

# HDTV Supply®

## Mega Scaler

Model No: mega-scaler

### Operating Instructions



### FEATURES

- 11-inputs-2 outputs multi-function video scaler, could convert AV, S-video, YPBPR, VGA, DVI-I and HDMI signal to two identical HDMI outputs in support of 720P and 1080P.
- Allows display to view any source at any time.
- Supports bypass function under VGA and DVI-I port.
- One of the four HDMI inputs support 5.1 channel surround.
- DVI-I support both analog and digital input with L/R and optical.
- Detached audio output by L/R and optical.
- Delivers uncompressed digital video with zero signal loss.
- Support high definition resolutions 1080P, 1080i, 720P and standard video format.
- 10-bit triple-ADC for RGB/YPBPR.
- Double switching modes, IR remote and manual.
- Remote controls function with RS232.
- Dual 3-D motion adaptive video de-interlaces.
- 3-D video noise reduction.
- HDMI V1.2 compatible.

**Dear customer:**

**Thank you for purchasing this product. For optimum performance and safety, please read these instructions carefully before connecting, operating or adjusting this product. Please keep this manual for future reference.**

## **NOTICE**

**HDTV Supply Inc. reserves the right to make changes in the hardware, packaging and any accompanying documentation without prior written notice.**



### **WARNING:**

#### **TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK OR PRODUCT DAMAGE:**

- 1) DO NOT EXPOSE THIS APPARATUS TO RAIN, MOISTURE, DRIPPING OR SPLASHING AND THAT NO OBJECTS FILLED WITH LIQUIDS, SUCH AS VASES, SHALL BE PLACED ON THE APPARATUS.
- 2) DO NOT INSTALL OR PLACE THIS UNIT IN A BOOKCASE, BUILT-IN CABINET OR IN ANOTHER CONFINED SPACE. ENSURE THE UNIT IS WELL VENTILATED.
- 3) TO PREVENT RISK OF ELECTRIC SHOCK OR FIRE HAZARD DUE TO OVERHEATING, DO NOT OBSTRUCT THE UNIT'S VENTILATION OPENINGS WITH NEWSPAPERS, TABLECLOTHS, CURTAINS, AND SIMILAR ITEMS.
- 4) DO NOT INSTALL NEAR ANY HEAT SOURCES SUCH AS RADIATORS, HEAT REGISTERS, STOVES, OR OTHER APPARATUS (INCLUDING AMPLIFIERS) THAT PRODUCE HEAT.
- 5) DO NOT PLACE SOURCES OF NAKED FLAMES, SUCH AS LIGHTED CANDLES, ON THE UNIT.
- 6) CLEAN THIS APPARATUS ONLY WITH DRY CLOTH.
- 7) UNPLUG THIS APPARATUS DURING LIGHTNING STORMS OR WHEN UNUSED FOR LONG PERIODS OF TIME.
- 8) PROTECT THE POWER CORD FROM BEING WALKED ON OR PINCHED PARTICULARLY AT PLUGS.
- 9) ONLY USE ATTACHMENTS/ACCESSORIES SPECIFIED BY THE MANUFACTURER.
- 10) REFER ALL SERVICING TO QUALIFIED SERVICE PERSONNEL.

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## INTRODUCTION

Mega Scaler supports one VGA source, one S-Video source, two AV sources, two YPBPR sources with analog audio, four HDMI sources and one DVI-I source with analog audio and digital audio by optical, if both of the analog and digital audio are connected, the digital audio has the priority. The analog audio from the input is digitized and outputted to the HDMI connection as well as the digital audio outs. The HDMI outputs also have separate analog audio output. One of the HDMI input supports audio 5.1.

Mega Scaler allows you to upscale and switch your standard definition or high definition sources to resolutions up to 720P or 1080P. The two outputs work simultaneously and are totally same. Some given VESA format can be bypassed under VGA and DVI-I port.

Mega Scaler has the ability of equalization and amplification to ensure HDMI signal's transmission through long cable without quality loss.

Mega Scaler offers solutions for digital entertainment center, HDTV retail and show site, HDTV, STB, DVD and Projector factory, noise, space and security concerns, data center control, information distribution, conference room presentation, school and corporate training environments.

