

SuperView 3000 Window System

Quick Start Guide

INTRODUCTION

The SuperView 3000 accepts multiple computer and video inputs¹, for output to a high resolution display. Each window can be individually sized and positioned, and any configuration can be saved and recalled.

This guide is intended to assist in quickly getting your SuperView 3000 into operation. It provides basic information about installing and configuring the device. Advanced functions such as zoom and pan within a window or chroma-key are covered in more detail in the SuperView 3000 User Guide.

The SV 3000 can be controlled from a terminal, an optional Windows application or optional front panel. Serial commands can be issued as commands from a terminal or from the optional Windows application known as the Virtual Control Panel (VCP). Each of these three methods are described separately in this *Quick Start Guide*.

1. SET UP

Use the numbered steps shown in **Figure 1** to connect up your SuperView 3000.

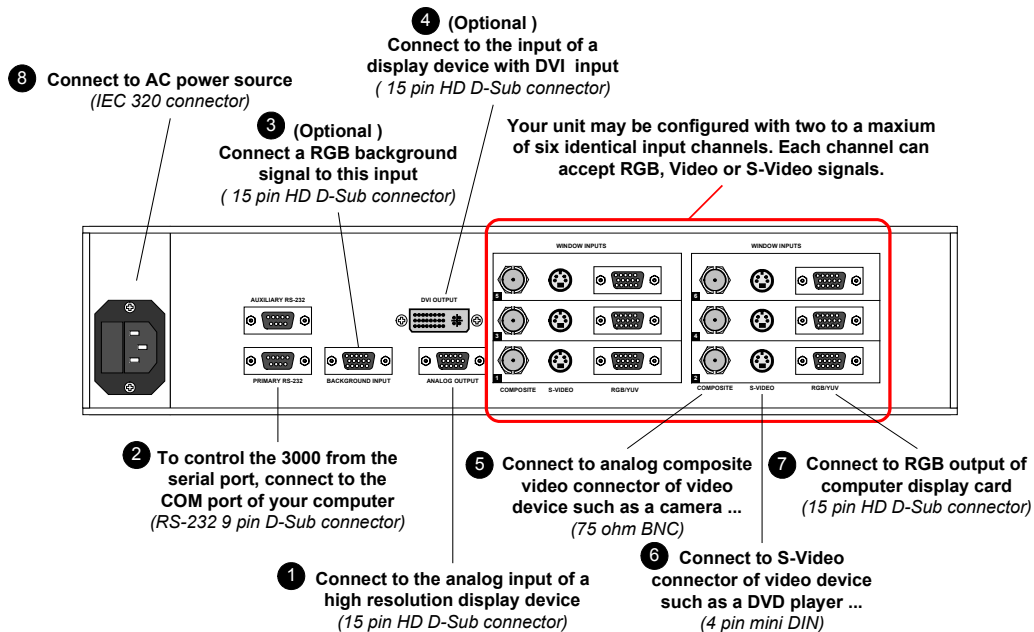


Figure 1. SV 3000 Rear Panel

Note: After making all connections, turn on the power switch located on the SV 3000 front panel.

¹ The SuperView 3000 supports up to twelve input channels. Units that have more than 6 input channels have additional inputs located above those depicted in **Figure 1**.

2. OPERATING SV 3000 FROM THE SERIAL PORT

All SV 3000 functions are accessible by means of a standard RS-232 serial control. Control can be achieved using a terminal, terminal emulator or 3rd party serial controller. This section describes control of the SV 3000 using a terminal or PC running a terminal emulation program such as HyperTerminal or Procomm. All RGB products will provide a complete list of serial commands simply by typing **HELP**.

COMMUNICATING TO THE SV 3000

The SV 3000 is pre-configured at the factory to operate at a baud rate of 9600 baud. Ensure that the controlling host computer or ASCII terminal is set initially for 9600 baud, 8 data bits, 1 start bit, 1 stop bit and no parity and X-ON / X-OFF flow control.

After the terminal is set up appropriately, type the command **HELP** from the terminal. Assuming that communications have been established correctly, the SV 3000 will respond with a list of available commands. A complete description of the commands will be found in the SV 3000 User Guide.

