

# HDTV/ AHD/ HDCVI/ CVBS to HDMI/ VGA/ Composite Video Converter

**ITEM NO.: AD001HD4**

AD001HD4 support 4 analog cameras: HD-TVI/AHD/HDCVI/CVBS, convert signal to HDMI, VGA and Composite Video or loop out which enabling users to use cost effective HDMI/VGA/BNC monitor to display all HD analog or regular analog camera. It also supports 3 different output displays at same time. It is perfect solution when user wants to display HD analog camera to different monitor without HD DVR.

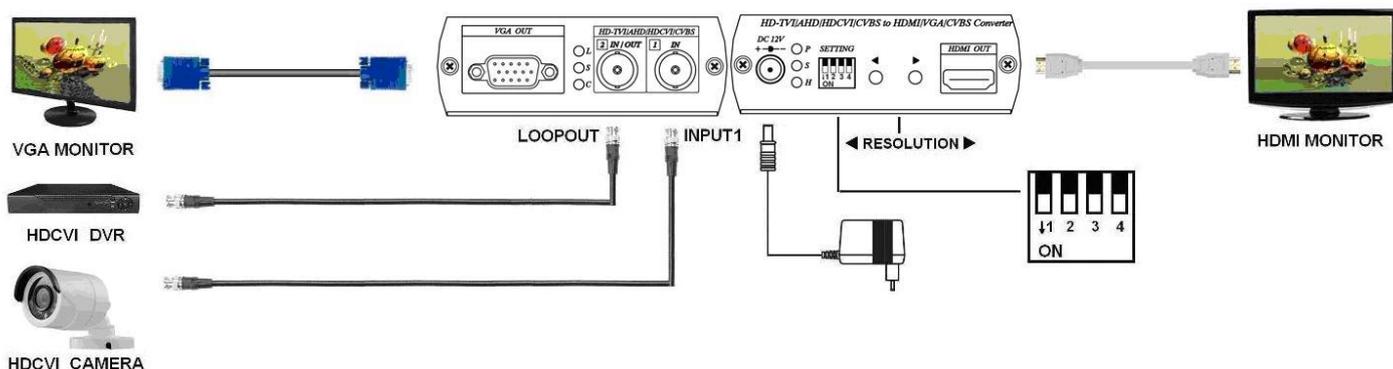
The **2 IN/OUT** function could works with 3 different function selections: CVBS output or HD loop out as a distributor function or as second HD camera input could be works as a switcher function with PIP feature to display 2 sources in one monitor.

## Features:

- Converts HD-TVI/AHD/CVI/NTSC/PAL/960H signal to HDMI, VGA, Composite Video or loop out.
- Input support: HD-TVI/AHD/HDCVI support: 720p@25/30/50/60, 1080p@25/30Hz.
- Output support: HDMI, VGA, Composite Video or loop out.
- 3 outputs could be display simultaneously.
- **BNC connector function selection: loop output, composite video output or as second camera input.**
- **Built in PIP (display two input picture) under dual camera input mode.**
- HDMI/VGA output support: 480p,576p,720p,1080i,1080p
- Composite video output support NTSC, PAL.
- Composite output built in underscan adjustment. (allow the edges of the picture fit well)
- Built in OSD to display input/output setting.
- HDMI and DVI compliant. (support DVI monitor by a HDMI to DVI adaptor)

