

# Instructions

Extend Card (Cross Point out)

Before attempting to connect or install this product,  
please read these instructions carefully and save this manual for future use.

Model No. **WJ-PB85M16**

## Caution

Hold this board only by its edges. Otherwise components on the board may be damaged by static electricity.

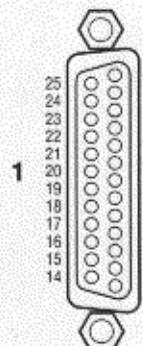
## ■ Preface

The WJ-PB85M16 Cross Point Output Board is an optional board for expanding the cross point output capability of the System 850 Matrix Switcher.

## ■ Appearance

### ① Video Input Port (VIDEO IN, 1 - 2)

These ports accept the video signal from the VIDEO OUT Port on the WJ-PB85M16 Cross Point Output Board of another Cross Point Cage (MXSW) for cascade input.

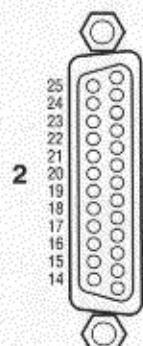


Pin No.	Designation	Pin No.	Designation
25	VIDEO 1	13	Ground
24	VIDEO 2	12	Ground
23	VIDEO 3	11	Ground
22	VIDEO 4	10	Ground
21	VIDEO 5	9	Ground
20	VIDEO 6	8	Ground
19	VIDEO 7	7	Ground
18	VIDEO 8	6	Ground
17	Not Used	5	Ground
16	Not Used	4	Ground
15	Not Used	3	Ground
14	Not Used	2	Ground
		1	Ground



### ② Video Output Port (VIDEO OUT, 1 - 2)

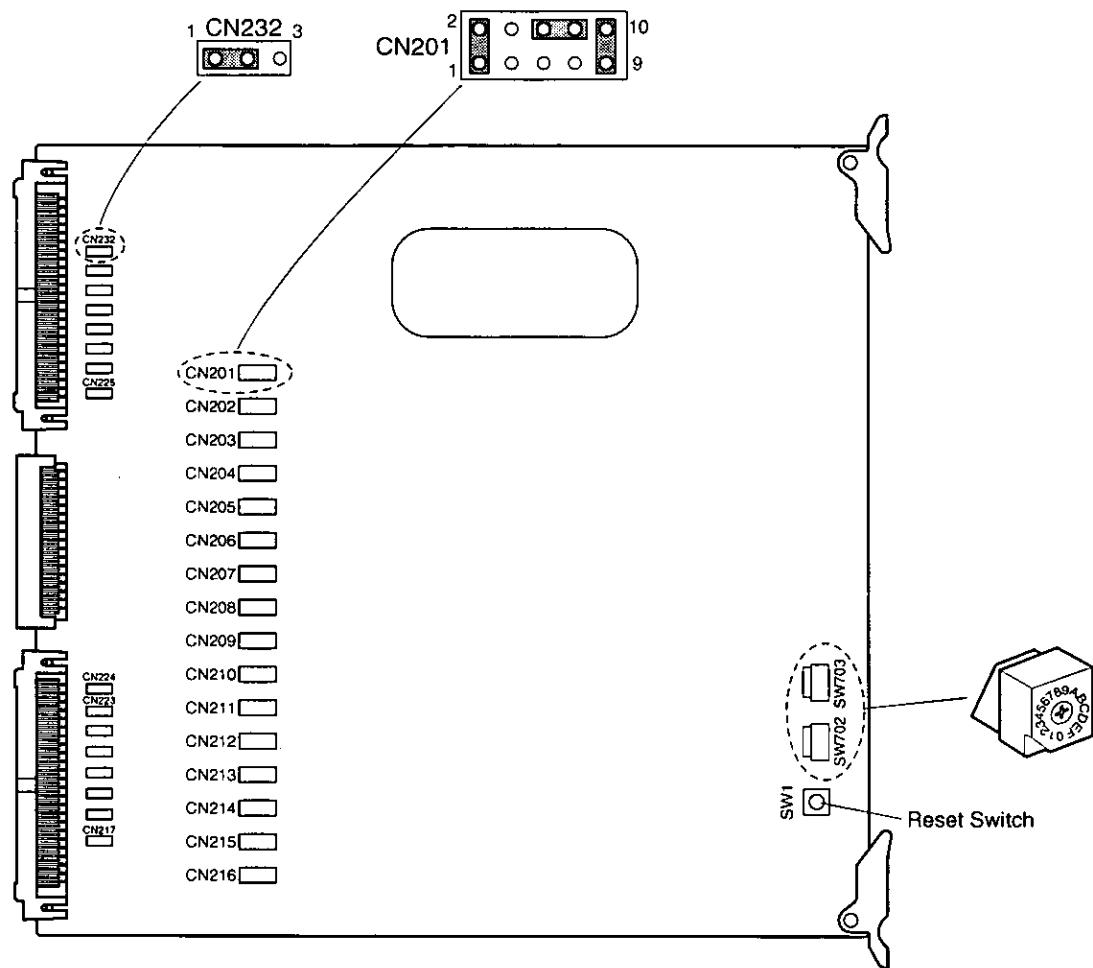
These ports provide the video signal to the VIDEO IN Port on the WJ-PB85M16 Cross Point Output Board of another Cross Point Cage (MXSW), or to the VIDEO IN Port on the WJ-PB85T08 On Screen Display Board of the On Screen Display Cage (MXOSD) for expanding video output capability.