Operation of SV 3000 from the RS-232 port typically involves issuing commands with some associated parameters. For example to increase the contrast setting for input channel 3 by 20% above nominal (100) the command **SAT 3 120** would be entered.

NORMALIZING THE SV 3000

To make sure that all the SV_3000 settings in a known state the unit should be reset to the factory settings. Ignore this step if the unit is new.

Type **RFD** and press the ENTER key.

ADJUST / SELECT OUTPUT SIGNAL

The SV 3000 should be set up to provide an exact match for your display device (known as the Host). *Host* commands are used to set the output parameters for the control the output.

1. ESTABLISH DISPLAY DEVICE REQUIREMENTS

Determine the specifications of your display device so that you can set the SV 3000 output to best match the display.

2. CHOOSE OUTPUT (HOST) SETTINGS

A list of pre-defined output settings can be viewed on the serial port by typing the command **HLIST** (note the first 10 entries in the list are user defined). From the list choose the closest match to your display.

3. SET OUTPUT SETTINGS

Use the host load command **HLOAD <1..64>** to load the timing parameters (step 2 above) into the device.

4. CONFIRM OUTPUT SETTINGS

To confirm the output settings prior to setting the input signals up, use the SV 3000 internal test signal generator. Type **TP CB** to activate the color bar test pattern. The output should display a full screen test pattern if the display device is correctly connected and the choice of output settings is correct. If the output is not correct, check the wiring to the display and repeat steps 1 through 3. When you are satisfied the output is working correctly, turn off the test pattern by typing **TP OFF**.

ADJUST INPUT SIGNAL SETTINGS

SV 3000 automatically locks to RGB graphics signals. If the signal has been previously applied the SV and settings (host) saved, it will automatically load the best match between the input signal and stored setting. If no match is found the SV will evaluate the input signal and estimate the picture edges. Fine adjustment may be necessary if the window is missing part of the picture, or displays a black band along an edge.

To precisely define picture edges, you can make adjustments for each input and then save these settings to the unit's internal memory. The input Interactive command (**INI**) provides an interactive way of adjusting input timing. For full details consult the SV 3000 User Guide.

Each input channel of the SV 3000 will also accept Composite or S-Video signals.

VERIFYING INPUTS

This section describes a simple procedure to test that all inputs to the SV 3000 are connected and set up appropriately. Each input channel can have RGB, COMPOSITE, and S-VIDEO. Use the following procedure to select the input that will be displayed.

1. SELECT INPUT TYPE

The default input type is RGB. To change the input type use the **INTYPE** command. Valid input types are **RGB**, **COMPOSITE SVIDEO** and **COMPONENT**.

For example to select the S-Video for Input channel 2 you would type: **INTYPE 2 SVIDEO**.

2. IDENTIFYING A WINDOW

In its default state, the SV will provide a simple window arrangement that will simultaneously display all valid input signals. To identify a specific input, type **IDENTIFY** and input number.

For example to identify input 3 you would type **IDENTIFY 3**.

MANAGING WINDOWS

The size and arrangements of windows can be directly controlled from the serial port. This section gives a brief description of the major capabilities. For full details please refer to the User Guide.

1. WINDOW SIZE AND POSITION

Any window (or portion of a window) can be positioned and sized anywhere on the screen.

2. WINDOW PRIORITY

Because it is possible to overlap windows it is possible for a window to obscure part of a different window. The relative priority of windows can be defined.

3. ZOOM AND PAN

Frequently it is useful to select a portion of the source and display it in a larger window. The Zoom and Pan functions allow you to select a rectangular piece of the source by panning and zooming within a window.

3. OPERATING SV 3000 FROM THE FRONT PANEL

The SV 3000 can be operated from the optional front panel. This section provides a brief description of how to set up and operate the SV 3000 by using the front panel. Read this section if you want to set up the system using the front panel or want to become familiar with operating the unit from the front panel.

A view of the front panel is shown in **Figure 2** below. The front panel consists of a four line LCD (1), menu navigation buttons (2), Menu Selection buttons (3) and Preset buttons (4). **Note** The Preset buttons provide the dual function of selecting Preset registers for storing and recalling set ups, as well as selecting inputs for adjustment on the front panel display.

