

CHQV-3CH

CVBS & COM to HDMI

Scaler Box

Operation Manual



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• **Trademark Acknowledgments**

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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>
VR0	20110401	Preliminary Release

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1. Introduction

The CVBS & COMP to HDMI Scaler Box is specially designed for low resolution analog YCbCr contents video to be upscale and display on HD TV/monitor. This device is suitable for iPod & MPEG 4 like consumer video devices to enjoying display video or images on the big screen with HD resolution. This device has built in the resolution adjustment allowing user to select the best output image according to the favor. Last but not least, the touch button panel and the remote control bring you the stylish and free enjoyment on the entertainment.

2. Applications

- Analog video CVBS & COMP YCbCr signal convert to digital video signal
- Analog audio signal convert to digital audio signal
- Low resolution MPEG image upscale to HD resolution and display

3. Package Contents

- CVBS & COMP to HDMI Scaler Box
- 3RCA to earphone (Green) for COMP
- 3RCA to earphone (Yellow) for CVBS with audio
- 5V DC power adaptor (USB jack)
- Operation Manual

4. System Requirements

Input video and or audio source equipment such as video player or palm size camcorder with connection cable and output display to HD TV/monitor with HDMI cable.

5. Features

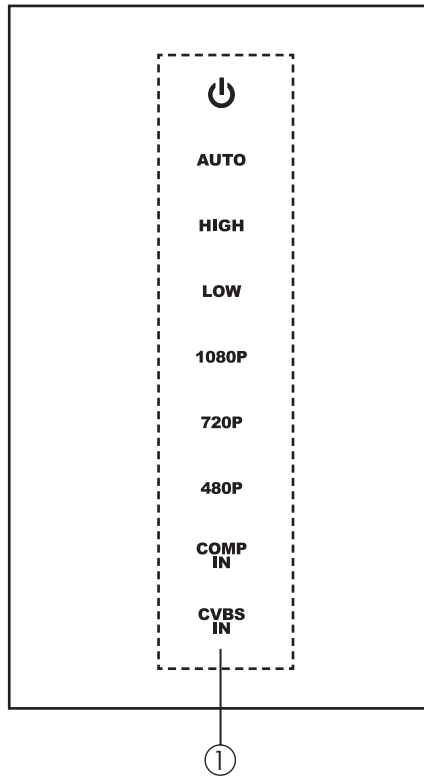
- Full HQV quality de-interlacing
- Improved adaptive motion processing for difficult and poor quality video scenes
- Temporal Noise Reduction (TNR)-Reduces noise caused by on film grain, random noise, sensor noise and light fluctuations
- Block Artifact Reduction (BAR)-Reduces Compression block artifact
- Mosquito Noise Reduction (MNR)-Reduces mosquito noise
- Supports NTSC/PAL input video and resolution 480i/p and 576i/p
- Video output resolution up to 1080p@60Hz
- Power over USB
- Palm size with stylish design
- Demo before scale and after scale's picture difference
- Enhance picture's detail quality

6. Specifications

Frequency bandwidth	2.25Mbps
Input port	1 x CVBS, 1 x Component
Output port	1 x HDMI
Input Video Resolution	480i/p, 576i/p
Output Resolution	480p, 720p, 1080p
Power Supply	5V/1.2A USB jack (US/EU standards, CE/FCC/UL certified)
ESD Protection	Human body model: $\pm 8\text{kV}$ (air-gap discharge) $\pm 6\text{kV}$ (contact discharge)
Dimensions (mm)	119.5(W) x 70(D) x 25(H)
Weight(g)	200
Chassis Material	Plastic
Silk Skin Color	Black
Operating Temperature	0°C ~ 40°C
Storage Temperature	20°C ~ 60°C / -4°F ~ 140°F
Relative Humidity	20 ~ 90%RH (non-condensing)
Power Consumption	4.2W

7. Operation Controls and Functions

7.1 Top Panel



- ①. Touch panel LED indicators: This is a touch panel controller, users can touch on the symbol or letters to switch in between the selection and the blue LEDs will illuminate according to user's touch.

