## Cabling the SGI<sup>®</sup> InfinitePerformance<sup>™</sup> Scalable Graphics Compositor to the SGI Onyx<sup>®</sup> 350 Compute/Graphics Module

This addendum describes how to cable the SGI InfinitePerformance Scalable Graphics Compositor to the SGI Onyx 350 compute/graphics module.

This addendum is a supplement to the SGI® InfinitePerformance<sup>™</sup> Scalable Graphics Compositor User's Guide (007-4489-001).

Figure 1 shows an Onyx 350 compute/graphics module with one InfinitePerformance pipe. The USB PCI card and IO9 card are standard on the first system module, but they are optional on expansion modules. See the *SGI*® *InfinitePerformance*<sup>TM</sup>: *Scalable Graphics Compositor User's Guide* for the locations and functional descriptions of the rear panel connectors.



Figure 1

SGI Onyx 350 Compute/Graphics Module with One InfintePerformance Pipe

To install the scalable graphics compositor, follow these steps. Although you can connect fewer pipes, it is assumed that you are connecting four InfinitePerformance pipes to the compositor.

- 1. Be sure that the compositor power switch on the rear panel is in the OFF **(O)** position and that it is not connected to a power source.
- 2. Gather the following cables and other cabling items, most of which are shown in Figure 2:
  - Three DVI single-link cables
  - One DVI-I splitter cable
  - Eight 75-ohm BNC cables
  - Six BNC L connectors
  - One 75-ohm BNC terminator
  - One digital monitor cable (not shown)
  - One analog monitor cable (not shown)
  - One power cable for the compositor (appropriate for local power source)





- 3. Using the DVI-I splitter cable and DVI single-link cables, connect the DVI connectors of the InfinitePerformance pipes to the compositor DVI connectors in the following order (as shown in Figure 3):
  - a. Connect the DVI connector on the InfinitePerformance pipe 0 to the DVI-I splitter cable. Then connect the digital side of the DVI-I splitter cable to the leftmost DVI IN 0 connector on the compositor. The analog side of the DVI-I splitter cable is used to connect a monitor to pipe 0. See step 7 on page 9 for details on how to connect the monitor.
  - b. Connect the DVI connector on the InfinitePerformance pipe 1 to the compositor DVI IN 1 connector.

- c. Connect the DVI connector on the InfinitePerformance pipe 2 to the compositor DVI IN 2 connector.
- d. Connect the DVI connector on the InfinitePerformance pipe 3 to the compositor DVI IN 3 connector.





Connecting the DVI Connectors

4. Using the 75-ohm BNC cables and the BNC L connectors, daisy-chain the InfinitePerformance swap-ready connectors to each other. Then connect the last connector to the swap-ready connector on the compositor in the following order (as shown in Figure 4): pipe 0 to pipe 1, pipe 1 to pipe 2, pipe 2 to pipe 3, and pipe 3 to the swap-ready connector on the compositor.



Figure 4 (

Connecting the Swap-Ready Connectors

- 5. Using the 75-ohm BNC cables and the BNC L connectors, daisy-chain the InfinitePerformance genlock connectors to each other, and then connect the last genlock connector to the genlock-in connector on the compositor in the following order (as shown in Figure 5): pipe 0 to pipe 1, pipe 1 to pipe 2, pipe 2 to pipe 3, and pipe 3 to the genlock-in connector on the compositor.
- 6. Connect the 75-ohm BNC terminator to the genlock-loop connector shown in Figure 5.





Connecting the Genlock Connectors

- 7. As is applicable to your cabling installation, connect the following items to the compositor (as shown in Figure 6):
  - a. If you are connecting to a digital monitor, first make sure that your digital monitor is powered off and not connected to a power source. Then connect the DVI OUT connector on the compositor to your digital monitor.
  - b. If you are connecting to an analog monitor, first make sure that your analog monitor is powered off and not connected to a power source. Then connect the ANALOG OUT connector on the compositor to an analog monitor. You can also connect the ANALOG OUT side of the DVI-I splitter cable, from the InfinitePerformance pipe, to an analog monitor (see Figure 3).
  - c. If you are connecting stereo glasses to the compositor, connect the glasses to the STEREO SYNC connector on the compositor.
- 8. Connect one end of the power cord to the compositor power plug and the other end of the cord to your AC power source.
- 9. Connect your monitor(s) to a power source as described in your monitor installation guides.
- 10. Press the compositor power switch to the ON (I) position.
- 11. Power on your monitors as described in your monitor user guides.
- 12. Boot the SGI host system.
- 13. See the *SGI*® *InfinitePerformance*<sup>™</sup>: *Scalable Graphics Compositor User's Guide* for instructions to configure the compositor.





Connecting to Digital and Analog Monitors

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