

# **HDCast Pro**



User manual

# TABLE OF CONTENTS

SAFETY
Standard accessories6
Product Overview6
SETUP AND INSTALLATION
Step 1 - Connecting the HDCast Pro7
Step 2 – Turn on projector and select HDMI source
Step 3 – Download and install the HDCast Pro app
Step 4 – Connect to wireless SSID (HDCastPro_xxxxxxxx)10
Step 4 – Using the HDCast Pro11
FEATURES14
Mirroring - Android27
ADDITIONAL INFORMATION

# SAFETY

## Copyright

© Copyright 2015. This publication, including all photographs, illustrations and software, is protected under international copyright laws, with all rights reserved. Neither this manual, nor any of the material contained herein, may be reproduced without written consent of the author.

## Disclaimer

The information in this document is subject to change without notice. The manufacturer makes no representations or warranties with respect to the contents hereof and specifically disclaims any implied warranties of merchantability or fitness for any particular purpose. The manufacturer reserves the right to revise this publication and to make changes from time to time in the content hereof without obligation of the manufacturer to notify any person of such revision or changes

## Trademarks

Optoma and its logo is a registered trademark of Optoma Corporation. Optoma Europe Ltd is the licensee of the registered trademark. Android is a registered trademark of Google Inc. Windows is a registered trademark of Microsoft Corporation in the United States and/or other countries. OS X is registered trademarks of Apple Inc. iOS is a trademark or registered trademark of Cisco in the U.S. and other countries and is used under license. HDMI, the HDMI Logo, and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC in the United States and other countries.

## FCC

This device has been tested and found to comply with the limits for a Class B digital device pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This device 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 device does cause harmful interference to radio or television reception, which can be determined by turning the device off and on is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the device and receiver.
- Connect the device into an outlet on a circuit different from that to which the receiver is connected...
- Consult the dealer or an experienced radio/television technician for help.

#### **Notice: Shielded cables**

All connections to other computing devices must be made using shielded cables to maintain compliance with FCC regulations.

#### Caution

Changes or modifications not expressly approved by the manufacturer could void the user's authority, which is granted by the Federal Communications Commission, to operate this projector.

#### **Operation Conditions**

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 received, including interference that may cause undesired operation.

#### Notice: Canadian users

This Class B digital apparatus complies with Canadian ICES-003.

Remarque l'intention des utilisateurs canadiens

Cet appareil numerique de la classe B est conforme a la norme NMB-003 du Canada.

# **Declaration of conformity**

- EMC Directive 2004/108/EC (including amendments)..
- Low Voltage Directive 2006/95/EC.
- R & TTE Directive 1999/5/EC

## WEEE



### **Disposal instructions**

Do not throw this electronic device into the trash when discarding. To minimize pollution and ensure utmost protection of the global environment, please recycle it.

# INTRODUCTION

## **Standard accessories**



## **Product Overview**



# SETUP AND INSTALLATION

## Step 1 - Connecting the HDCast Pro

The HDCast Pro dongle is compatible with MHL interface, so there are 2 ways to connect with HDCast Pro dongle with your receiver devices. Use the switch to choose HDMI output or MHL output, please be noted your MHL device must provide 900mA power, and if you use HDMI out, you will need external 5V/1A DC power to bring up the dongle.



# Step 2 – Turn on projector and select HDMI source

a.



c. After booting up successfully, the following screen will be displayed. It shows the download and connect methods, SSID, password, and network link status.



# Step 3 – Download and install the HDCast Pro app



## Android / iOS

Make sure your device is connected to the Internet Search for "HDCast Pro" in App Store or Google Store and install it.

### Windows / OS X

Search for "Optoma HDCast Pro" or visit www.optoma.eu/wireless

# Step 4 – Connect to wireless SSID (HDCastPro\_xxxxxxx)

**Note:** You may be asked to enter a password. The password can be found in the top right corner of the projector screen



## Step 4 – Using the HDCast Pro

1. Open the app



2. Select HDCast Pro



## 3. Connect to HDCastPro\_xxxxxxxx



## 3a. Connecting to the internet

The first time you launch the app, there will be a pop up WiFi router list so that you can link with your WiFi router through HDCast Pro device to keep internet surfing.