Pin No.	Designation	Pin No.	Designation
25	VIDEO 9	13	Ground
24	VIDEO 10	12	Ground
23	VIDEO 11	11	Ground
22	VIDEO 12	10	Ground
21	VIDEO 13	9	Ground
20	VIDEO 14	8	Ground
19	VIDEO 15	7	Ground
18	VIDEO 16	6	Ground
17	Not Used	5	Ground
16	Not Used	4	Ground
15	Not Used	3	Ground
14	Not Used	2	Ground
		1	Ground

## ■ Board Setting

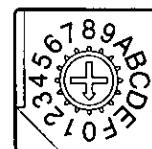
Before installing this board, the following settings should be made by qualified service personnel or system installers.



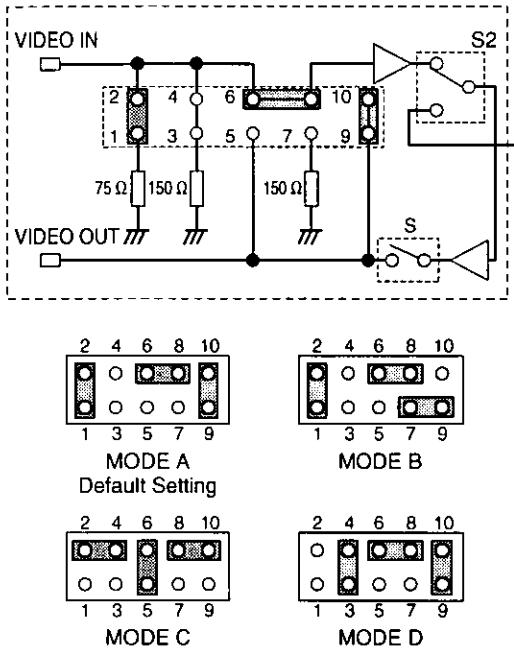
1. Set switches (SW702 and 703) on the board to designate the Cross Point Output board number as shown in the following table.

The factory default setting is Board Number 1 (00).

Board No.	VIDEO IN/OUT	SW Positions	
		SW703	SW702
1	1 - 16	0	0
2	17 - 32	0	1



2. Position jumper connectors (CN201, CN202, CN203, CN204, CN205, CN206, CN207, CN208, CN209, CN210, CN211, CN212, CN213, CN214, CN215, CN216) on the board as shown below. The factory default setting is position MODE A (Normal).

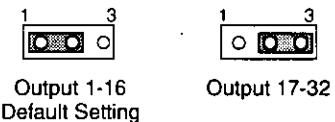


MODE	Input Spec.	Output Spec.
MODE A	75 Ω Termination	75 Ω Buffered Output
MODE B	75 Ω Termination	75 Ω with 150 Ω Termination Buffered Output
MODE C	Hi-Z Termination	Wired Loop Through
MODE D	150 Ω Termination	75 Ω Buffered Output

For detail settings, refer to the appendix on page 5.

3. When two cross point output boards are installed in a Cross Point Cage (MXSW), position jumper connectors (CN217, CN218, CN219, CN220, CN221, CN222, CN223, CN224, CN225, CN226, CN227, CN228, CN229, CN230, CN231, CN232) on the board to assign outputs as shown below.

The factory default setting is positions 1 and 2.

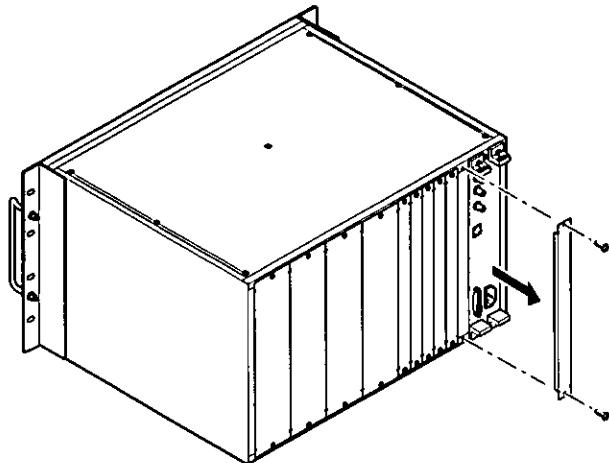


## ■ Installation

The following installation should be made by qualified service personnel or system installers.