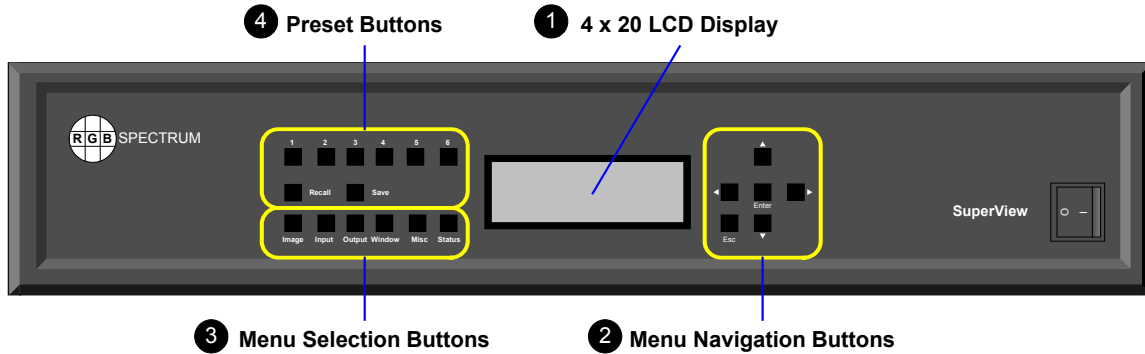


Figure 2. SV 3000 Front Panel

NAVIGATION AND ENTERING DATA FROM THE FRONT PANEL

The menu navigation controls (**Figure 2 (2)**), are located to the right of the display. A group of 4 cursor keys provides up/down and left/right control of the cursor on the display screen. An ENTER key is located at the center of the cursor keys, and an ESCAPE key is located at the lower left edge of the group of buttons.

The 4 x 20 LCD is located centrally on the front panel (**Figure 2 (1)**). The top row of each menu page is the menu title. As shown in **Figure 3**, there are six menus at the top of the menu structure. Each menu can be selected directly by pressing the associated menu selection button (**Figure 2 (3)**).



Figure 3. SV 3000 Top Level Menu Selections

Menus that refer to input oriented items indicate the input number on the title row. The other three rows are used to list sub-menu options or in the case of interactive controls prompt the user for appropriate action. The second line of the LCD is always the active or selectable line.

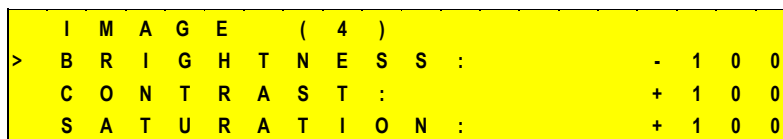


Figure 4. Typical LCD Sub Menu

Navigation through all of the menus is accomplished by using the ▲ and ▼ scroll buttons and the Enter and Escape buttons. As a user scrolls up or down a list, the next selectable menu item is moved to the second line. The menu item currently under adjustment is indicated by the > symbol adjacent to the item.

In the example of **Figure 4** above the item under adjustment is Brightness and the current value is -100. The left and right cursor keys are used to increment or decrement values. When the desired value has been reached the user can select the value using the **ENTER** key, or return to the previous value by pressing the **ESC** key.

Immediately after the unit has been turned on the display will indicate the status screen indicating the model name and firmware version number.

For complete details on using the front panel refer to the SV 3000 User Guide.

ADJUST / SELECT OUTPUT SIGNAL

The SV 3000 must be set up to deliver the correct signal for your display device (known as the Host).

1. ESTABLISH DISPLAY REQUIREMENTS

Determine the specifications of your display device so that you can set the SV 3000 output to match the display. A list of pre-defined hosts can be viewed on the serial port by typing the command HLIST (note the first 10 entries in the list are user defined).

From the list choose the closest match to your display.

2. CHOOSE HOST SETTINGS

Press the **OUTPUT** Menu Selection button (**Figure 2(3)**) to enter the Output menu. The first entry in the menu is **LOAD HOST TIMING**. There are 64 sets of timing parameters.

3. SET HOST SETTINGS

Scroll through the list until you find the entry that best suits the characteristics of your display and press **ENTER**.