**Note: The switching is done by using the remote control or the button on the front panel. Any HDTV with DVI inputs can be connected to the HDMI output of the Mega Scaler by using a HDMI to DVI adapter, if the cable being used is DVI.**

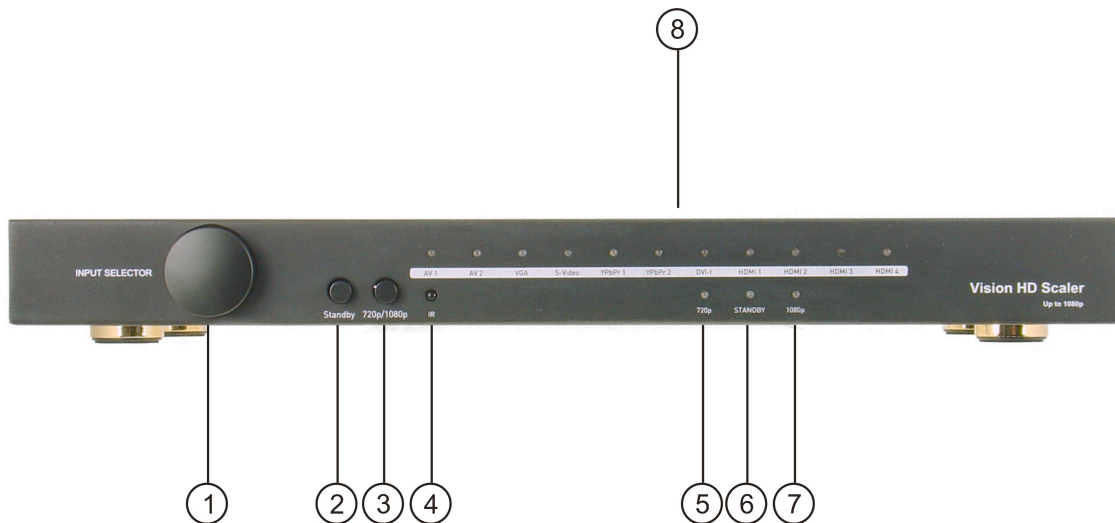
## PACKAGE CONTENTS

1. Main unit. P/N\_Mega Scaler
2. Power Supply, 5VDC
3. Operating Instructions
4. Remote.
5. IR extension cable.

\*PART NUMBER (Abbreviation as P/N).

