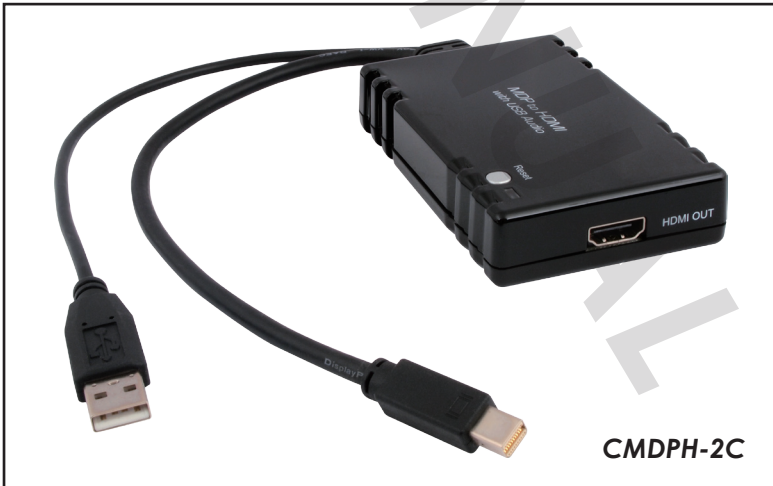


# CMDPH-2C

## Mini-DisplayPort to HDMI Converter

*Operation Manual*



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## • **Safety Precautions**

Please read all instructions before attempting to unpack or install or operate this equipment, and before connecting the power supply. Please keep the following in mind as you unpack and install this equipment:

- Always follow basic safety precautions to reduce the risk of fire, electrical shock and injury to persons.
- To prevent fire or shock hazard, do not expose the unit to rain, moisture or install this product near water.
- Never spill liquid of any kind on or into this product.
- Never push an object of any kind into this product through module openings or empty slots, as you may damage parts.
- Do not attach the power supply cabling to building surfaces.
- Do not allow anything to rest on the power cabling or allow it to be abused by persons walking on it.
- To protect the equipment from overheating, do not block the slots and openings in the module housing that provide ventilation.

## • **Revision History**

<u>Version No</u>	<u>Date</u>	<u>Summary of Change</u>
<b>V1</b>	<b>20101006</b>	<b>Preliminary Release</b>

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## **1. Introduction**

Having MAC /PC / Notebook to display on an HDTV or monitor may become easy with Mini DisplayPort to HDMI Converter. It allows users to do so by simple connection with built-in USB power cable. This device is HDMI v1.3(with Deep Color Video) & HDCP v1.1 compliant and is capable of high speed data transfer with speed up to 2.7Gbps per lane. Without the need to install any software, its fantastic performance and USB power connection is a must for MAC /PC / Notebook users.

## **2. Applications**

- Mini DP to HDMI signal conversion
- PC contents display on HDTV

## **3. Package Contents**

- Mini DP to HDMI Signal Converter
- Operation Manual

## **4. System Requirements**

Input Mini DP/DP source equipment with USB output connection and output display HD TV or monitor.

## **5. Features**

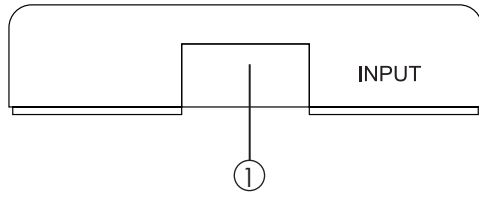
- Compliant with HDMI v1.3(with Deep Color Video), HDCP1.1 and DVI1.0
- Supports up to 1080p 50/60 & WUXGA
- Supports pixel component format with RGB: YCbCr422: YCbCr444
- Supports bit depth per color with 8/10/12 bits
- Bi-direction Color Space Conversion (CSC) between RGB and YCbCr
- Dithering for conversion from 12 bits component to 10/8 bits
- Support USB 2CH, LPCM 48K 24 bits
- Automatic audio error detection with soft mute function, preventing annoying harsh output sound due to audio error or hot-unplug
- Automatic loss of signal detection for link management

## 6. Specifications

TMDS Clock Frequency	2.7Gbps
Input ports	1 x Mini-DisplayPort (Male type), 1 x USB
Output port	1 x HDMI (Female type)
Input Resolution	480i ~1080p, VGA ~ WUXGA
Output Resolution	480i ~1080p, 1920 x 1200@60Hz, VGA~WUXGA
I/O Audio Sample Rate	Up to 48 kHz
I/O Audio Support	PCM 2CH
ESD Protection	Human Body model: $\pm 8\text{kV}$ (air-gap discharge) $\pm 4\text{kV}$ (contact discharge)
Dimensions (mm)	114(W) x 65(D) x 24(H)
Weight(g)	22
Chassis Material	Plastic
Silkscreen Color	Black
Operating Temperature	$0^{\circ}\text{C} \sim 40^{\circ}\text{C}$ / $32^{\circ}\text{F} \sim 104^{\circ}\text{F}$
Storage Temperature	$-20^{\circ}\text{C} \sim 60^{\circ}\text{C}$ / $-4^{\circ}\text{F} \sim 140^{\circ}\text{F}$
Relative Humidity	20~90% RH (non-condensing)

