

Appendix O

Venus Monitor Configuration

When used with a Jupiter control system, the Venus output monitoring hardware allows verification of switcher performance without interrupting normal operations. A separate switching system is used to switch the Monitor Output to any *output* of the switcher.

Using a control panel, the operator picks an output as usual—in this case, the Monitor Output. The operator then selects an *input*, but this input is actually one of the switcher *outputs*.

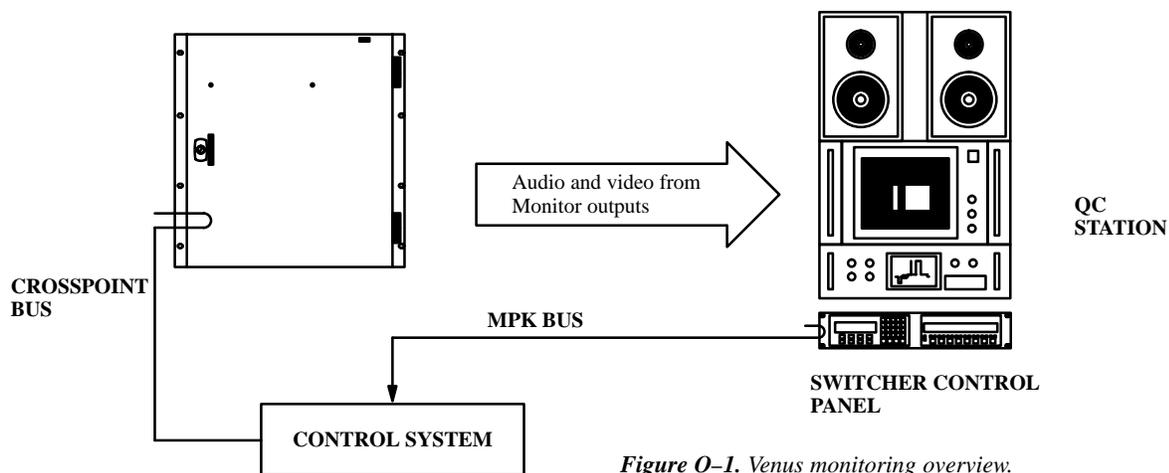


Figure O-1. Venus monitoring overview.

HARDWARE INSTALLATION

The number of the Monitor Output, which is used during software configuration, is determined by factory-set jumpers on the switcher motherboard. At the output card slots, the output number used is the output number for the output monitor. In larger, multi rack systems, all output cards are set to the same output number. By convention, this number should be the next output number range above the last real output in the system. On a 352 by 64 switcher system, the output numbers would be from 0 to 63. The output monitor would then be 64. In all cases, the monitor output number should be confirmed by checking the documentation package supplied with the switcher.

Cabling

For details concerning external cable connections for output monitoring, please see the Installation Section of the *Venus Installation Manual*, part number 04-044592-004.

VM/DC 400 Combiners

The *Venus Installation Manual* also describes installation of the VM 400 Analog Video Monitor Combiner and the DC 400 Digital Video Monitor Combiner.

SOFTWARE CONFIGURATION

Figure O-2 is a block diagram of a Venus 64 x 64 switcher and its built-in 64 x 1 monitor switcher. In this example, the monitor output (lower right corner) has been set with a jumper to the highest output number plus 1, or "64." The crosspoint marked "x" means that the monitor output has been switched to physical *input 0* of the monitor switcher, which corresponds to physical *output 0* of the Venus itself.

Various software tables must be used to establish the switcher as having 65 outputs; to assign a name and category/entry number to the monitor switcher output; and to assign a name and category/entry number to each monitor switcher input.