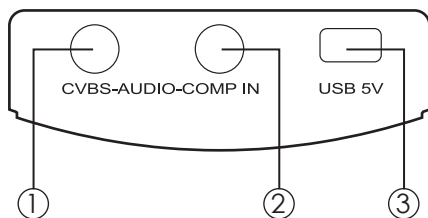
Symbol ⏻ represent power, press it once to turn ON the device and the LED will illuminate in blue, press it again to switch the device to standby mode and the LED will illuminate in red.

AUTO, HIGH & LOW are the mode adjustment function for the output display image. Users can select only one of the three at a time.

1080p/720p & 480p are the output resolution selection. Users can only select one of the three at a time.

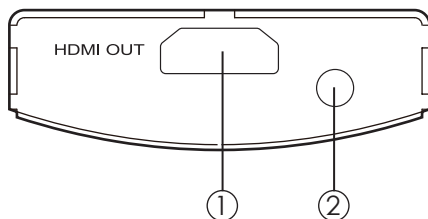
COMP IN & CVBS IN are the input selection. Users can only select one of two at a time.

7.2 Upper Panel



- ①. CVBS & Audio IN: This slot is to connect with input source equipment such as consumer electronic camcorder device or video player for input signal sending.
- ②. COMP IN: This slot is to connect with input source equipment such as DVD player or iPod devices for input signal sending.
- ③. USB 5V IN: Plug the 5V DC USB power adaptor included in the package from the AC wall outlet for power supply sending.

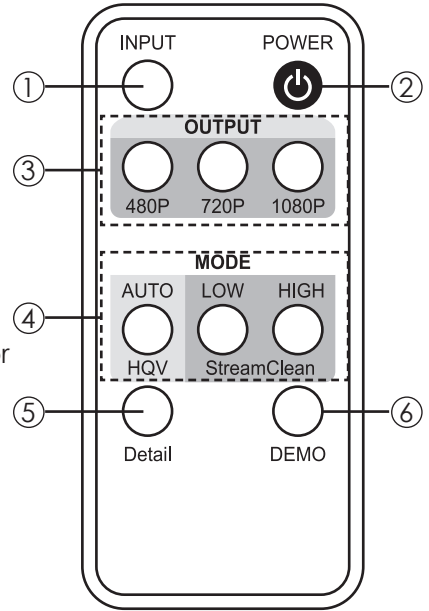
7.3 Bottom Panel



- ①. HDMI OUT: This slot is to connect with the HD TV/monitor with HDMI cable for output image display.
- ②. IR receiver window: This IR receiver only receive the signal from the remote control included in the package.

8. Remote Control

1. INPUT: Press this button to switch input source in between of CVBS or COMP.
2. Power: Press this button to turn ON or set the device to standby mode.
3. OUTPUT 480p/720p/1080p: Press these hot keys to select the desire output resolution of 480p/720p or 1080p.
4. MODE AUTO/LOW/HIGH: Press these hot keys to select the output display's image quality. AUTO adjustment by the device for the output image's noise reduction. LOW adjustment on the output image's noise reduction. HIGH adjustment on the output image's noise reduction.
5. Detail: Press this button to adjust further on the image's sharpness. There are total of 4 level allowing user to adjust for the best output image.
6. DEMO: Press this button to demo the original output image and the image output from the device. A green vertical line will appear on the middle of the image and the left side is the original picture whereas the right side is the picture with HQV process. To move the line to left press the hot key of 480p and to move the line to right press the hot key of 1080p. Press the button again to exit the DEMO function.



9. Connection and Installation



Acronyms



Acronym

Complete Term

COMP	Component
CVBS	Composite Video Broadcast Singal
HDMI	High-Definition Multimedia Interface
HQV	Hollywood Quality Video
MPEG	Moving Picture Experts Group
NTSC	National Television System Committee
PAL	Phase Alternating Line



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