

# HDMI to HDMI HQV Scaler - ID# 890



**Operation Manual**

## Introduction

This Scaler Box is designed for the Blu-ray DVD players, Digital TV, Cable and Satellite Set-Top Box (STB), Internet Digital Media Adapters, Audio-Video Receivers and Digital Recorders markets. This Scaler Box is unlike anything you have ever purchased. Giving you the freedom to enjoy the full benefits of high resolution video by recreating a cinema like experience in the comfort of your home, this device is a worthy addition to any home entertainment system. In addition, the HD inputs have been improved, allowing this Scaler Box to deliver crisp, stunning and noise free full HD video.

## 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
- 12-bit color space conversion on input and output
- Supports Deep Color at 36-bit color depth and xvYCC color gamut
- HDMI output resolution 480p@50/60Hz, 720p@50/60Hz, 1080p@50/60Hz
- Powered by its USB connection, or by an AC connection using an adaptor

## Applications

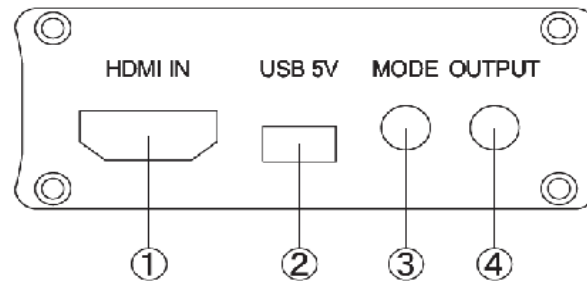
- Up scales low resolution video quality to HD resolution
- To improve incoming low resolution to noise free full HD video

## System Requirements

HDMI input port connected to the source/HDMI system with HDMI port and output connected to the display/HDMI system with HDMI port.

## Operation Controls and Functions

### Front Panel



① **HDMI IN:** Connect this HDMI input connector to the HDMI output connector of your HDMI source equipment using certified HDMI cable or connect this HDMI input connector to the DVI output of your DVI source equipment using DVI cable together with DVI to HDMI adaptor. The HDMI input resolution support 480i~1080p and VGA~WUXGA.

② **USB 5V IN:** The system can attach the mini-USB power adaptor or powered using from a USB port of a PC or other source.

③ **Mode button:** Pressing "MODE" will toggle between the following 3 available noise reduction settings:

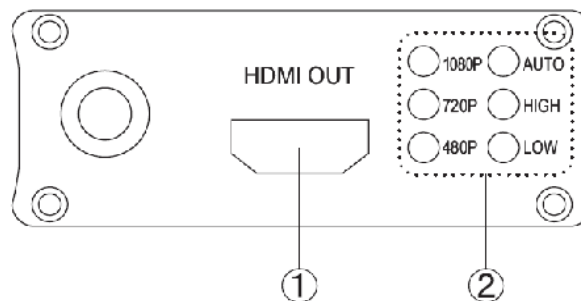
**Auto:** This is for normal video from sources such as Broadcast, Cable Box, DVD. The Matchbox will automatically apply noise reduction and resolution enhancement as needed.

**StreamClean Low:** This is for higher quality streamed content – e.g. Netflix Streaming or IP Set top box. A little compression noise reduction and resolution enhancement are applied.

**StreamClean High:** This is for lower quality streamed content from Internet sources – e.g. YouTube. A lot of compression noise reduction and resolution enhancement are applied.

④ **Output button:** Pressing the "OUTPUT" button will toggle between the 3 output resolutions -1080p, 720p and 480p.

### Rear Panel



① **HDMI out:** Scaled digital HDMI output. Connect this output to the HDMI display and the output resolution support -1080p, 720p and 480p.

② **Mode and Output LED indicators:** Several status LEDs on the output side of the system show the current output format and noise reduction setting.

## Remote control

① **480P:** Force 480p output from the IDT HQV Matchbox.

② **720P:** Force 720p output from the IDT HQV Matchbox.

③ **1080P:** Force 1080p output from the IDT HQV Matchbox.

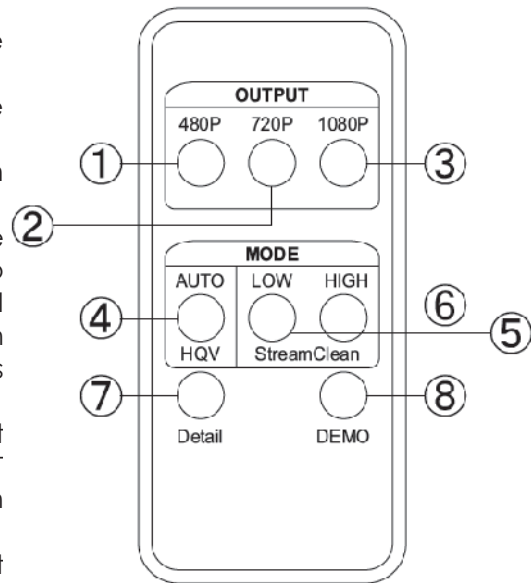
④ **HQV:** Auto: This preset puts the video processing to HQV Auto mode. Note that the Detail Enhancement will change to high mode by default when this button is pressed.

⑤ **StreamClean: Low:** This preset puts the video processing on the IDT HQV Matchbox to StreamClean Low mode.

⑥ **StreamClean: High:** This preset puts the video processing on the IDT HQV Matchbox to StreamClean High mode.

⑦ **Detail:** Toggles between Resolution Enhancement On and OFF.

⑧ **Demo:** This button controls the split-screen mode to demo the Matchbox noise reduction capabilities. Toggles between 3 modes : split-screen on 50%, split-screen scrolling and OFF.



## Connection



## Specifications

<b>Frequency bandwidth</b>	2.25Gbps
<b>Input port</b>	1 x HDMI
<b>Output port</b>	1 x HDMI
<b>Output Resolution</b>	480p@50/60Hz, 720p@50/60Hz, 1080p@50/60Hz
<b>Power Supply</b>	5VDC/1.2A (US/EU standards, CE/FCC/UL certified)
<b>ESD Protection</b>	Human body model: ± 8kV (air-gap discharge) ± 4kV (contact discharge)
<b>Dimensions (mm)</b>	110(W) x 65(D) x 26(H)
<b>Weight(g)</b>	200
<b>Chassis Material</b>	Metal
<b>Silkscreen Color</b>	Black
<b>Operating Temperature</b>	0°C ~ 40°C / 32°F ~ 104°F
<b>Storage Temperature</b>	-20°C ~ 60°C / -4°F ~ 140°F
<b>Relative Humidity</b>	20~90% RH (no condensation)