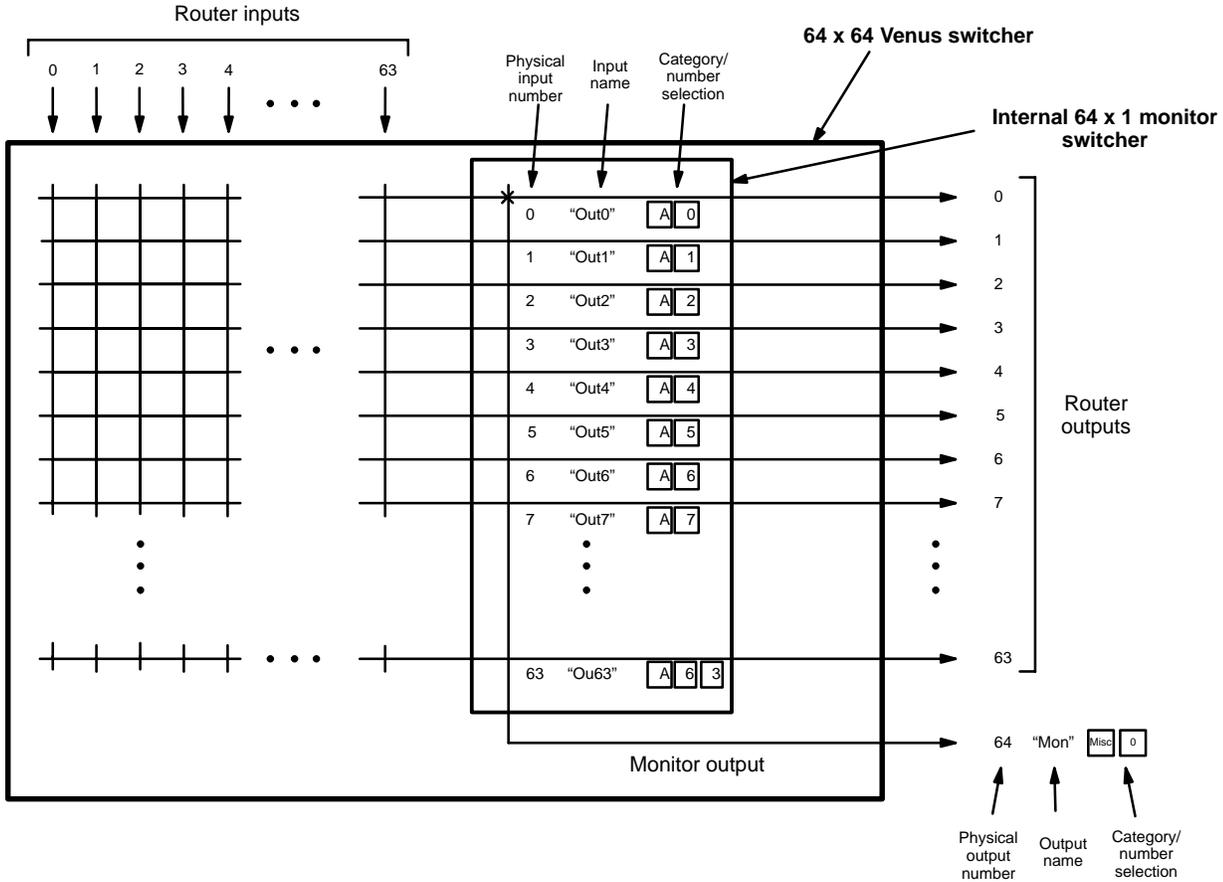


Figure O-2. Example of Venus monitoring system.

1. On the Switcher Description table, enter the Monitor Output Number (as shown in the documentation supplied with the switcher) as the number of outputs **for all levels**. In this example, the number of outputs would be 65, **even when some of the levels have less than 64 outputs**. See Figure O-3.
2. At the end of the Switcher Output table, create a name for the monitor output, and enter the corresponding physical output number (Figure O-4). On an Output Set table, enter the output name and a Category/Entry number (Figure O-5).
3. At the end of the Switcher Input table, create names for the monitor inputs, and enter the corresponding physical input numbers (Figure O-6). On an Input Set table, enter the input names and a Category/Entry number for each (Figure O-7). Note the use of input names and mnemonics such as "OUT0;" these are to help the operator find the intended router output for monitoring.

Switcher Description																
Switcher	Level	VI	RV	MC	Board	#In	#Out	PLvl	Follow	Level	Driver	3 LI	3 LO	Option	Audio	DM 400 Off Time
1	MainRout	VIDEO	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	M1	64	65	1		Binary				NONE	
2	MainRout	LEFT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	M1	32	65	2		Binary				LEFT	
3	MainRout	RIGHT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	M1	32	65	6		Binary				RIGHT	
4	MainRout	TC	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	M1	16	65	3		Binary				NONE	

Figure O-3.

Figure O-4.

Switcher Output – MainRout							
Logical Output Name	Security	S-T	Pass Word	VIDEO	LEFT	RIGHT	TC
•							
•							
•							
63 VT15		S		63	63	63	63
64 MON		S		64	64	64	64

Output Set — QC-OUT							
Category	Entry	Auto Mnem	Mnemonic	Logical Output	Level Set	Button	
1	MISC	0	<input checked="" type="checkbox"/>	MON	MON		

Figure O-5.

Figure O-6.

Switcher Input – MainRout				
Logical Input Name	VIDEO	LEFT	RIGHT	TC
•				
•				
•				
63 VT15	063	063	063	063
64 OUT0	000	000	000	000
65 OUT1	001	001	001	001
66 OUT2	002	002	002	002
67 OUT3	003	003	003	003
•				
•				
•				
127 OU63	063	063	063	063

Input Set —QC-INP					
Category	Entry	Auto Mnem	Mnemonic	Logical Input	
1	A	0	<input checked="" type="checkbox"/>	OUT0	OUT0
2	A	1	<input checked="" type="checkbox"/>	OUT1	OUT1
3	A	2	<input checked="" type="checkbox"/>	OUT2	OUT2
•					
•					
•					
63	A	63	<input checked="" type="checkbox"/>	OU63	OU63

Figure O-7.

OPERATIONAL SEQUENCE FOR MONITORING

The following example assumes that the Venus has been set up as described above.

1. Using a control panel such as a CP 3000, select the monitor output of the switcher for control. In this example, the operator would select output "MISC 0."
2. Select one of the switcher outputs to be monitored. In this example, the operator would select category "A," then an entry number from 0 to 63.