ADJUST INPUT SIGNAL SETTINGS

Each input channel of the SV 3000 will accept either RGB or Composite or S-Video signals. The SV 3000 will automatically lock to these input signals. There is a wide variety of possible RGB signal types that the SV 3000 can lock to. When an RGB signal is applied to the SV 3000 for the first time, the unit will automatically lock to the signal and estimate what portion of the signal is active picture. If this estimate is not exact, the window may be missing part of the picture, or display "extra" black band along an edge.

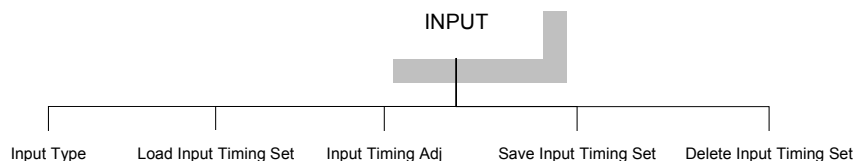


Figure 5. Input Sub Menu

To improve the timing parameters you may make adjustments for each input and then save these settings to the unit's internal memory. **Figure 5** above shows the menu selections that can be used to accomplish this. For full details consult the SV 3000 User Guide.

Note: Input timing relates to RGB inputs only. Composite video and S-Video sources are pre-defined

In addition to making timing adjustments it is possible to make **IMAGE** adjustments to each input. Since there are three types of input for each channel, the input type for the required input channel must first be selected. Select the Input Type by pressing the **INPUT** button to select the **INPUT** menu (see **Figure 5**), and then pressing the appropriate **PRESET** button to chose the required input.

Note: When there are more than six inputs (3RU version), inputs 7-12 are accessed by pushing the associated **PRESET** button twice.

As can be seen in **Figure 6** the **IMAGE** menu supports adjustments to input signals such as Brightness, and Contrast.

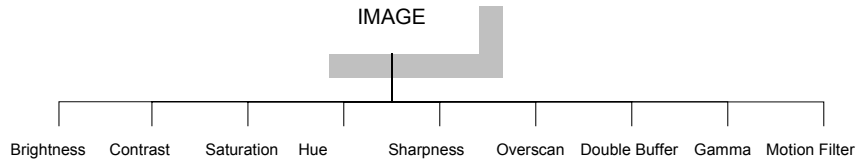


Figure 6. SV 3000 Image Menu

SETTING AND VIEWING WINDOWS ON THE OUTPUT DISPLAY

This section describes a simple procedure to confirm that all inputs to the are connected SV 3000 and set up appropriately.

The SV 3000 can support up to six windows (2RU chassis) or up to twelve windows (3RU chassis). Each window can be individually sized and positioned on the output display. Since windows may be placed at any point on the output display it is possible to have overlapping windows as seen in the figure below.



Figure 7. Multiple Overlapping Windows

For information regarding the setting of priorities of overlapping windows please see the User Guide.

To avoid confusion when setting up a system it is recommended to test each input at full screen with all other windows disabled. To make sure that only one window is present, first make sure that all windows are turned off.

1. DISABLE ALL WINDOWS

Press the **WINDOW** button located in the Menu Select button section (**Figure 2 (3)**), and select **Window Enable** function (**Figure 8**). Each window must be disabled individually which is accomplished by selecting the input channel using the **PRESET** button associated with the input, and then disabling the window from the **Window Enable** menu.. For example to disable window 2 press **PRESET** button 2, select **Window Enable OFF** and press **ENTER**. Repeat this process for all windows.

2. ENABLE WINDOW

When all windows are disabled, turn on the window for the channel that you want to test. by using the following procedure:

If the Window screen is not currently displayed then press the **WINDOW** Menu Select button then press the **PRESET** button corresponding to the required input and finally using the **Window Enable** sub menu select ON and press the **ENTER** button.



Figure 8. SV 3000 Window Menu

3. SELECT INPUT SOURCE TYPE

Now that the window has been enabled it is necessary to select the source signal for the input channel. Each input channel has the choice of three different input types. The types are **RGB**, **COMPOSITE**, **SVIDEO** and **COMPONENT**. To accomplish this select the **INPUT** sub menu (**Figure 5**) and using the **Input Type** menu item choose the type of input to be used.

Repeat steps 1 –3 to test all inputs.

When you have completed this test you have shown that the unit is working normally and all inputs and outputs are connected correctly.