🞊 Setting 💩 SSID: HDCastPr	o_EF4B6EB2 🏾 🏛 Password: 227452	287 []
	Add network	
	cwlee1	
AP List	WBR-2200	
Connect for Internet access!		
		1/1

Select the required network you wish to connect to and enter the password if required.

You can then setup how you want to connect to the HDCast Pro dongle





**Note:** After setting up your internet, sometimes the connection between the HDCast Pro and your mobile phone might disconnect because your WiFi router may change channel. Please remember to reconnect again.

### **Option 2 - Infrastructure mode**



This model allows you to link with the HDCast Pro through router. However, the performance may not as

good as direct link, and you will need to enter the setting to enable it if need it.

# **FEATURES**

Main screen (Android / iOS)



#### Video



There are 2 sources to video streaming. One is to sync the video you like through iTunes (iTunes File Syncing), or you can select video from your recorded video (Camera Roll) Please be noted iOS will compress the recorded video before streaming to save the bandwidth, you can decide if you want to save it in HDCast Pro app for future use.

You can also sync subtitle file to HDCast Pro, just make sure the filename is the same with your video and sync through iTunes, it will be automatically shown with video playing.

#### Supported file formats

It only supports MPEG1/2/4/H.264. For subtitle, we support srt, smi, ssa and cdg formats with UTF-8 coding.

File Format	Video Format	Decode Max res.	Max Bit Rate	Audio Format	Profile
MPG, MPEG	MPEG1	1920x1090 30fps	30M bps	MPEG1 L1-3	
AVI, MOV, MP4,	H.264	1920x1090 30fps	30M bps	MPEG1 L1-3	BP/MP/HP
MKV				HE-ACC v1	
				AC3	
AVI, MOV, MP4,	MPEG4	1920x1090 30fps	30M bps	HE-ACC v1	SP/ASP
AVI, MOV, MP4,	Xivd	1920x1090 30fps	30M bps	MPEG1 L1-3	HD
				HE-ACC v1	
AVI	MJPEG	8192x8192 30fps	30M bps	MPEG1 L1-3	Baseline
				HE-ACC v1	
WMV	VC-1	1920x1090 30fps	30M bps	WMA8/9(V1/v2)	SP/MP/AP

Subtitle Format	Font	Subtitle Size
Standard SRT	UTF-8/UTF-16	8 bits up to 1280x800
SMI		
SSA/ASS		

Note: DO NOT support mixed code in subtitle files.

#### Photo



You will have to allow HDCast Pro to share your camera roll and enable the location service before using Photo function.

Location Services	OFF
Location Services uses cro hotspot locations to determin location.	wd-sourced Wi-Fi le your approximate

In Photo viewer, you can select photo and it will be displayed on your Projector. You can also use gesture control to zoom in/out or change photos.

We developed a practical tool called "Sketch", you can draw on the photo you picked, and save it if you like.

#### Supported file formats

Image Type (Ext Name)	Sub Type	Encode Type	Max Size
Jpeg / Jpg	Baseline	YUV420	4000x4000=16,000,000 pixel
		YUV422	
		YUV440	
		YUV444	
	Progressive	YUV420	4000x4000=16,000,000 pixel
		YUV422	
		YUV440	
		YUV444	
BMP			4000x4000=16,000,000 pixel

#### Document



The document viewer can support MS-office, PDF, and Apple's iWorks. Before you start to cast, please remember to sync the document files to your iOS device through iTunes.

The document viewer supports sketch as well, that means you can make some note on the document, and save the page to camera roll.

Please be noted some documents may not be displayed the same as shown on PC.