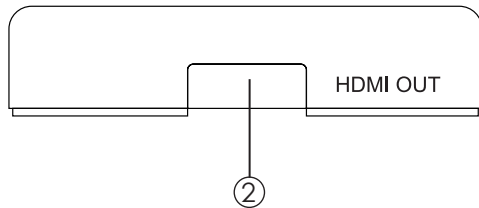
## 7. Operation Controls and Functions

### 7.1 Front Panel



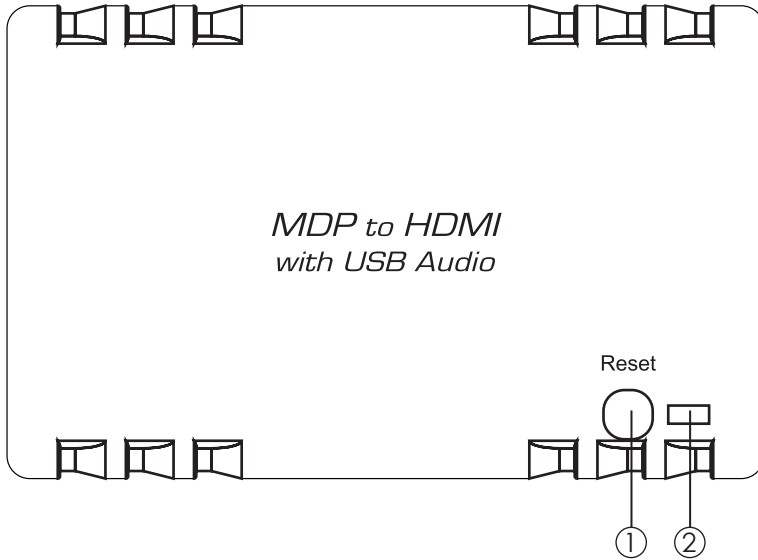
- ① MDP & USB INPUT: Connect each one of this cable to your input source equipment's output port for both MDP signal sending and power supply and or audio signal. There are 2 ways to output audio sound and one is from the source equipment's speaker and the other is from USB to HDMI. Users need to select from the source equipment's audio output selection for the desire output format.

### 7.2 Rear Panel



- ① HDMI OUT: This slot is to connect to output display such as HD TV or monitor with HDMI cable.

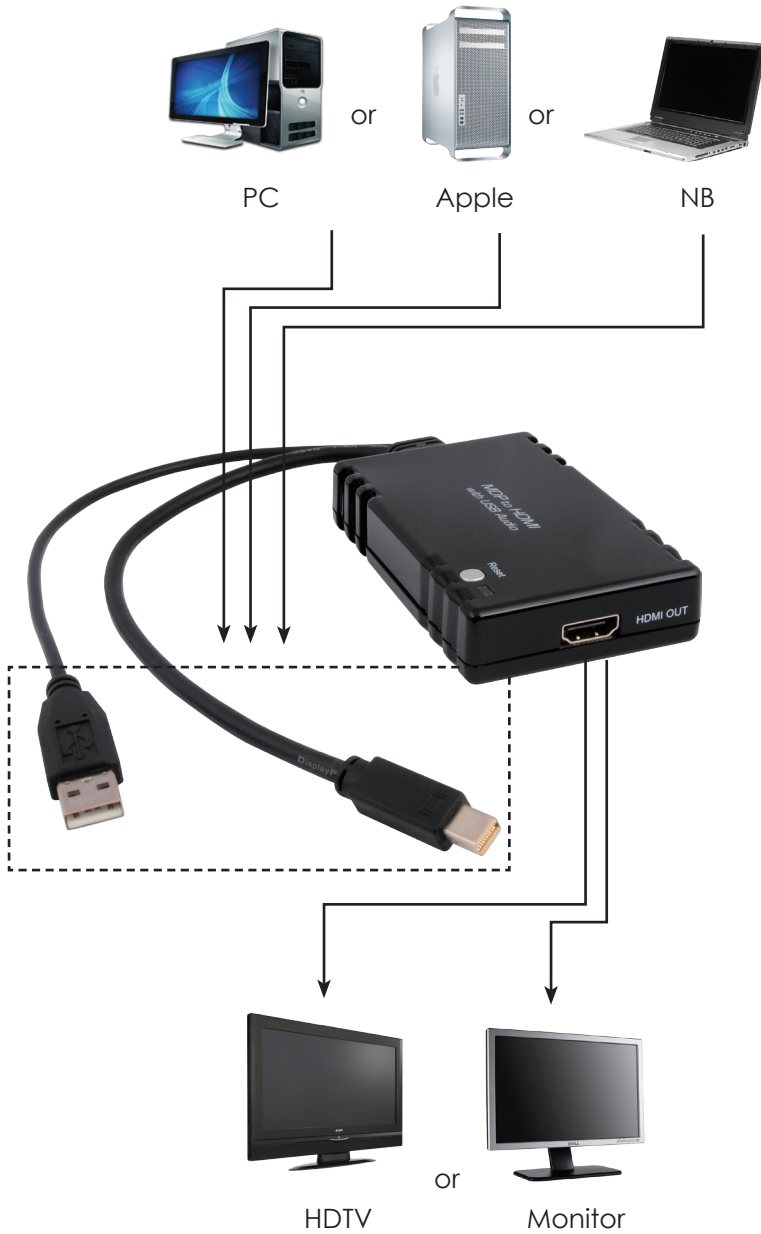
### 7.3 Top Panel



- ①. RESET: Press this key only when the image is not displaying. Press it repeatedly until the image turns out.
- ②. Power LED: The red LED will illuminate when the USB power is connected.



## 8. Connection and Installation





# Acronyms

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## **Acronym**

## **Complete Term**

HDCP

High-bandwidth Digital Content Protection

MDP

Mini DisplayPort





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