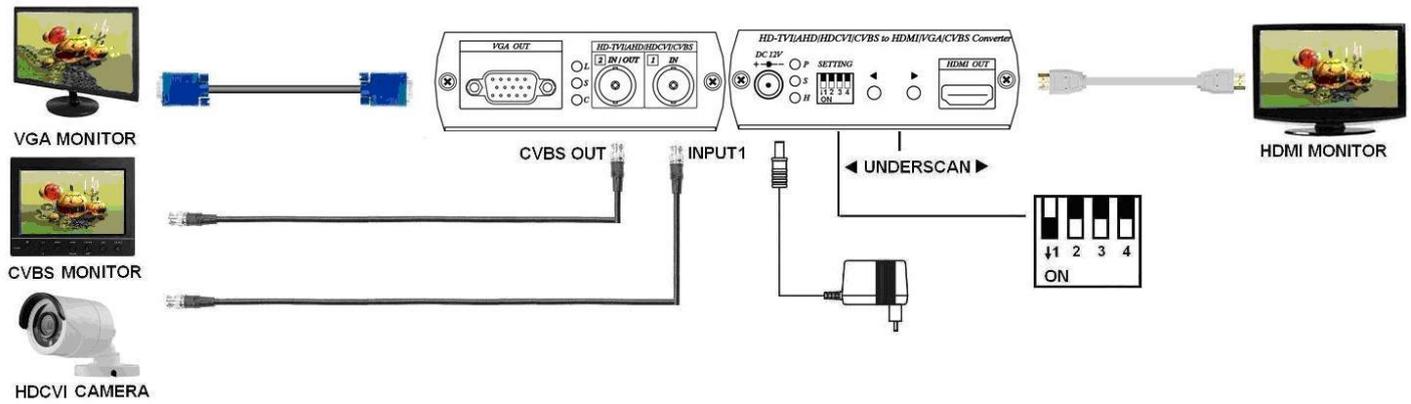
## Installation:

### Loop out Mode:



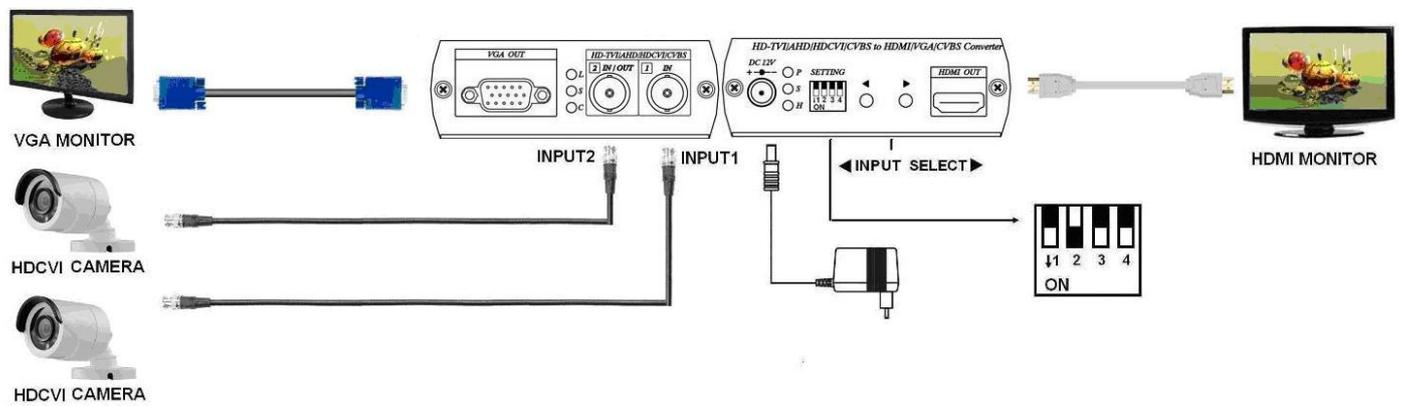
\* 3 outputs: HDMI, VGA, loop output as a distributor.

## CVBS Output Mode:



\* 3 outputs: HDMI, VGA, CVBS could be display simultaneously.

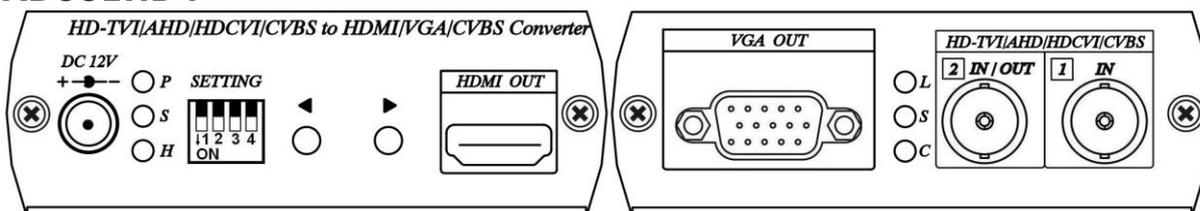
## HD-TVI/AHD/CVI/NTSC/PAL/960H Input Mode:



\* Allow two camera inputs with 2 outputs: HDMI, VGA as a switcher.