4. OPERATING SV 3000 FROM THE VIRTUAL CONTROL PANEL (VCP)

SETTING UP THE VCP APPLICATION

The VCP application must be loaded to the PC that you want to use to control the SV 3000. Create a folder in the PC's Program directory and copy the .exe and .hlp files to the folder. To make access easier you may also wish to create a shortcut to the .exe file and place it on the Windows desktop or toolbar.

To start the VCP program double click the .exe file or associated shortcut icon. The program is designed as a dialog based application with tabs relating to different VCP functions.

To control the SV 3000 the PC you are using must be electrically connected to the SV 3000 via the computer's serial control port (RS-232). After making this connection it is necessary to set up the communication parameters using the VCP program and choose the serial communications port that the SV 3000 is connected to.

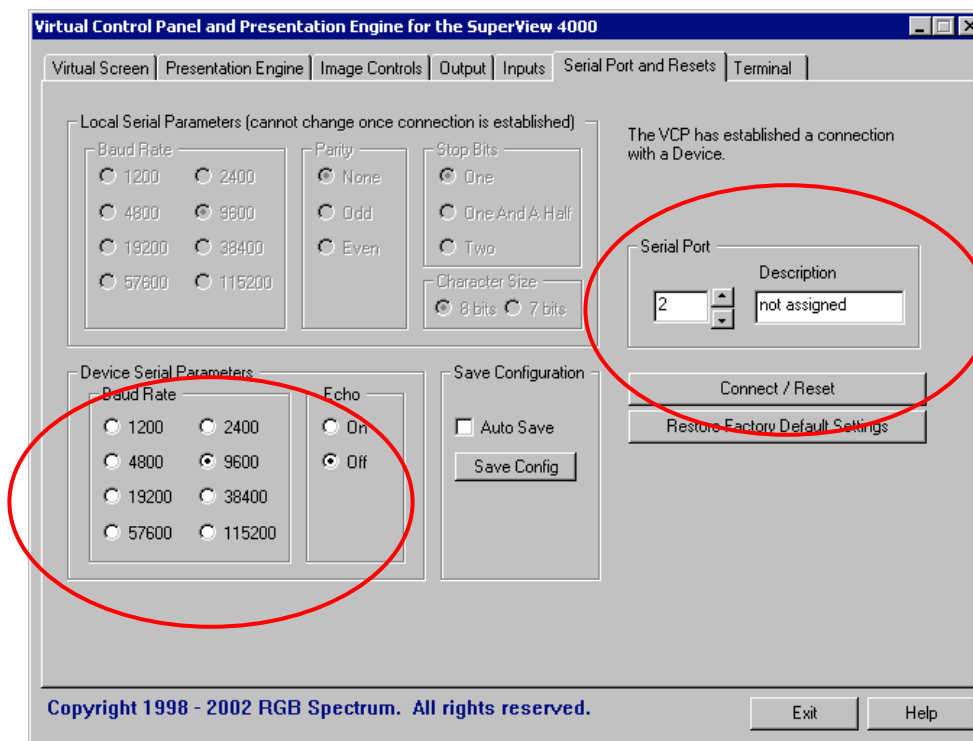


Figure 9. SV3000 VCP Serial Port Page

1. Select the VCP "Serial Ports and Resets tab" shown in **Figure 9** above.
2. In the serial port section choose the Serial port that you will use.
3. In the "Device Serial Parameters Section", set the baud rate for 9600 baud
4. Click on the "Connect / Reset" button.

After the connection has been made the Virtual Screen page is displayed (see **Figure 12**).

ADJUST / SELECT OUTPUT SIGNAL

Select the *Output* tab to view the current output mode of your unit. (see **Figure 10**)