#### Supported file formats

File	Support Version	Page/Lines Limitation	Limitation
Format			
Adobe PDF	PDF 1.0, 1.1, 1.2, 1.3, 1.4	Up to 1000 pages (One File)	Size up to 75MB
MS Word	British Word 95,	Because office viewer does not	-Size up to 100MB
	Word 97, 2000, 2002, 2003	load all pages of MS/Word file at	- Not support Bold Text
	Word 2007(.docx),	the same time, there are not	in Simple Chinese
	Word2010(.docx),	obvious limitations of page and	front
		line.	
MS Excel	British Excel 5,95	Row Limit: up to 595	-Size up to 15MB
	Excel 97, 2000, 2002, 2003	Column Limit: up to 256	-Not support
	Excel 2007(.xlsx),	Sheet: up to 100	password-protected
	Excel 2010(.xlsx)		sheet
	Office XP Excel	Note: Any one of three limitations	
		above can not appear on one	
		excel file simultaneously	
MS	British PowerPoint 97	Up to 1000 pages (One File)	-Size up to 19MB
PowerPoint	PowerPoint 2000, 2002,		-Not support
	2003		SlideShow order
	PowerPoint 2007(.pptx)		
	PowerPoint 2010(.pptx)		
	Office XP PowerPoint		
	PowerPoint presentation		
	2003 and earlier (.ppx)		
	PowerPoint presentation		

2007 and 2010 (.ppsx)		
-----------------------	--	--

#### Music



The music player allows you to stream music through WiFi, and we can support playlist. There are multiple music formats supporte: ape, flac, ogg, mp3, wma, wav, rm, m4a, aac, ra, aif, aiff, mka Please be noted HDCast Pro can't access your iTunes music library due to iOS limitation, so you must use iTunes to sync the audio you like to our app.

#### Supported file formats

Music Type (Ext Name)	Sample Rate (KHz)	Bit Rate (Kbps
MP3	8-48	8-320
WMA	22-48	5-320
ADPCM-WAV	8-48	32-384
PCM-WAV	8-48	128-1536
AAC	8-48	8-256

Voice Record Type	Audio Format Sample Rate		Bit Rate (Kbps
		(KHz)	
.mp3	MPEG Layer-3	8-48	64-256
.wav	IMA-ADPCM	8	32
		16	64
		24	192
		48	384

#### Live camera



Live camera is a real object camera which allows you to stream the image from mobile device's camera, and take a snap shot to edit.

You can adjust image quality, switch from Front/Rear camera. You can enable Sketch and save the current

image to album.

#### Web browser



HDCast Pro comes with a built-in browser, and we also categorize several popular websites for you. The web page will dynamically change with different country setting in your device. Sketch function is also supported.

#### **Cloud storage**



We will link to your personal Dropbox, iCloud and/or \*Google Drive account to let you access your cloud storage anywhere. All content will be shown for you to download and display. You can enable sketch function if you download and decode a document file. iOS version doesn't support Google Drive.

#### **Cloud video**



Cloud media is a shortcut for all major web video sites, you can link to Youtube, Vimeo and other on-line video sites with the existing shortcuts.

Cloud media is a shortcut for all major web video sites, you can link to Youtube, Vimeo and other on-line video sites with the existing shortcuts.

#### **HDMirror**



HDMirror is fully compatible with Miracast, you can click the HDMirror button in the HDCast app, and the receiver will be switched to Miracast mode. Once you turn it on, there will be a 60seconds countdown for your mobile phone to connect with the receiver. Please select your Miracast function in your mobile phone setting page.



 We also recommend you link your smart phone to your home network at the same time to keep internet connection.

### DLNA

DLNA is an industrial standard which allows you to stream multimedia formats through WiFi/LAN In the main menu, you can also use DMLA app to push multimedia files to HDCast Pro for streaming.

## Split screen 4:1



HDCast Pro device will allow max. 4 users to display on screen together, but only Host can decide the position he wants, other guest's screens will be placed automatically after the request is allowed.



#### Additional features

#### Annotations

Except Preferred device setting, you can also enable/disable the inquiry from guests, or automatically allow all display requests from guests without showing pop-up message.



#### Preference



Except Preferred device setting, you can also enable/disable the inquiry from guests, or automatically allow all display requests from guests without showing pop-up message.