## Panel View:

### AD001HD4



DC 12V  
HDMI OUT  
VGA OUT  
1 IN  
2 IN/OUT

DC 12V power terminal  
HDMI output interface  
VGA output interface  
1st source input interface  
Multiple functions source input/output interface

## LED Indication:

### DC JACK LED:

Green P      Power ON  
Blue S      Input 1 signal received  
Red H      HDMI output linking

### 2 IN/OUT Connector LED : (BNC)

Green L      Under LOOPOUT mode  
Blue S      Input 2 signal received  
Red C      CVBS OUT mode

## Switch mode + Button Function Quick reference:



When press ◀▶ two buttons at same time to switch video input as AHD or HDCVI mode (HD-TVI mode: no need to switch), after complete switching, the power must be resetting to be effective the new mode. When AHD or HDCVI input model selection error, the picture will become black and white,



◀▶ button: resolution setting



◀▶ button: CVBS output underscan adjustment



◀▶ button: input selection



◀▶ button: PIP position selection



◀▶ button: PIP dimension selection

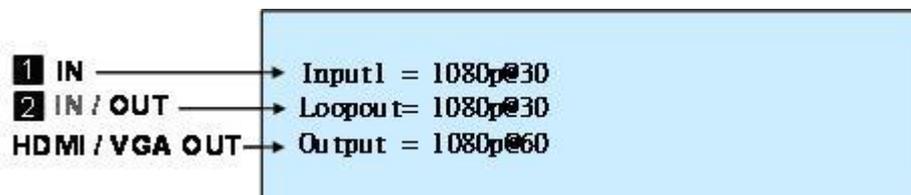
## Switch, Button Function:

### DIP Switch 1 : LOOPOUT / CVBS OUT Function Selection



**DIP Switch 1** ↑ (LOOPOUT)

2 IN/OUT connector setting as **LOOPOUT** mode



Button for HDMI/VGA resolution switching, press ◀ button to decrease the resolution, press ▶ button to increase output resolution

Resolution for switch sequence will be follow as below:

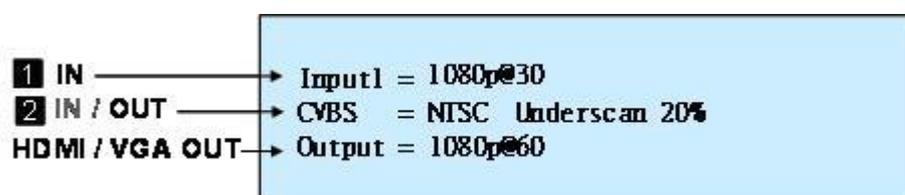
480p → 576p → 720p@60 → 720p@50 → 1080i@60 → 1080i@50 → 1080p@60 → 1080p@50

When press ◀▶ two buttons at same time to switch video input as AHD or HDCVI mode (HD-TVI no need to switch), after complete switching, the power must be resetting to be effective the new mode.



**DIP Switch 1** ↓ (CVBS OUT)

2 IN/OUT connector setting as **CVBS** mode



Button for underscan adjustment, press ◀ decrease CVBS OUT underscan, press ▶ enlarge CVBS OUT underscan

CVBS underscan adjustment is to avoid overscan situation on CRT screen (Overscan is the situation in which not all of a televised image is present on a viewing screen) which cause picture enlarge and could not see the edge of screen. The reduce screen adjustment range could be from minimum 0% up to 20% based on each time 2% reduced.

When press ◀▶ two buttons at same time to switch CVBS output mode as 16:9 or 4:3

**When HDMI/VGA output resolution setting on 480p, 720@60, 1080i@60, 1080p@60, CVBS output is NTSC**

**When HDMI/VGA output resolution setting on 576p, 720p@50,1080i@50, 1080p@50, CVBS output is PAL**

### DIP Switch 2 : INPUT / OUTPUT Mode Selection



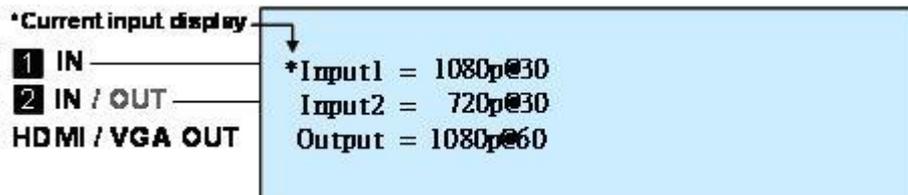
#### DIP Switch 2 ↑ (Output Mode)

