

VIM-HD

Datasheet

DOC V1.00
PCB V1.01



PRELIMINARY, SUBJECT TO CHANGE WITHOUT NOTICE

VIM-HD brief

VIM-HD is highly integrated board for Marquee 7000 8000 9000 series CRT projector. It has two input port, one is advanced HDMI input port, and another is analog component input. Input auto-selection is useful when projector is mounted on ceiling. Optional Gamma circuit create real nature image for your projector. The VIM-HD is an ideal product for CRT projector connect feature digital and analog HD source.

FEATURES

■ HDMI input path

- HDMI 1.1, 1.2ready ,HDCP 1.1, and DVI 1.0 compliant
- DTV mode support (480P,576P,720P,1080i,1080P) for 50 and 60Hz
- PC mode support (VGA, SVGA, XGA, SXGA, UXGA) up to 165MHz
- Support 4:4:4 RGB / YCbCr input
- Support 4:2:2 YCbCr input
- Support both 16-235 and 0-255 color range and auto select correct value
- High precision >200MHz 10bit DAC
- High speed >500MHz output Buffer

■ Analog component input path

- BT601/709 color space transform support
- Auto mode detect for correct color space
- Support HDTV mode 480P 720P 1080I 1080P 60HZ(board V1.01 optional)
- High speed >500MHz output Buffer

■ Board

- Auto input source detect and auto-select function with priority setting
- Optional gamma circuit interface
- Low power consumption when disabled
- [IR remote \(optional\) control input priority and gamma level control, PCB version V1.01 or later](#)

■ 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
	1080I	29HZ 30HZ 50HZ 59HZ 60HZ 96HZ ^{*1}
	1080P	50HZ 59HZ 60Hz 24HZ ^{*2}

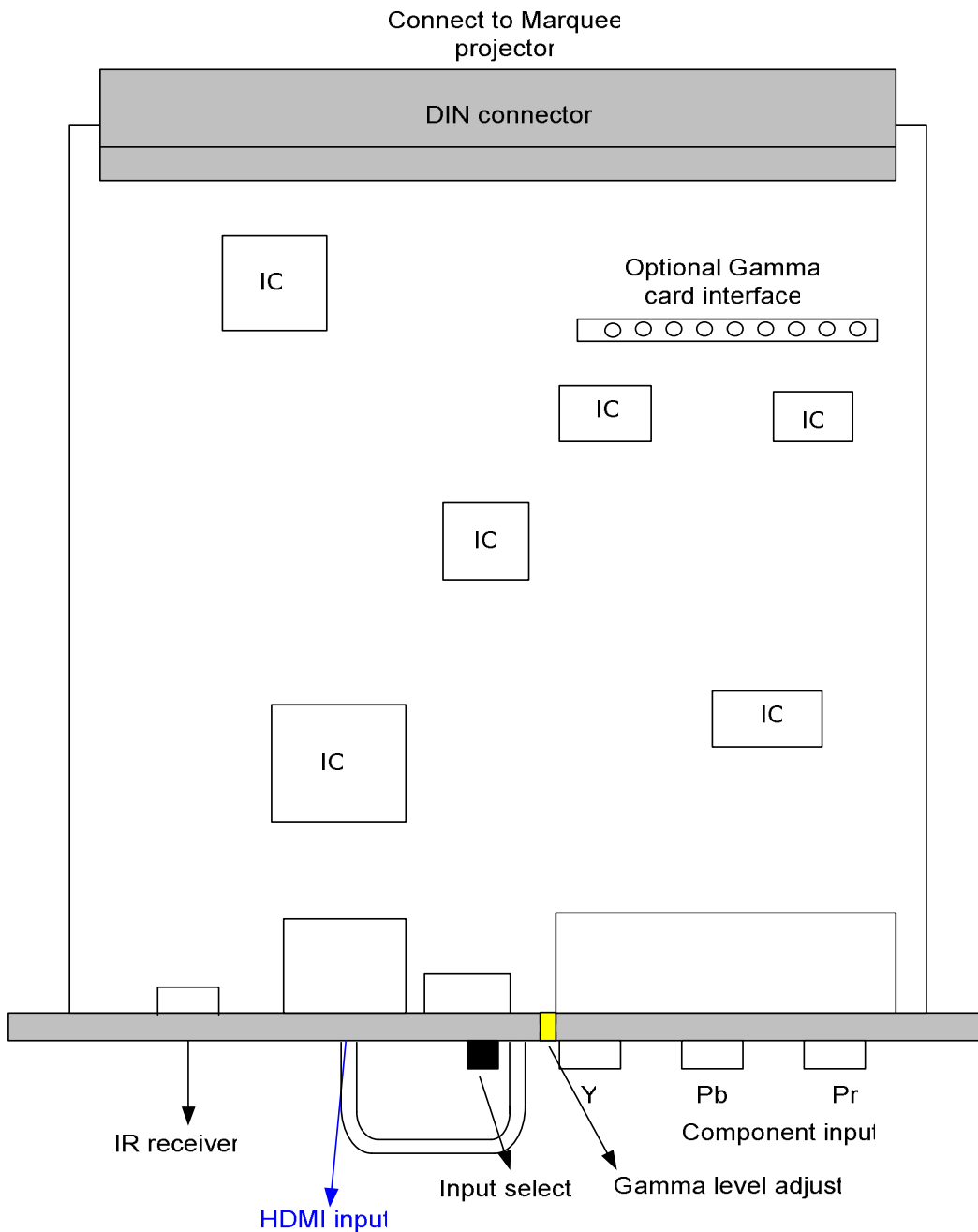
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	1035I	30HZ
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*1 need use powerstrip to set graphic card output this mode