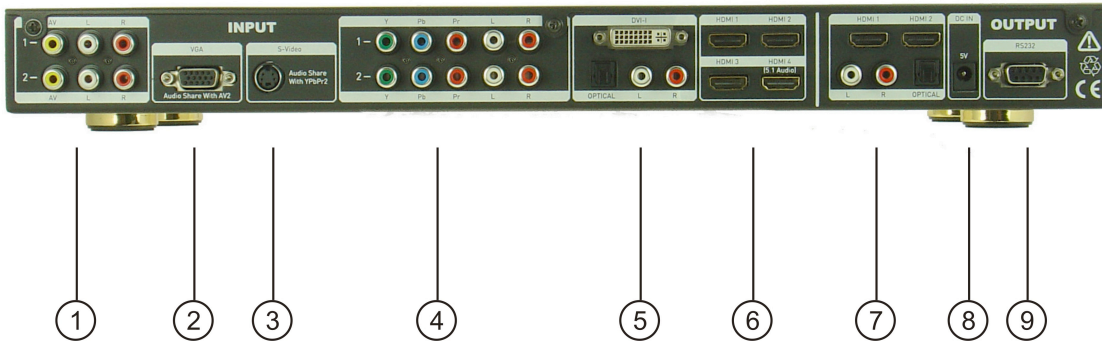
## PANEL DESCRIPTIONS

### Front Panel



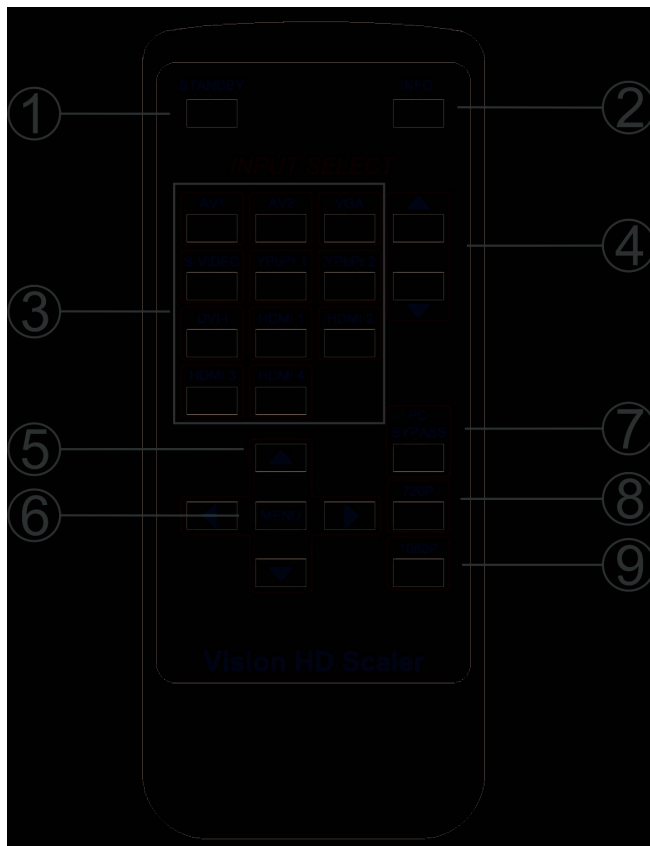
1. Button of input selection.
2. Button of power standby.
3. Button of output format rolling between 720P, 1080P and bypass. Bypass function is useful under VGA and DVI-I input.
4. IR window.
5. Indicator of 720P.
6. Indicator of power standby. When power standby, the LED lights.
7. Indicator of 1080P.
8. Indicator of input sources.

### Rear Panel



1. Input port AV1 and AV2 with audio R/L.
2. Input port VGA.
3. Input port SV.
4. Input port YPbPr1 and YPbPr2 with audio R/L.
5. Input port DVI-I with audio R/L and optical.
6. Input port HDMI1 to HDMI4, HDMI4 supports audio 5.1.
7. Output port HDMI1 and HDMI2 with audio R/L and optical.
8. Power input.
9. RS232 port.

## IR REMOTE



### 1 STANDBY

Press the button once to enter standby mode; press again to power on the MS1102-01A.

### 2 INFO

Press the button to view the input and output message.

### 3 INPUT SOURCE

Press any of the button to directly select an Input source.

### 4 UP/DOWN

Select the input source one by one.

### 5 UP/DOWN/LEFT/RIGHT

Press UP/DOWN button to move the highlighter bar to the desired parameter in OSD menu. Press LEFT/RIGHT to increase/decrease the setting value of a selected parameter.

### 6 MENU

Press the button to activate an on screen menu page.

### 7 PC BYPASS

Press the button to enter bypass mode.

### 8 720P

Press the button to directly output 720P.

### 9 1080P

Press the button to directly output 1080P.

### OSD MENU

PICTURE	CONTRAST	0~100 of contrast level
	BRIGHTNESS	0~100 of bright level
	SATURATION	0~100 of saturation level
	SHARPNESS	0~100 of sharpness level
	HUE	0~100 of sharpness level
	PICTURE MODE	STANDARD/ DYNAMIC/ SOFT /PERSONAL
	SCALE	FULL/ OVERSCAN/ UNDERSCAN/ LETTERBOX/ PANSCAN
	NR	HIGH/ MID /LOW/ AUTO/ OFF
	RESET	Reset the above parameters to the default factory settings.
PC	CONTRAST	0~100 contrast level
	BRIGHTNESS	0~100 of bright level
	H-POSITION	0~100 of H position level
	V-POSITION	0~100 of V position level
	H-SIZE	0~20 of H size level
	V-SIZE	0~20 of V size level
	RESET	Reset the above parameters to the default factory settings.
OSD	H-POSITION	0~100 of H position level
	V-POSITION	0~100 of V position level
	DURATION	5s/ 15s/ 30s/ 60s
	HALFTONE	0~8 of halftone level
	RESET	Reset the above parameters to the default factory settings.

