Stereo Space Model 1
Operating Instructions.

The Stereo Space Model 1 has two primary modes. In OVER/UNDER mode the VGA signal is SYNC doubled, i.e. a 60Hz VGA signal becomes 120Hz and the glasses are driven at the doubled rate.

In the NORM/ALT mode the VGA signal is passed through unmodified. Two options are provided to drive the glasses in a frame alternate manner.

The Stereo Space contains a digital display which shows the current vertical frequency.

1. Operation.

The STEREO SPACE MODEL 1 has two primary modes of operation: NORM/ALT and OVER/UNDER.

You can select the mode with the front panel toggle switch as shown in fig. 1, or with software control (with factory modification only - see section PORT OVER/UNDER CONTROL)
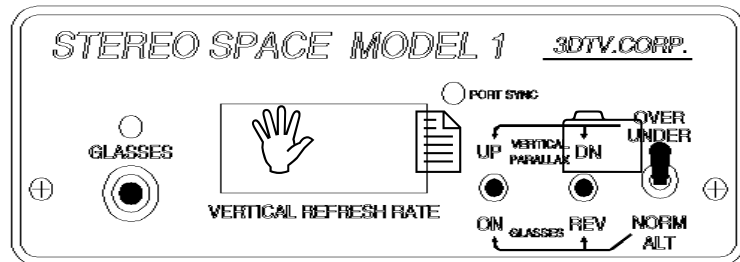

fig 1: Front Panel

Note that the functions of the two momentary switches on the front panel depend on the mode of operation.

The green LED above the GLASSES jack lights when the glasses are active.

1.1 Over/Under.

1.1.1 Using OVER/UNDER

The toggle switch on the front panel takes the device in and out of OVER/UNDER mode. For proper operation, run your program and wait until the Over/Under image is fully displayed on the screen before entering Over/Under.

In this mode the two momentary switches on the front panel let you adjust the vertical parallax if needed.

NOTE : Choosing the perfect refresh rate for the graphics mode you use is crucial. Different monitor and graphics card combinations will produce varying results. Use the software which comes with your video card to setup the vertical frequencies to be used for the various resolutions. Your monitor may perform better than it is specified. In Over/Under the vertical frequency will double, so it should generally be set to less than 60Hz unless your monitor can handle a greater bandwidth. Please realize that while running your card's setup software the size and position adjustments usually offered actually tweak the frequencies a bit and may be used to your advantage. You may need to save a separate setup for ideal over/under operation. Note that 800x600 might be the most difficult mode to make work. If your monitor doesn't appear to work and the frequency is greater than 120Hz then the monitor can't handle the bandwidth and is using 1/2 the rate.

To reverse eyes in OVER/UNDER put the toggle switch to NORM, press the REV switch and while holding the REV switch throw the toggle to OVER/UNDER.

1.1.2 Port Over/Under Control. (factory modified option)

This modification lets you select the mode of operation from the computer, and is denoted by the label 'D2=O/U'.

To select Over/Under from the computer the front panel switch must be in the NORM ALT position, otherwise it will override. While D2 (or RTS) is HIGH and presented to the RCA jack tip, then Over/Under mode is selected.
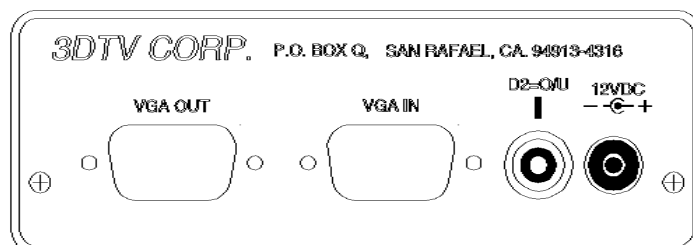

fig 2: Modified Rear Panel

1.2 NORMAL/ALT.

1.2.1 Vertical Sync

In NORM/ALT, Stereo Space uses the vertical sync pulse from your video card to synchronize the glasses. To start it be sure the toggle switch is in and simply press the momentary switch (marked 'ON') on the front panel. Pressing this switch again turns off the glasses. The other switch lets you invert the left and right sides, to create both pseudoscopic and stereoscopic 3D views.

1.2.2 Port Sync (Standard Version).

The Stereo Space automatically detects a sync signal on the *Port Sync* input (unless factory modified for Port OVER/UNDER Control). The *Port Sync* LED will light. The glasses also automatically turn off when the signal stops.

You can still put Stereo Space in vertical sync follow mode during this time. In this case, the *Port Sync* LED on the front panel turns off to let you know the sync signal is not being used. The *'REV'* switch will still flip the eyes. It will not flip the eyes if the *Port Sync* LED is on.
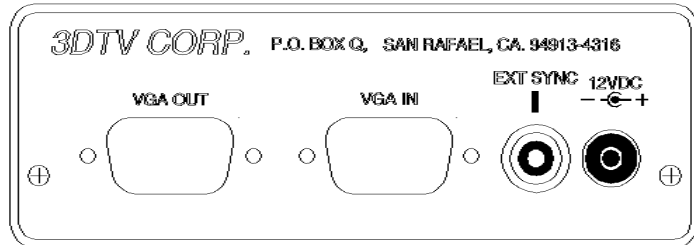
fig 3: Default Rear Panel

2. Connections.

2.1 VGA Connections.

The VGA output from your computer goes to the *Input* connector on the back of panel.

Your monitor cable goes to the *Output* connector. A six foot male-male VGA cable is supplied.

2.2 Port Sync or D2=O/U Connections.

The *Port Sync* RCA connector can receive input from either the parallel or serial port of your computer. *This connection is optional.* The parallel port cable V124W1 is supplied.

The Port Sync or D2=O/U cable is as follows, varies by port used.

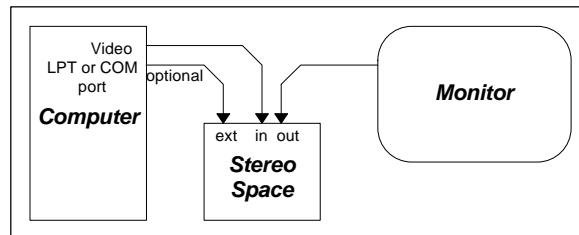|	SERIAL DB9 FEM	SERIAL DB25 FEM	PARALLEL DB25 MALE
PART #	V124W3	V124W2	V124W1
RCA TIP	7 (RTS)	4 (RTS)	4 (D2)
RCA SHIELD	5 (GND)	7 (GND)	18 (GND)

2.3 Power

Rating 12VDC, 300mA.

fig 4: Standard setup.

Connector = 2.1mm x 5.5mm

Although the panel is marked '12VDC, CENTER POSITIVE', the center pin can be Positive or Negative.