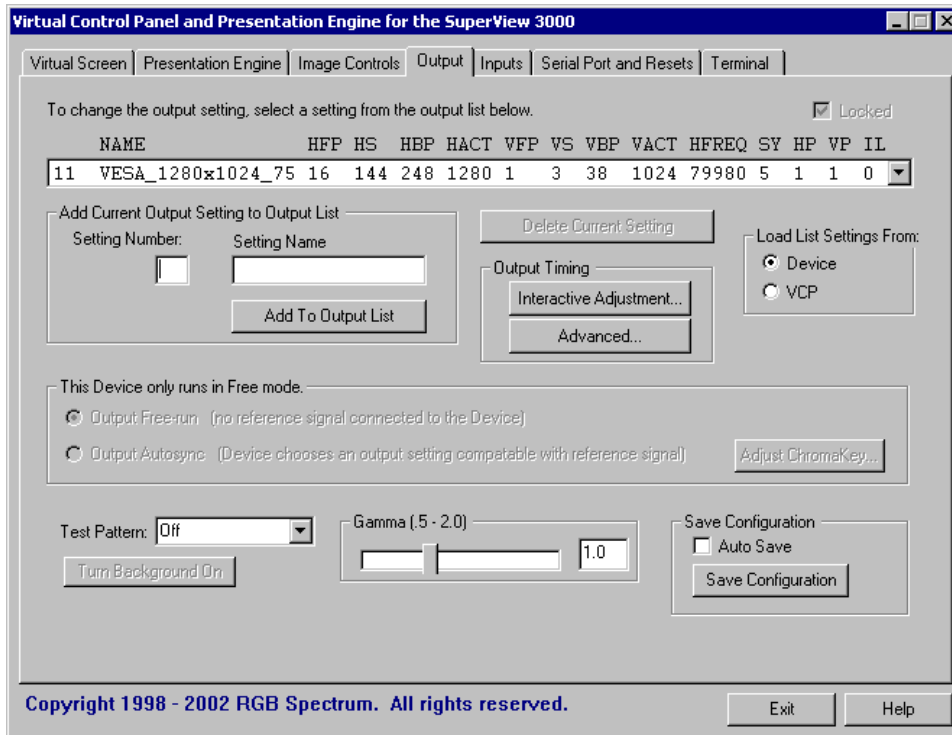


Figure 10. SV3000 VCP Output Menu

1. To create a user output setting with the aid of the SV 3000's output interactive mode, click on the *Interactive Adjustment* button in the *Output Timing* section (**Figure 10**).
2. Click OK when you have completed the adjustment.
3. To save the current user output setting, enter a number (1- 10) and a name for the new setting in the *Add Current Output Setting To Output List* section.
4. Once you provide a number and name, click the *Add* button. The VCP will instruct the SV 3000 to store the current setting as a new output preset with the name and number that you chose. If an output preset with the same number already exists, the VCP will ask for confirmation that you want to overwrite the existing preset with a new one.

ADJUST INPUT SIGNAL SETTINGS

The *Inputs* tab allows you to adjust input parameters for all SV 3000 inputs. Each window can display one of three different type of input sources. The *Input Type* section in the right portion of the page allows you to select a SV 3000 input source (see **Figure 11**).

