

EXT-FULLHD SC version

Manual DOC V1.01



EXT-FULLHD brief

The EXT-FULLHD is a HDMI to RGB converter, ideal for connecting CRT projectors and other analog RGB displays to digital 1080p full HD sources such as the PS3, XBOX360, HD DVD, and Blu-ray players. It has one HDMI V1.3 input port with Deep Color™ support, and converts the HDMI to an analog RGB output. A build-in Gamma adjustment circuit allows for perfect black level details creating a perfect image for your projector. A gain control is also available for advanced users and installers to adjust the white (contrast) level of the image.

FEATURES

■ HDMI input path

- HDMI 1.0, 1.1, 1.2, 1.3 ,HDCP 1.1, and DVI 1.0 compliant
- Supports DTV mode (480P,576P,720P,1080i,1080P) for 50 and 60Hz
- Supports PC mode VGA, SVGA, XGA, SXGA, UXGA .etc
- Supports 4:4:4 RGB / YCbCr input
- Supports 4:2:2 YCbCr input
- Supports both 16-235 and 0-255 color range and auto select correct value
- **14bit** Data processing with High precision **200MHz 11bit** DAC
- **Gamma correction processing**
- High speed 1GHz output Buffer for driving long analog RGB cables of any length
- Support deep color mode for **10bit** and **12bit**
- Support 120Hz for 720P and 1080i

■ Board and BOX

- Metal box for the cleanest electrical environment for high definition content processing
- Global power supply 100V-240V
- Toslink output, support up to 8ch Audio
- Output sync mode supports RGBHV
- Manual H-PHASE adjustment

■ HDMI support mode table

PC mode	640X480	60HZ 72HZ 75HZ 85HZ
	800X600	56HZ 60HZ 72HZ 75HZ 85HZ
	1024X768	43HZ 60HZ 70HZ 75HZ 85HZ
	1152X864	60HZ 70HZ 75HZ 85HZ
	1280X1024	43HZ 60HZ 75HZ 85HZ
	1600X1200	48HZ 60HZ
	1440X960	43HZ 60HZ 72HZ
HDTV mode	480p	60HZ
	576p	50HZ
	720p	50HZ 59HZ 60Hz 120Hz
	1080i	29HZ 30HZ 50HZ 59HZ 60HZ 96HZ 120Hz
	1080p	50HZ 59HZ 60Hz 24HZ* 25HZ* 29.9HZ* 30HZ*
	1035i	30HZ

PRELIMINARY, SUBJECT TO CHANGE WITHOUT NOTICE

*1 The EXT-FULLHD support these refresh rates (and others), but most CRT projectors and analog display devices will only support a 30Hz-150Hz range. Using such such low refresh rates on most analog displays will result in image flicker.

Box overview

Input side of Panel



POWER INPUT

Output side of panel
HDMI Active

HDMI input

Deep Color mode
Link Status
SEL button

White (Contrast) Adjust

For adjusting the output between 0.7V~1.0V
(advanced users only!)



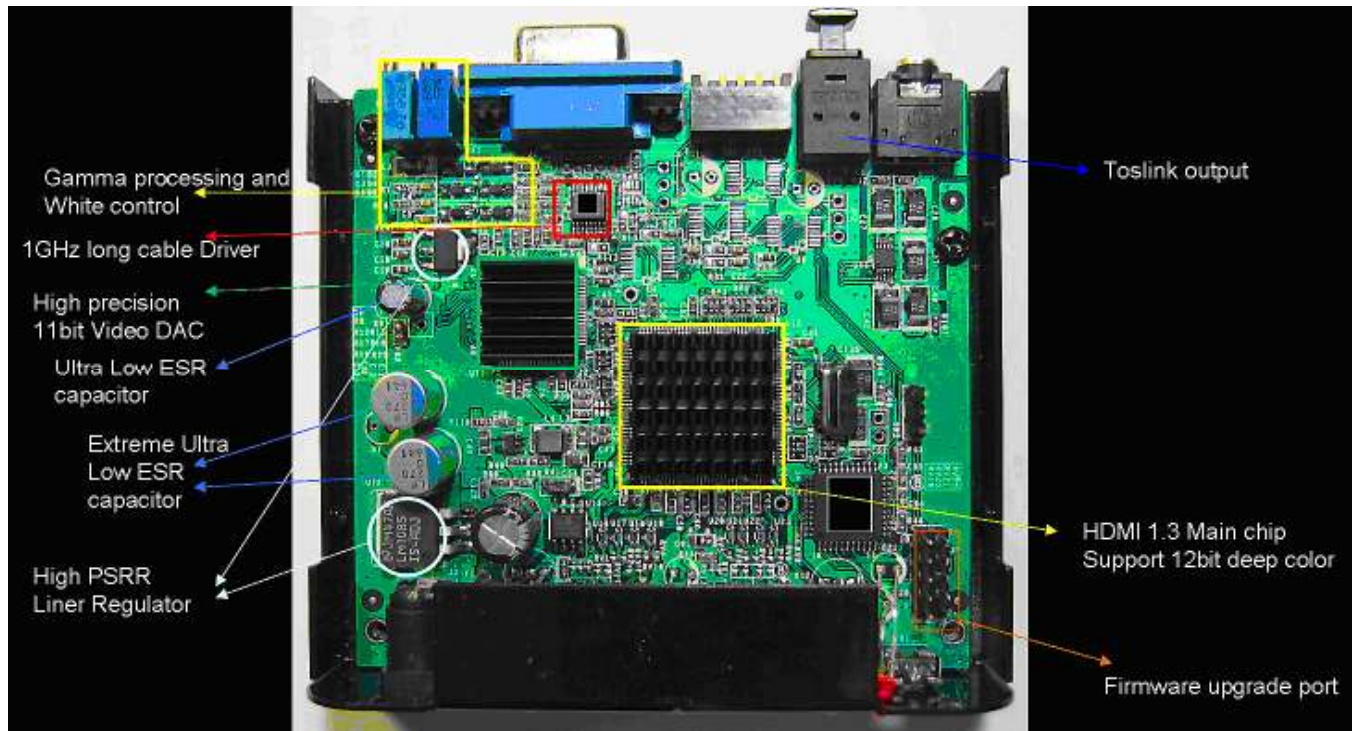
SPDIF output

Optional Switch

VGA output

Gamma Adjust

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HDMI input ports:

Connect HDMI cable to video source

SPDIF port (Toslink):

Optical digital sound output, supports 2 channel PCM and 8 channel compressed sound

DC connector:

Connect to AC adaptor

Option Switch:

Switch	Description	Notes
#1	Not used	
#2	Not used	
#3	Optional	
#4	V-shift	Set to K – see 'H-phase adjust' below
#5	H-shift	Set to K – see 'H-phase adjust' below

H-PHASE ADJUST:

This adjustment is for professional use only. The average user will never need to adjust this.

The SEL button together with dip switches may be used to adjust image position if required.

SEL button



Procedure:

1. Set SW1 #5 to "K"
2. Press SEL button, you will see the image shift
3. If you change resolutions (ex: 1080P to 720P) repeat the procedure by doing steps 1 & 2 again
4. The shift value will be remembered for the last running mode



Long cable support:

The unit has been tested with 30 meter MOLEX HDMI cable. Longer cables are supported as well, though high quality cables should be used (especially for long runs).

The EXT-FULLD has been tested with the following HDMI V1.3A Players :

1. Toshiba XA2 HD-DVD player
2. Sony PS3
3. Panasonic BD30A Blue-ray player

Any and all HDMI devices are supported however.