*2 mode supported or not will dependent on projector, most CRT projector only support 30Hz-150Hz

Board overview



HDMI input port:

Connect HDMI cable to video source

Component port:

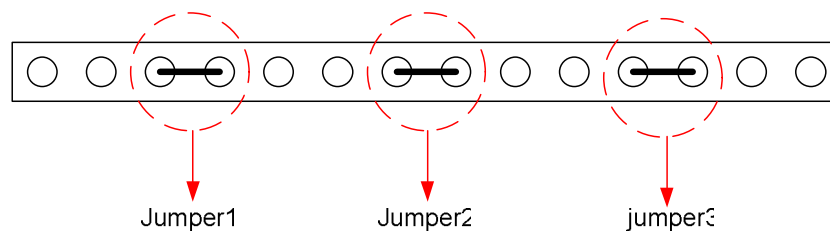
Connect video source by RCA cable

Input Select:

Select input source priority

Optional Gamma circuit interface:

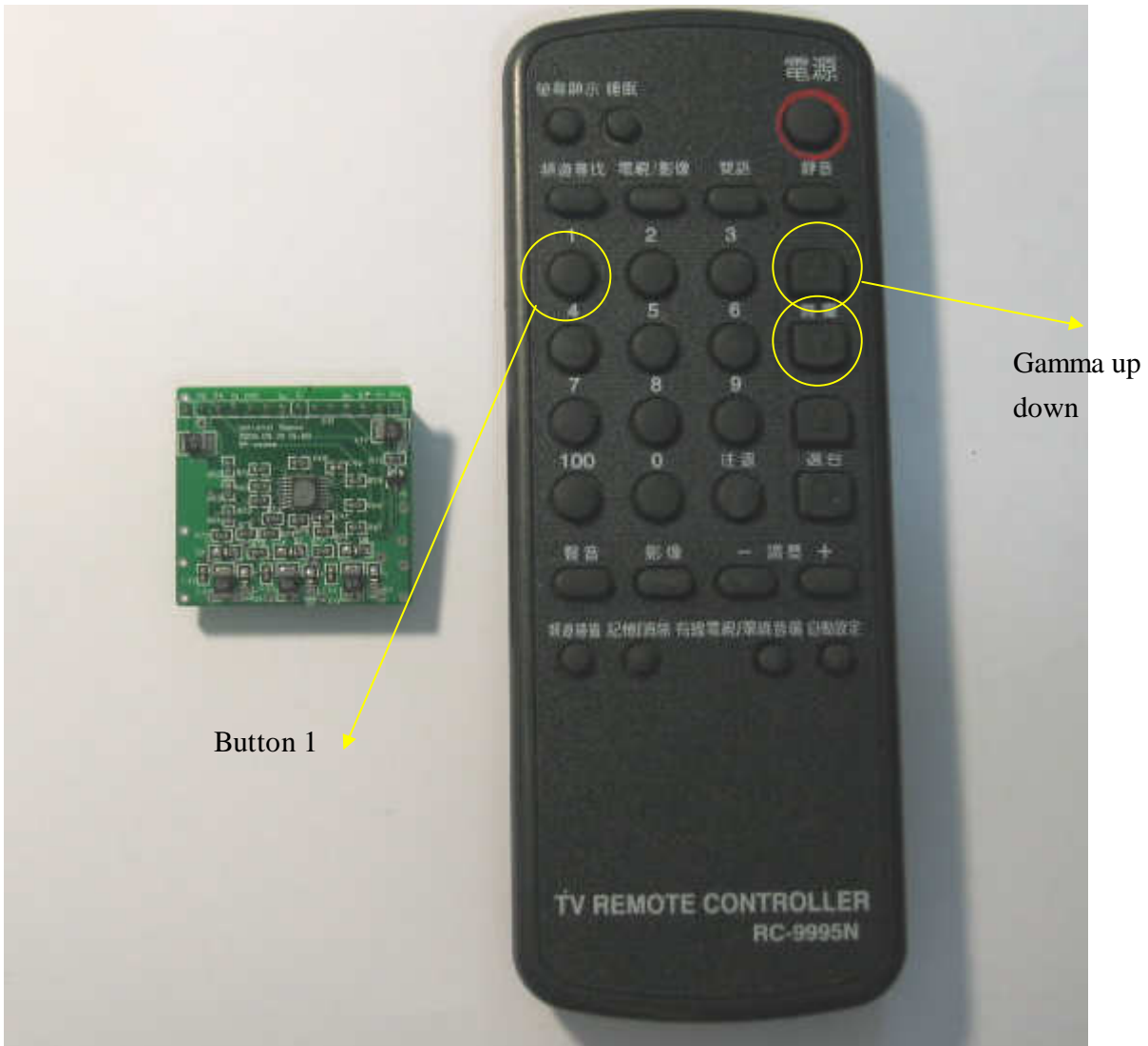
If gamma circuit is not existed, there will be three jumper needed. Jumper setting is below:

