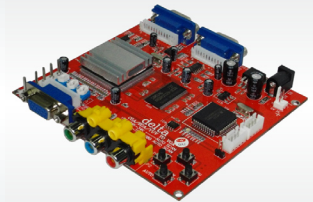




## Arcade Video Converter Board

### ID # 12205

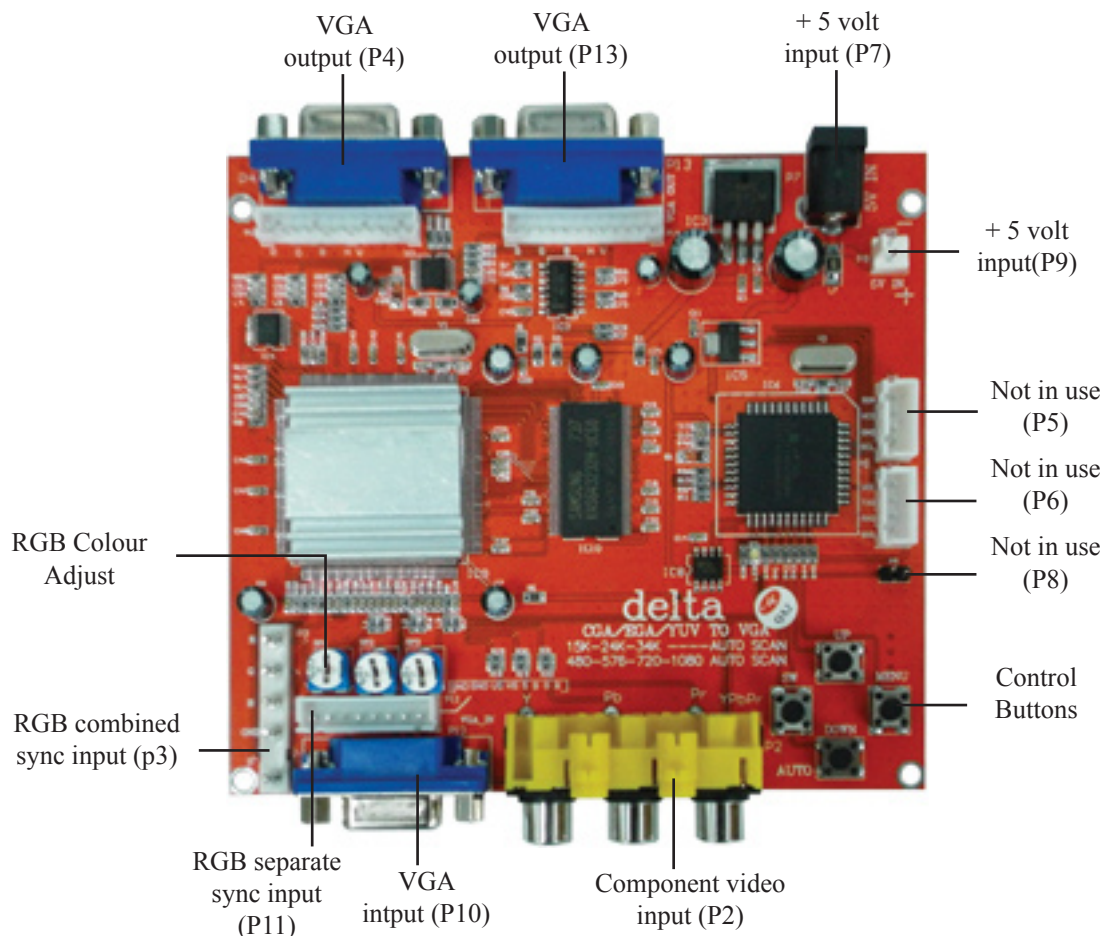


### INTRODUCTION:

The Arcade Video Converter Board is for upscaling your existing video game board to VGA+ resolutions for display to new LCD and Plasma monitors. Enhance your Arcade cabinet for best display of your games using latest visual technology. There is now no need to use Rear Projection or CRT screens. This converter board will accept a wide range of CGA, EGA, HD and VGA signal timings making it fully adaptive with all of the existing game boards.

### FEATURES:

- Supports CGA / EGA / VGA / YCbCr / YPbPr signal inputs
- Input Connection (selectable): RGBS- 5 pin, RGBHV- 8 pin, VGA- 15 pin, Component RGB- 3AV.
- Output Connection: Dual VGA- 15 pin, Dual VGA- 12 pin.
- Supports VGA Output : VGA (640x480), SVGA (800x600), XGA (1024x768), HDTV (1360x768)
- Input Signal Auto Scan: CGA (14.5-16.5KHz) / EGA (23.5-25.5KHz) / VGA (30.5-32.5KHz)
- Input Signal Auto Scan YCbCr / YPbPr: (480i, 576i, 720i, 1080i, 480p, 576p, 720p, 1080p)
- English and Chinese On Screen Display menu.
- Supports Output Resolution control, Position & Size control.
- Digital 24-bit A/D converter for true 16.7-million color conversion.
- Supports all VGA monitors (CRT, LCD, PDP)



**\* - To RESET system, press and hold DOWN/AUTO button for 5 SECONDS.**  
**\*\* - P5, P6, P8 DO NOT USE. BOARD MALFUNCTION/DAMAGE WILL OCCUR.**



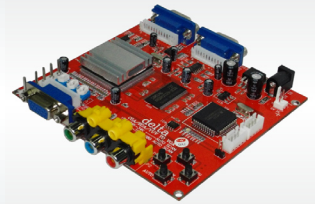
## Arcade Video Converter Board ID # 12205