CURRENT DEVICE		
Current device:HDCastPro_EF4E	36EB	
PREFERRED DEVICE		Optoma
Preferred Device:HDCastPro		Current Device :HDCastPro_EF4B6EB2 Preferred Device : Use preferred device Host Control :
Do not disturb		<ul> <li>Do not disturb</li> <li>Auto allow request</li> </ul>
Auto allow request		
ABOUT		
Version:1.6.671.668		

#### **AirView**



This feature allows connected devices to view the projected content on their devices screen providing one device is casting an image or document to the HDCast Pro.

#### Mirror



This feature allows Android devices to be mirrored at the touch of a button.

#### Setting





In setting function, you can setup HDCast Receiver's configurations including output resolution, change SSID password, setup router connection for internet surfing, boot up mode priority and update the latest FW over the air.

We also added a new linking mode to allow you link with dongle through router, however, please be noted the performance may be impacted if you choose to link through router due to distance or router performance.

### Update



Update function allows you to check the app version, history and update it up to date.

#### **Preferred Device**

We added a special mode "Preferred device" which will remember your device ID. You can save the current hardware to preferred device, and the app will find the preferred device and link to it directly next time.

Optoma 📲	
Photo Camera Music Video	🗟 Optoma HDCast Pro 1.6.0.189 💿 🗉 💌
Do you want to set this device as preferred device?	Optoma
NO YES	
Split Screen Preference AirView	Preferred Device
HDMirror Setting	Do you want to set this device as preferred device?

#### Host control

When you are the first user link to HDCast Pro and open the app, you will become the "Host". Host has the authority to control the display, that means Host role can use all features without limitation The next or later coming users will be treated as "Guest", some functions will be disabled under Guest mode, and you will need to get Host's permission to display.

	Optoma »I
Photo     Camera     Music     Video       Document     Web     Cloud Video     Cloud Scorege	Photo Carriera Music Video Waiting for Host's permission
Allow guest's request?(192.158.168.21) split so	Cancel Split Screen Preference AirView



\* Once the current host quits from app, the second user will become host automatically.

# **Mirroring – Android**

- Connect to the dongle as described in Step 1 4
- Once connected you should see the home screen below



- Select
- Your device will be mirrored straightway

-	Ор	tom	092% ∎ 09:17
Mirror Off	Photo	Camera	Music
Video Video Cloud Storage	Document	Web	Cloud Video
	HDMirror	Setting	

# **ADDITIONAL INFORMATION**

## Specifications

DRAM	DDR3 256MB, 1Ghz
NAND	128MB
Output	1280x720 default for HDMI/MHL
Resolution	(HDMI Max. up to 1080p@30p by EDID)
I/O	Output: HDMI 1.2 or MHL2.0
	Input: Micro USB
WiFi	802.11 b/g/n 2T2R single band
Power	DC 5V/1A, through Micro USB port (HDMI)
	DC 5V/0.9A, through MHL (MHL)
Video support	Max. 1080p@30p video decode, output
	1080p@60/50hz
LED	LED indication for Power status
Working Temp.	0~60°°C
Storage Temp.	-20~+80°°C

## Арр

• iOS System requirements

iOS	iOS 8 and above
Device	All iPhone model after iPhone 4
	All iPad model after iPad 2
	All iPod touch after iPod touch 4 <sup>th</sup> generation
Resolution support	• iPhone: 480x320~1136x640
	• iPad: 1024x768~2048x1536
Storage	At least 40MB free space needed

## • Android OS System requirements

Phone/Pad	Android 4.0 ICS model with 1GB RAM
Resolution	WVGA ~1080p
Storage	At least 40MB free space needed

### • Windows OS:

CPU	Dual Core 2 GHz or higher (Not support ATOM)
Graphic card	Graphic card with 64MB VRAM or above
OS version	Windows 7 SP1, Windows 8 and later
PC's WiFi	802.11n (2T2R recommended)

### • Mac OS:

CPU	Dual Core Intel Core i 1.4 GHz or higher (PowerPC not supported)
Graphic card	Graphic card with 64MB VRAM or above
OS version	Mac OS X 10.9 and above
Recommended	Mac Book series and iMac series after E/2011
Models	