



# Tech Note

VICON TECHNICAL SERVICES GROUP

**Subject:** V6680SCC-V1466SCPU-A -  
32 Monitor Output in Single Cage  
**Product:** V6680SCC-HD  
**Number:** 1400-0001-90-00  
**Date:** 12/30/05

## Converting a V6680SCC-HD Matrix Cage to 32 Monitor Outputs

The purpose of this Technical Note is to explain the procedure necessary to convert a V1466 Matrix Switching System from 16 Monitor outputs to 32 Monitor outputs.

The normal configuration for a V1466 Matrix Switching System is 16 monitor outputs. The system is capable of 32 monitor outputs; however, the system is normally ordered in this configuration from the factory. The modification is capable of being performed in the field *as long as the technician is familiar with, and proficient in, the use of soldering equipment and general electronic repair techniques.*

The maximum capacity for the standard configuration Matrix66 single card cage is 256 camera inputs by 16 monitor outputs. A 256x16 system may be expanded, with the addition of another card cage, to 256x32. When the system is modified to 128x32, it is no longer possible to expand the number of cameras or monitors.

Reference: X824, Matrix66 Super-High-Density Video Switching System Installation Manual  
X897, VPS1466 Digital Control and Matrix Switching System Programming Manual

1. Remove power from the card cage.
2. Disconnect any coaxial cables attached to the Monitor output BNC rear panel (V6610RP-B). See Figure 1.

V6610RP-B Monitor Output BNC Panel

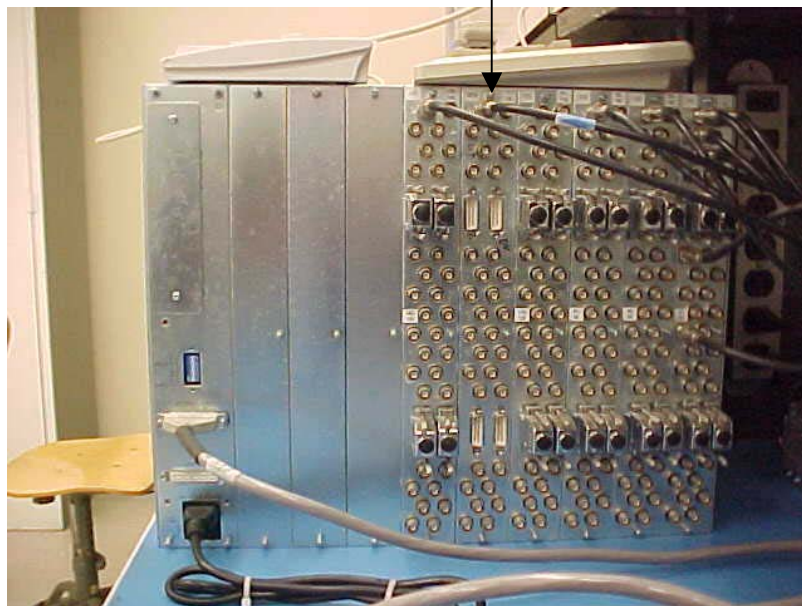


Figure 1

3. Remove the three screws that secure the panel to the rear of the card cage.

4. Remove the panel by pulling it straight back. *Note: it may be necessary to loosen or remove BNC panels adjacent to the monitor panel.*
5. Note the 16 SMD (surface mount device) 0 ohm resistors soldered on the rear of the backplane. See Figure 2.

Resistors

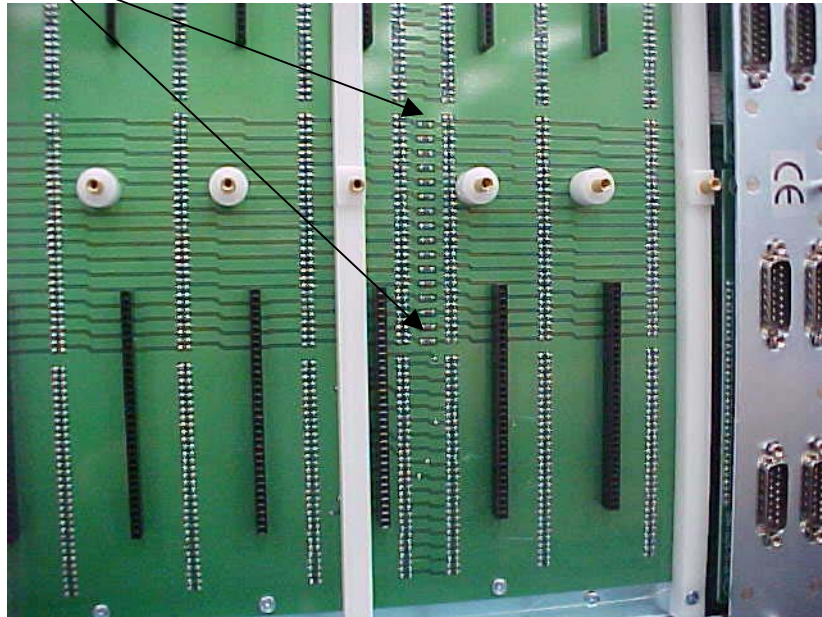


Figure 2

6. Unsolder one end of each resistor. Pry the unsoldered end up so that the connection is open.
7. Reinstall the V6610RP-B BNC panel being very careful to fully align both sets, upper and lower, of the pin contacts into the connector receptacles. Press the panel in to fully seat the contacts.
8. If adjacent panels were removed or loosened in Step 4 above, reinstall or retighten the panels, exercising care with the contact pins.
9. Install additional V6610S-1 video input cards, V6610RP-B BNC rear panels, V66RC looping cables, V6632AMP-1, V1466TDT-SHD Titler card. Follow the steps in the appropriate sections of X824, Matrix66 Installation Manual.
  - A. Single Card Cage Installation
    1. Fig 6, page 9
    2. Fig 7, page 10
  - B. Expanding an Existing System, page 19
  - C. Camera and Monitor Addressing, page 20
    1. Camera Addressing, Table 3
    2. Monitor Addressing, Table 4
  - D. Adding a V1466 Titler Card, page 30
10. Apply power to the V1466.
11. Unless previous programming changes have been made in the Keypad-to-Monitor and Camera-to-Monitor partitioning tables of the CPU program, there should be no programming changes necessary to permit the selection of cameras to the added monitor outputs. For programming assistance, refer to X897, VPS1466 Digital Control and Matrix Switching System Programming Manual.