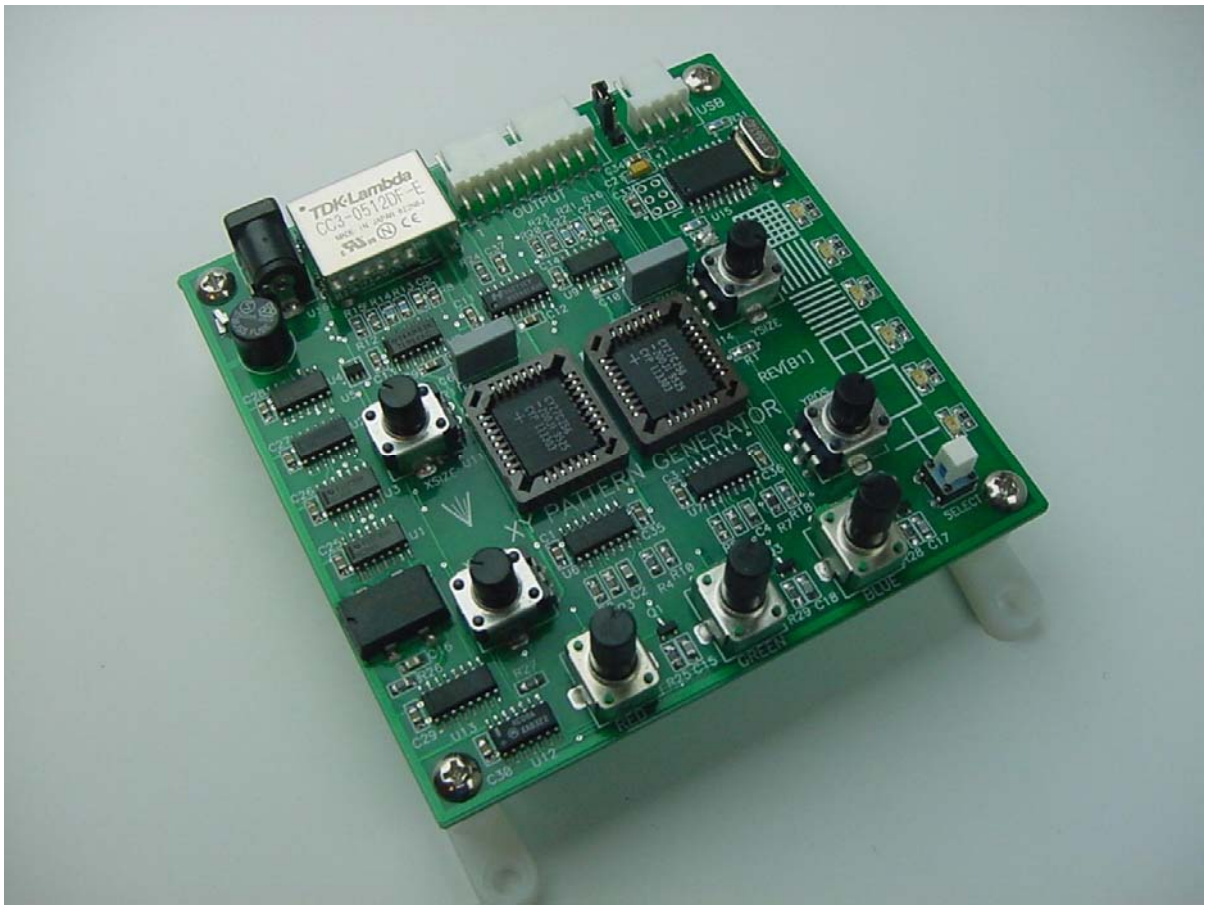
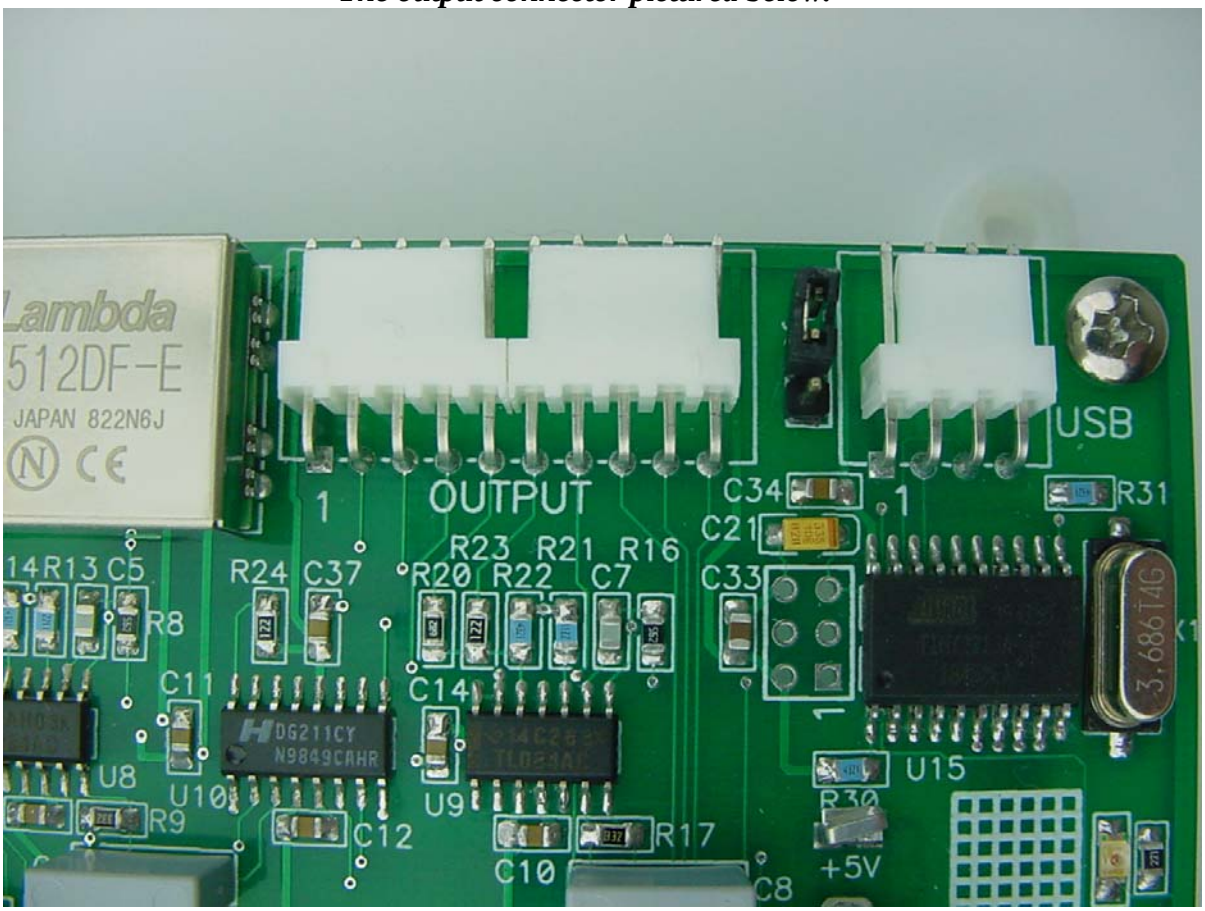
INSTRUCTIONS FOR THE VECTOR LABS X-Y MONITOR TESTER