## OUTPUT FORMAT

<b>INPUT</b>	
AV/SV	PAL, NTSC
YPBPR/HDMI	480i,480P,576i,576P,720P@[50/60], 1080i@[50/60], 1080P@[50/60]
VGA/DVI	800x600@60, 1024x768@60,1152x864@60, 1280 x768@60,1280 x960@60,1280x1024@60, 1440 x900@60,1400 x1050@60,1600 x1200@60, 1920 x1200@60
VESA-BYPASS	800x600@60,1024x768@60,1280 x720@60, 1280x1024@60,1280 x960@60,1440 x900@60, 1600 x1200@60,1920 x1080@60
<b>OUTPUT</b>	
AV/SV/YPBPR/HDMI/ VGA/DVI	720P@[50/60] 1080P@[50/60]
VESA-BYPASS	800x600@60,1024x768@60,1280 x720@60, 1280x1024@60,1280 x960@60,1440 x900@60, 1600 x1200@60,1920 x1080@60

## CONNECT AND OPERATION

- 1) Connect the HDMI input sources (such as HD-DVD, PS3, STB etc) into Mega Scaler.
- 2) Connect the HDMI outputs (such as HD-LCD, HD-DLP) into Mega Scaler.
- 3) Power on the input source you want to show. (Keep the unused input power off, otherwise it may interfere the normal display.)
- 4) Connect the power supply into Mega Scaler and turn on the display you want to watch.
- 5) Use remote or rolling the button to choose input source.

### NOTE:

VGA and AV2 share the same L/R audio input, S-video and YPBPR2 share the same L/R audio..

MS1102-01A accepts AV, SV, VGA, YPBPR, DVI-I and HDMI inputs. The formats supported by these inputs are as follows:

**Attention**

1. This equipment has memory. When restarting this machine, input selection would be fixed as it was before.
2. Under bypass mode, the indicators of output will go out.
3. Under bypass mode, when switching from VGA or DVI-I to other inputs, the output will be in 1080P.
4. The output will be 1080P when powered on from bypass mode.
5. The bypass key is only useful under VGA and DVI-I input.
6. Besides the given VESA format, the output will be automatically 1080P.

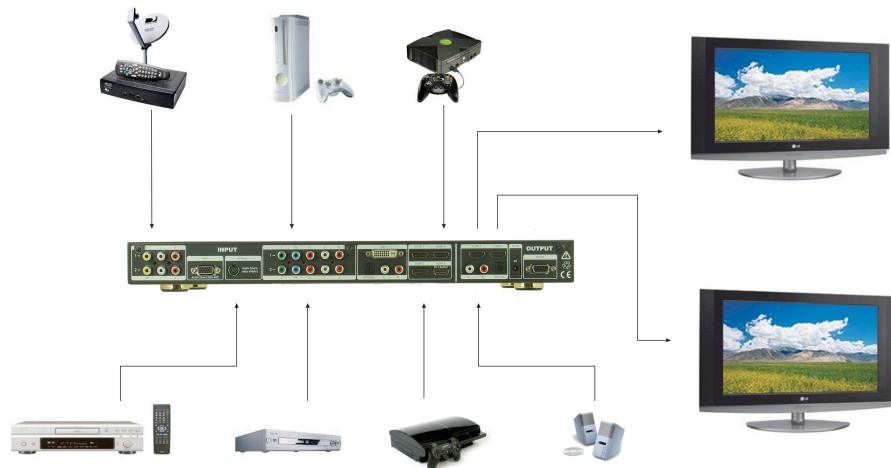
**SPECIFICATIONS**

Operating Temperature Range	-5 to +35°C (-41 to +95 °F)
Operating Humidity Range	5 to 90 % RH (no condensation)
Input Video Signal	0.5-1.0 volts p-p
Input DDC Signal	5 volts p-p (TTL)
Output Video	HDMI1.2
Maximum Transmission Distance	<15m (If needed, HDMI extender is optional)
Power Consumption	15watts (Max)
Power Supply	5VDC
Dimensions	430mmW×48mmH×200mmD/16.9"W×1.9"H×7.9"D
Mass (Main unit)	2.4kgs/5.3lb

**\*Note: Specifications are subject to change without notice. Mass and dimensions are approximate.**



## TYPICAL APPLICATION



## MAINTENANCE

Clean this unit with a soft, dry cloth. Never use alcohol, paint thinner or benzene to clean this unit.