**Long cable support:**

30m molex cable test ok 720P BOK HDMI player

Optional IR control:

IR control can let you toggle two input source without change the switch on the card, and also can control gamma level just using one remote controller.

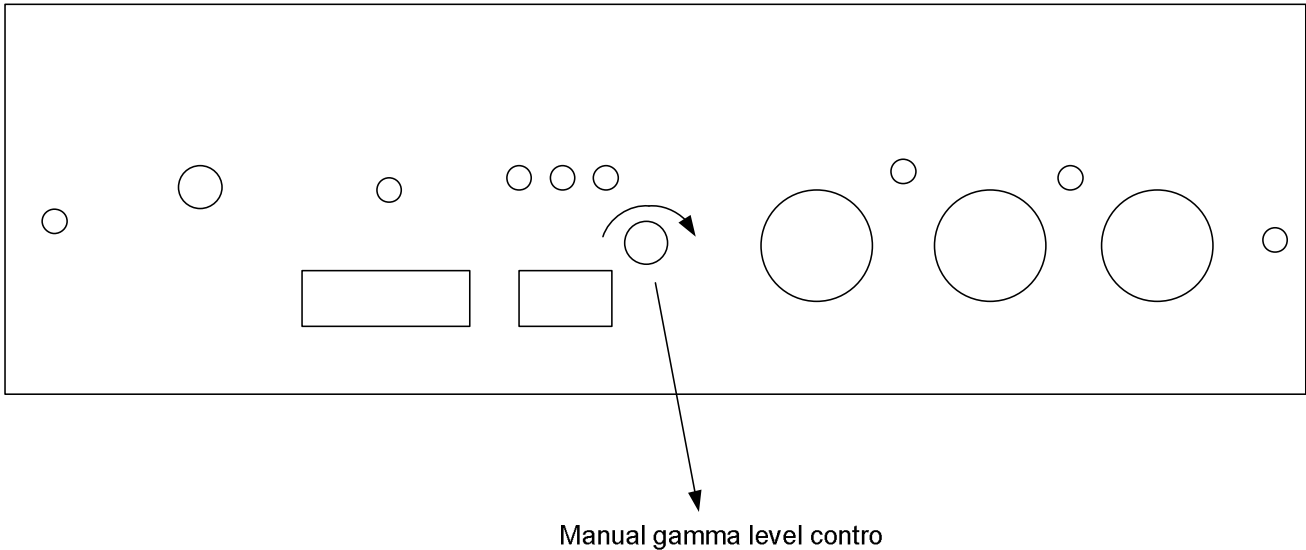


Button 1: input select (switch on the card should set to hdmi side first),

Only active when two input source are alive!

Gamma up/down Key: gamma correction level control (20 step)

Gamma level Adjust:



We can see the panel between Switch and component input, there is a little screw, it is use for gamma level adjust. Below is adjustment way:

1. for VIM-HD with remote controller user:

step 1: trun the little screw to max, (right to left)

Step 2: using remote controller gamma up/down key to the a little higher gamma level you want. This is crose adjust for gamma step, you will have total 20 level to use.

Step 3: fine tune the gamma level by turning the little screw. (you will not need this step, if 20 step gamma is enough for your system.

2. for VIM-HD without remote controller user:

just use the little screw to adjust the gamma level you need.