The X-Y Pattern Generator was designed as a test instrument to aid in the repair and alignment of B/W and Color X-Y monitors. This unit cannot be used on Raster scan monitors. The Pattern Generator comes equipped with pass through cable assemblies to fit Wells Gardner and Electrohome B/W and color X-Y monitors. The unit can be used on other X-Y monitors by building your own cables or ordering custom cables from support@vector-labs.com

The unit is powered by the included 5VDC wall adapter or through an optional USB cable and a socketed 500ma fuse is provided for circuit protection. +5VDC and GND test points for scope probes is also provided. There is a single “SELECT” push button which cycles through the six different display patterns. Adjustment pots for XSIZE, X POSITION, YSIZE, X POSITION, RED LEVEL, GREEN LEVEL & BLUE LEVEL.

The output connector pictured below.



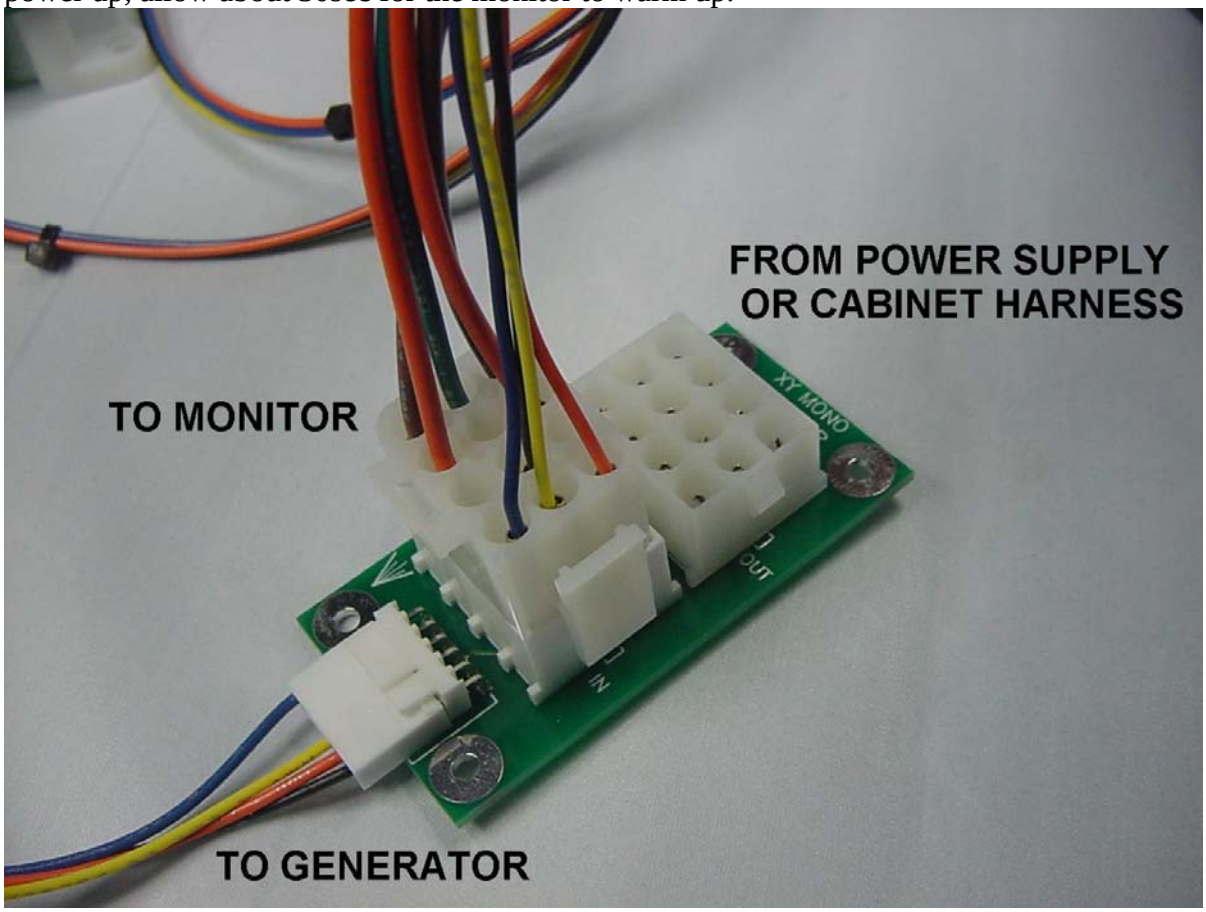
Pin assignments for the 10 pin output connector is as follows:

1. Ground
2. XOUT
3. XCTRL (see note)
4. XGAIN (see note)
5. YOUT
6. YCTRL (see note)
7. YGAIN(see note)
8. RED
9. BLUE
10. GREEN

NOTE:
When connecting Monochrome monitors X output is on pin2 with 3-4 shorted.
When connecting Monochrome monitors Y output is on pin5 with 6-7 shorted.
When connecting Color monitors X output is on pin2 with 3-4 open.
When connecting Color monitors Y output is on pin5 with 6-7 open.

TESTING YOUR X-Y MONITOR

The Pattern Generator does not provide power outputs to the monitor. The included pass-thru cables are made so as to allow the games power supply to stay connected while the generator controls the inputs to the monitor. When testing a monitor check the power supply FIRST to be sure that the proper voltages are present. Only if the power supply is verified should the tested be plugged into the monitor. To begin testing first attach the provided cable that match your monitor type to be tested as shown. Before powering set the GREEN & RED level pots to the counter-clockwise or minimum level position and the BLUE to mid level position. This will prevent phosphor burn on a monitor with defective X & Y deflection circuits. Turn on the power supply or game cabinet and then plug in the Pattern Generator. The generator defaults to the CROSS pattern on power up, allow about 30sec for the monitor to warm up.



MONOCHROME XY PASS THRU CABLE SHOWN AS EXAMPLE

POWER UP ADJUSTMENTS

You should see a dim blue CROSS pattern on the monitor. Now adjust the BLUE level control to both clockwise and counter clockwise positions to verify that the brightness changes. Now set the BLUE level to minimum and try setting the brightness on the GREEN & RED controls to see if they function normally.

(NOTE: On a Monochrome monitor only the BLUE level control is functional)

COLOR ADJUSTMENTS

On a color monitor if you set all three colors to the max clockwise position your monitor should display white lines. You may still see parts of the line separate into RED, GREEN & BLUE lines. This is due to the convergence of the monitor not being perfectly aligned. Push the ‘SELECT’ switch to cycle to the different patterns to make sure that they are all functional. You may notice some “bowing” of the lines especially on larger monitors. This is because the generator does not have any pincushion correction.

YOKE ALIGNMENT

Set the generator to the horizontal or vertical lines. Test that the lines are not angled on the monitor. If so the Yoke may have rotated on the neck. See manufacturer’s instructions for the procedure.

CENTERING

The generator has adjustments for XSIZE, X POSITION, YSIZE and X POSITION via the four pots. You can use these controls as indicated to center and control the size of the image so that it fits onto the monitor with no lines going “off screen”

IF YOU HAVE AND PROBLEMS OR SUGGESTIONS ON HOW TO IMPROVE THIS GUIDE PLEASE CONTACT SUPPORT@VECTOR-LABS.COM

THANK YOU FOR YOUR PURCHASE