Functions				Board Location
Power	5 Volts (2amp DC) Positive Centre			P7 or P9
Input Signal	CGA / EGA RGB (5 pin)	14.5 - 16.5khz 23.5 - 25.5khz 30.5 - 32.5khz	autoscan	P3 or P10 or P11
	RGBHV (8 pin)	30.5 - 32.5khz	autoscan	P10 or P11
	VGA (15 pin)	30.5 - 32.5khz	autoscan	P10 or P11
	YPbPr	480p, 576p, 720p, 1080p	autoscan	P2
	YCbCr	480i, 576i, 720i, 1080i	autoscan	P2
Output Signal	VGA (15 pin)	VGA-640*480, SVGA-800*600 XGA-1024*768, HDTV-1360*768		P4 and P13
User Control	Input Switch, Image Zoom, Image Position, Output Resolution, RGB gain adjust.			menu key RGB VR pots
Dimensions	115 x 105 x 20 mm			
Weight	100g			

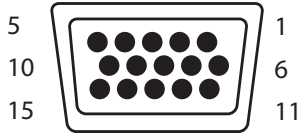
CONTROL BUTTONS:	
MENU	Open OSD menu / Enter Parameters.
UP	Up Menu / Increase value.
DOWN/AUTO	Down Menu / Decrease value / Auto Scan / Reset Press this key: auto scan CGA/EGA signal ** this operation is invalid when you open OSD menu**
SW	Select input YPbPr / RGBS / RGBHV-VGA. ** this operation is invalid when you open OSD menu**

POWER CONNECTIONS					
5v DC 2 Wire Power (P9)			5v DC Socket Power (P7)		
PIN	Function	Wire Colour	PIN	Function	Wire Colour
A	+ 5v DC	yellow	Center	+ 5v DC	black w/white stripe
B	- 5v DC	black	Outer	- 5v DC	black



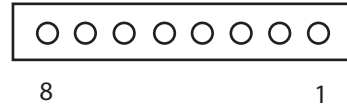
### Connection Pinouts

#### VGA Inputs and Outputs (P4, P10, P13)



PIN #	Function	Wire Colour
pin 1	red	N/A
pin 2	green	N/A
pin 3	blue	N/A
pin 4 ~ 12	ground	N/A
pin 13	H sync	N/A
pin 14	V sync	N/A
pin 15	N/C	N/A

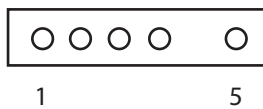
#### RGBHV Input (P11)



PIN #	Function	Wire Colour
pin 1	red	red
pin 2	green	green
pin 3	blue	blue
pin 4	shield	grey
pin 5	H sync	white
pin 6	V sync	yellow
pin 7 ~ 8	ground	black

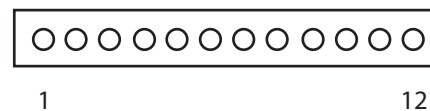
*Note : Cable colour may vary*

#### RGBS Input (P3)



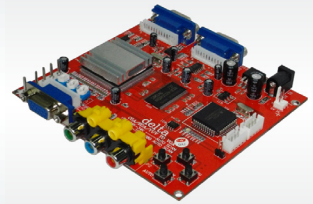
PIN #	Function	Wire Colour
pin 1	red	red
pin 2	green	green
pin 3	blue	blue
pin 4	ground	black
pin 5	H+V sync	white

#### RGBHV Output (P4, P13)



PIN #	Function	Wire Colour
pin 1	red	red
pin 2	ground	black
pin 3	green	green
pin 4	ground	black
pin 5	blue	blue
pin 6	ground	black
pin 7	H sync	white
pin 8	V sync	yellow
pin 9	ground	black
pin 10 ~ 11	N/C	
pin 12	ground	black

*Note : Cable colour may vary*



## Arcade Video Converter Board ID # 12205

### ON SCREEN DISPLAY

#### GEOMETRY

- H Position: Increase / Decrease Horizontal Position.
- V Position: Increase / Decrease Vertical Position.
- H Size: Increase / Decrease Horizontal Size.
- V Size: Increase / Decrease Vertical Size.
- Clamp St: Increase / Decrease Black Band
- Clamp Sp: Increase / Decrease Black Band
- Exit

**\*\* "Clamp sp" & "Clamp st": Do not adjust this button unless the monitor has black stripe on screen. \*\***

#### DISPLAY

- 640 x 480      VGA out
- 800 x 600    SVGA out
- 1024 x 768    XGA out
- 1360 x 768    HDTV out
- Exit

#### LANGUAGE

- English
- Chinese
- Exit

## Troubleshooting

<b>PROBLEM</b>	<b>SOLUTION</b>
No signal on the monitor	- Check input and output cables connected correctly. - Check power is on.
Display on the monitor is: "No signal"	- Press "SW" to switch input port.
Display on the monitor is: "Input not Supported"	- Press "DOWN/AUTO" for 5 seconds and release, system will reset to SVGA (800x600) output.
Display on the monitor not "Full Screen"	- Enter menu and adjust image position and zoom.
Image "Shake" or "Freeze"	- Press "DOWN/AUTO", system auto scans input signal and restores image.
Have black stripe on screen, or screen loses image after 10-15 minutes.  <i>NB. "sp" value is always greater than "st" value</i>	- Adjust "Clamp sp" to 04. - Adjust "Clamp st" to 03. test . - If still no image, adjust "sp", "st" values up by 1 until image remains constant. - Clamp sp is always greater than Clamp st
Image color not right	- Adjust R\G\B Pots (mounted on PCB)