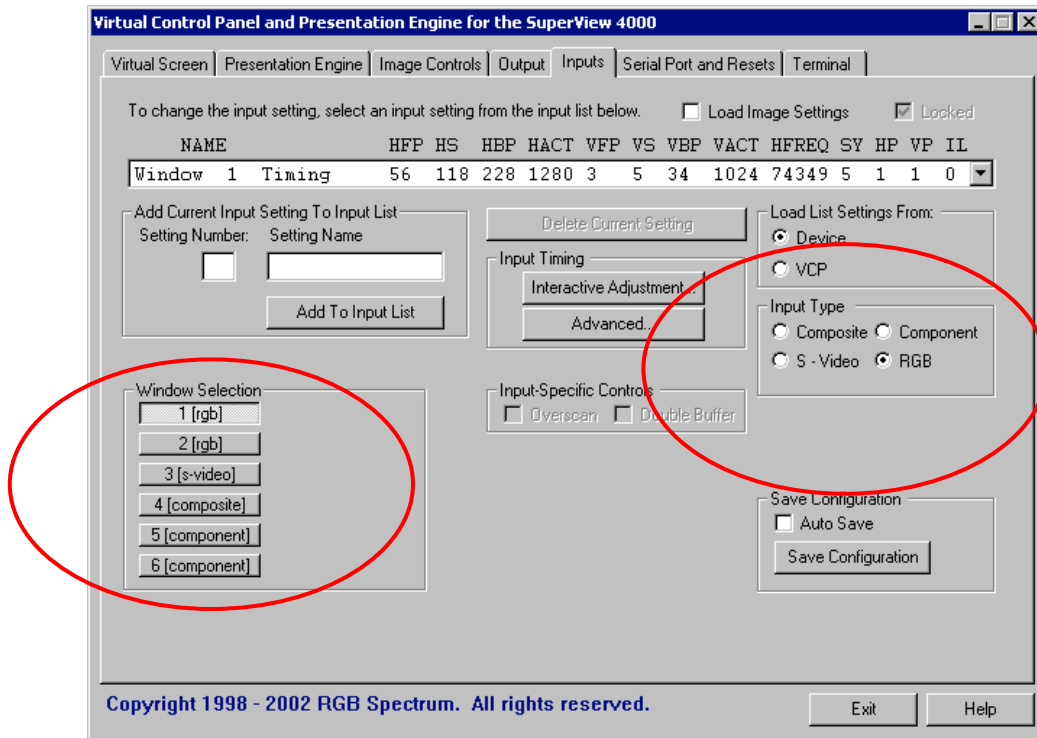


Figure 11. SV3000 VCP Input Menu

To ensure that all connections have been made correctly use the following test procedure:

1. To avoid the problem of a window overlapping and obscuring one of the other windows, set up a window arrangement of tiled windows. A variety of pre-set arrangements is provided on the **Virtual Screen** page (**Figure 12**). Click on the **Virtual Screen** tab
2. Select the **Inputs** tab (**Figure 11**).
3. Select the desired window to test by clicking on the **Window Selection** button located in the lower left portion of the **Inputs** screen. The active selection is shown as an indented button.
4. Select the required input type by clicking the appropriate button in the **Input Type** section of the **Inputs** screen.
5. Repeat steps 2 through 4 until all inputs have been set up.

NOTE: When an RGB signal is applied to the SV 3000 for the first time, the unit will automatically lock to the signal and estimate what portion of the signal is active picture. If this estimate is not exact, the window may be missing part of the picture, or display "extra" black along an edge. This may be adjusted using the *Input Interactive Timing Adjustment* which can be accessed from the Inputs screen.

To save the current user input setting, enter a number (1-50) and a name for the new setting in the *Add To Input List* section. Once you provide a number and name, click the Add button. The VCP will instruct the SV 3000 to store the current setting as a new input preset with the name and number that you chose. If an input preset with the same number already exists, the VCP will ask for confirmation that you want to overwrite the existing preset with a new one.

You have now set up the unit ready for use. The following describes some basic set and adjustments that you can make to the system. More detail and advanced topics are discussed in the SV 3000 User Guide.

USING THE VIRTUAL SCREEN

The VCP **Virtual Screen** is used to control the layout of windows on the output. Several pre-set arrangements of windows are provided. In addition the ability to create and load a total of six SV 3000 presets is provided.