## PRODUCT SERVICE

- 1) **Damage requiring service:** The unit should be serviced by qualified service personnel if:
  - (a) The DC power supply cord or AC adaptor has been damaged;
  - (b) Objects or liquids have gotten into the unit;
  - (c) The unit has been exposed to rain;
  - (d) The unit does not operate normally or exhibits a marked change in performance;
  - (e) The unit has been dropped or the cabinet has been damaged.
- 2) **Servicing Personnel:** Do not attempt to service the unit beyond that described in these operating instructions. Refer all other servicing to authorized servicing personnel.
- 3) **Replacement parts:** When parts need replacing ensure the servicer uses parts specified by the manufacturer or parts that have the same characteristics as the original parts. Unauthorized substitutes may result in fire, electric shock, or other hazards.
- 4) **Safety check:** After repairs or service, ask the servicer to perform safety checks to confirm that the unit is in proper working condition.

## WARRANTY

If your product does not work properly because of a defect in materials or workmanship, HDTV Supply Inc. (referred to as “the warrantor”) will, for the length of the period indicated as below, **(Parts (1) Year, Labor(90) Days)** which starts with the date of original purchase (“Limited Warranty period”), at its option either (a) repair your product

with new or refurbished parts, or (b) replace it with a new or a refurbished product. The decision to repair or replace will be made by the warrantor.

During the “Labor” Limited Warranty period there will be no charge for labor. During the “Parts” warranty period, there will be no charge for parts. You must mail-in your product during the warranty period. This Limited Warranty is extended only to the original purchaser and only covers product purchased as new. A purchase receipt or other proof of original purchase date is required for Limited Warranty service.

### Mail-In Service

When shipping the unit, carefully pack and send it prepaid, adequately insured and preferably in the original carton. Include a letter detailing the complaint and provide a day time phone and/or email address where you can be reached.

IF REPAIR IS NEEDED DURING THE LIMITED WARRANTY PERIOD THE PURCHASER WILL BE REQUIRED TO FURNISH A SALES RECEIPT/PROOF OF PURCHASE INDICATING DATE OF PURCHASE, AMOUNT PAID AND PLACE OF PURCHASE. CUSTOMER WILL BE CHARGED FOR THE REPAIR OF ANY UNIT RECEIVED WITHOUT SUCH PROOF OF PURCHASE.

### LIMITED WARRANTY LIMITS AND EXCLUSIONS

- 1) This Limited Warranty ONLY COVERS failures due to defects in materials or workmanship, and DOES NOT COVER normal wear and tear or cosmetic damage. The Limited Warranty ALSO DOES NOT COVER damages which occurred in shipment, or failures which are caused by products not supplied by the warrantor, or failures which result from accidents, misuse, abuse, neglect, mishandling, misapplication, alteration, faulty installation, set-up adjustments, misadjustment of consumer controls, improper maintenance, power line surge, lightning damage, modification, or service by anyone other than a Factory Service center or other Authorized Servicer, or damage that is attributable to acts of God.
- 2) THERE ARE NO EXPRESS WARRANTIES EXCEPT AS LISTED UNDER “LIMITED WARRANTY COVERAGE”. THE WARRANTOR IS NOT LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OF THIS PRODUCT, OR ARISING OUT OF ANY BREACH OF THIS WARRANTY. (As examples, this excludes damages for lost time, cost of having someone remove or re-install an installed unit if applicable, travel to and from the servicer, loss of or damage to media or images, data or other recorded content. The items listed are not exclusive, but are for illustration only.)
- 3) PARTS AND SERVICE, WHICH ARE NOT COVERED BY THIS LIMITED WARRANTY, ARE YOUR RESPONSIBILITY.



**Thank you for your purchase.**

**We appreciate your business. Please contact us with your question and comments.**

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