2 IN/OUT connector setting as output mode, 2 IN/OUT connector function follow by DIP Switch 1 selection.



#### DIP Switch 2 ↓ (Input Mode)

2 IN/OUT connector setting as input mode, 2 IN/OUT connector function as input 2, DIP Switch 1 setting will be ignored.



Button as input selection, press ◀ to display Input 1 picture, press ▶ to display input 2 picture, the current input display will be add 「\*」 symbol marked.

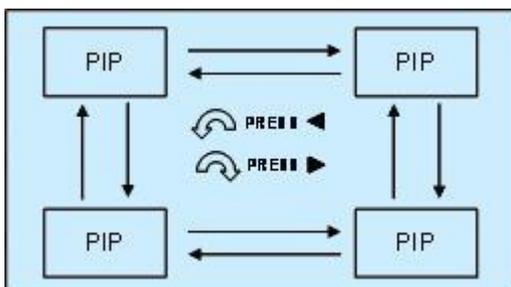
To press the ◀▶ two buttons together could switch the aspect ratio when the source is NTSC or PAL; the switching aspect ratio is 16:9 or 4:3 and affects HDMI and VGA output only, please follow the source to make adjustment. If the input is 960H video format, then make the aspect ratio setting at 16:9. For AHD input aspect ratio is fixed at 16:9, this setting is not affected.

### DIP Switch 3 : PIP Mode



#### DIP Switch 3 ↓ (PIP Mode)

This function only activated on **DIP Switch 2 ↓**



Button as PIP sub-screen display position, press◀ Counter-Clockwise to switch, press▶ Clockwise switch

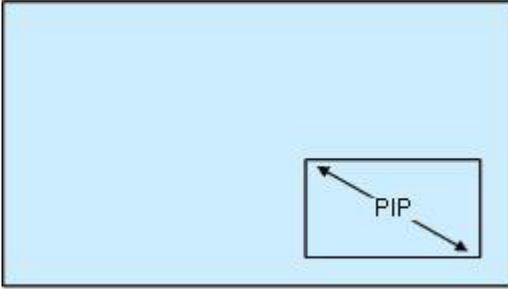
When press◀▶ two buttons together, two inputs can be switched between the main picture and sub picture.

## DIP Switch 4 : PIP Dimension Setting



### **DIP Switch 4** (Adjust PIP Dimension)

This function only activated on **DIP Switch 2** and **DIP Switch 3** both at  position.



Button as PIP sub-screen dimension setting, press ◀ to decrease PIP sub-screen dimension, press ▶ button to enlarge PIP sub-screen dimension.

## Restore Factory Default

Unplug power and hold to press ◀ button for 5 seconds, then release ◀ button.

## Caution

1. Before switching HDMI/VGA monitor, please make sure your monitor supported resolution. If the monitor not supports the resolution, then there will be no output.
2. If the PIP sub-screen from SD source, then the sub-screen picture will comes black edge.
3. This product HDHDCVI input and HDHDCVI loop out do not support audio and data transmission.
4. When AHD or HDCVI input model selection error, the picture will become black and white.

ITEM NO	AD001HD4
Video Input	HD-TVI / AHD / HDCVI 720p@25/30/50/60Hz · 1080p@25/30Hz · NTSC · PAL · 960H
Video Output	HDMI & VGA (480p · 576p · 720p/50/60 · 1080i/50/60 · 1080p/50/60) · CVBS (NTSC · PAL)
Input Connector	BNC (75Ω 1Vpp)
Output Connector	HDMI Type-A · D-SUB 15 · BNC (75Ω 1Vpp)
Switch	DIP Switch x 1 · Tact Switch x 2
Power Supply	12V 500mA
Power Consumption	350mA (Max) 4-5 Watts
Temperature	Operation: 0 to 55°C, Storage: -20 to 85°C, Humidity: up to 95%
Dimension (mm)	88 * 130 * 30
Weight (g)	275



Rev. B3