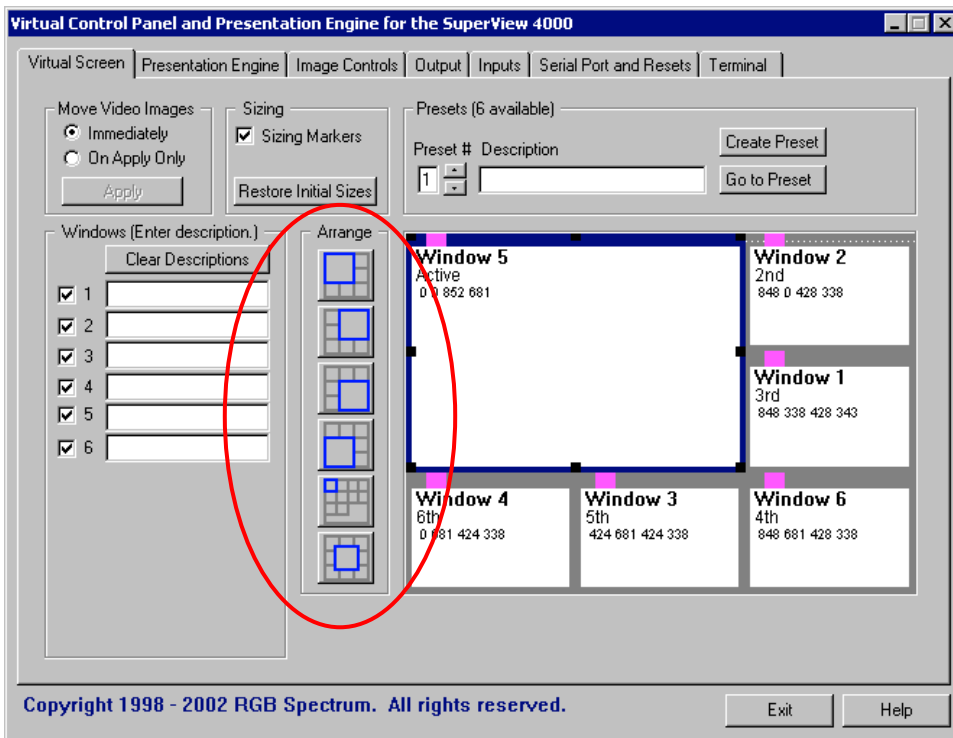


Figure 12. SV3000 VCP Virtual Screen Menu

MAKING IMAGE ADJUSTMENTS

After you have completed your initial set up, you can then adjust the image controls for each channel. Click on the VCP *Image Control* tab to select the adjustment page.

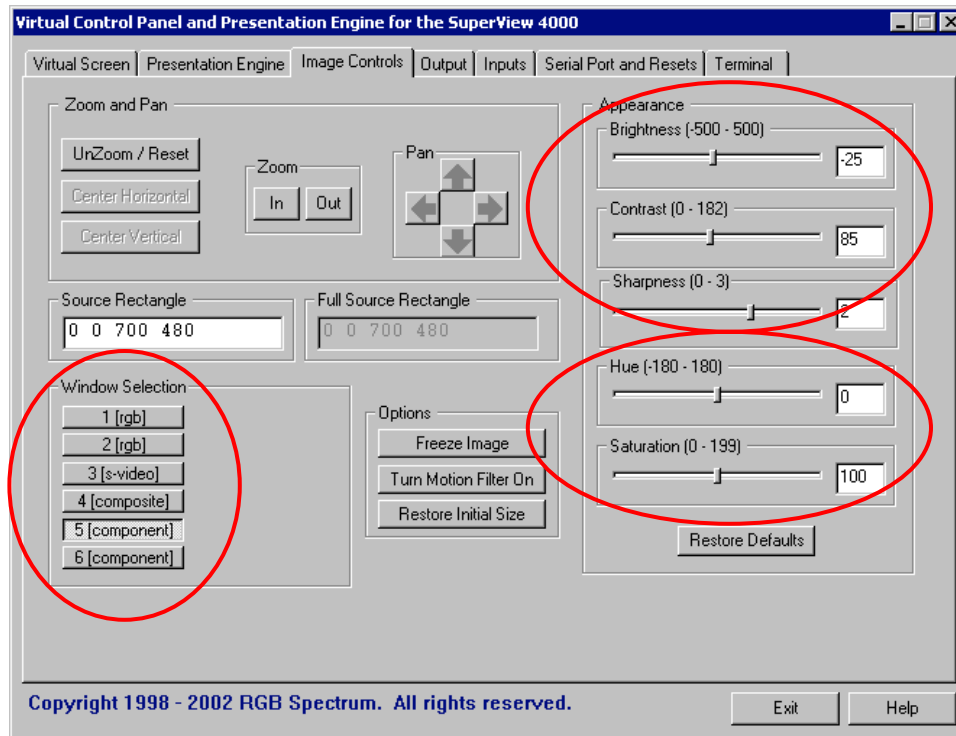


Figure 13. SV 3000 VCP Image Adjustment Menu

The following image controls apply to all input sources.

BRightness

CONTRast

SHARPness

To adjust any of these parameters select the window you want to adjust using the Window Selection area of the menu at the lower left region of the menu.

For video channels only, you can also adjust the following parameters:

HUE (nominal value = 0)

SATuration (nominal value =100)

In addition to these image adjustments, the SV 3000 provides the ability to set the output gamma. This is useful to adjust the image to suit different types of displays. This adjustment applies to the output and so applies to all signals. To set output Gamma select the VCP **OUTPUT** Menu (see **Figure 10**).