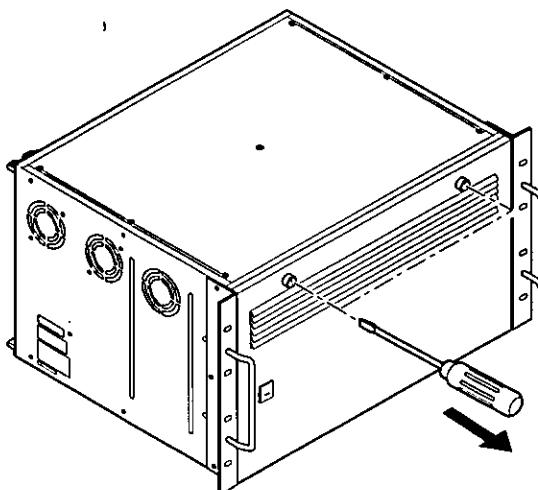
### ● Installing Additional Extension Boards

1. Remove the screws from the rear panel(s) of the WJ-SX850 Matrix Switcher Card Cage.

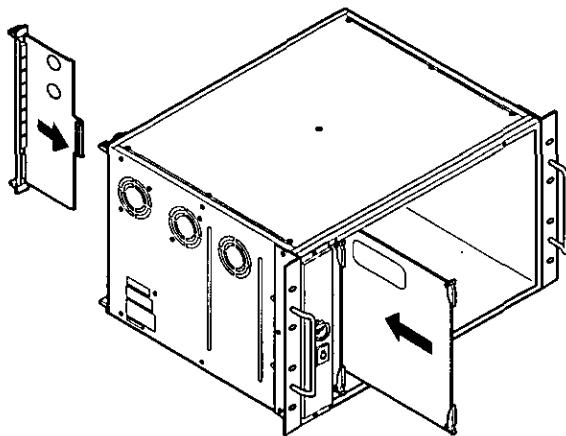


2. Remove the rear panel(s).

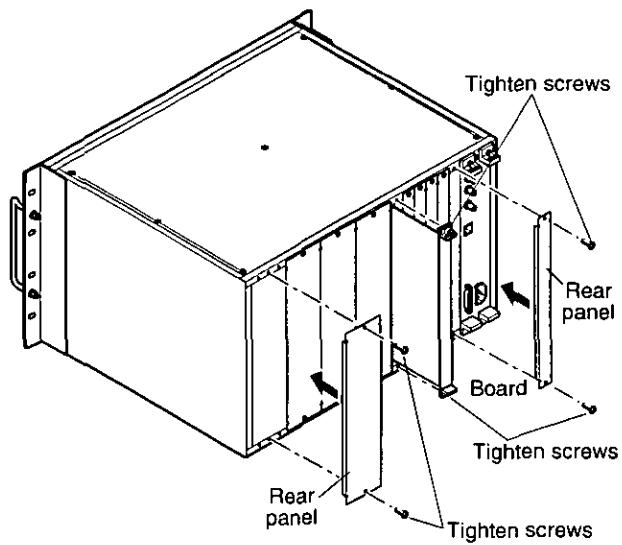
3. Remove the front panel of the cage by removing the two screws on the panel shown below.



4. Place the Boards into the specified positions in the front or rear of the Cage by sliding them along the board guides as shown below.



5. Make sure to push in the Boards until they are seated firmly.
6. Secure the rear board by tightening the two screws on the board.

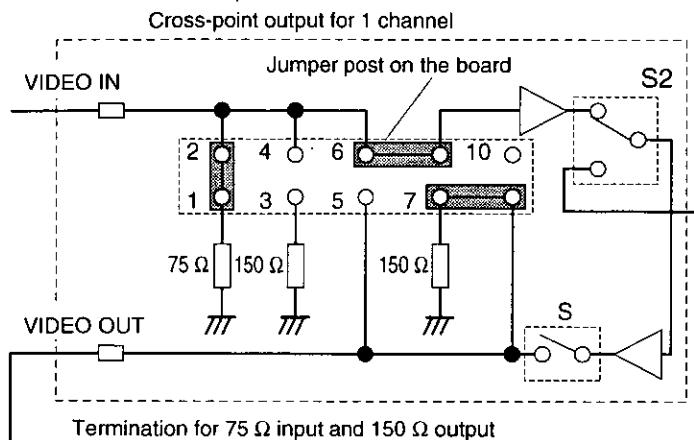


7. Close open spaces on the rear of the Cage with the supplied rear panel(s).
8. Close the front of the cage by fixing the front panel.

# ■ Appendix

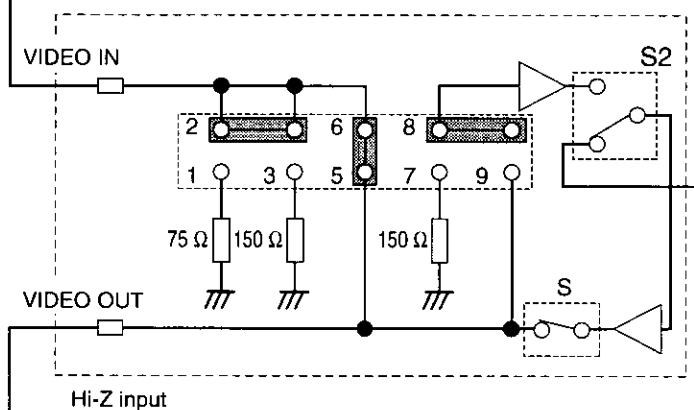
## ● Jumper Connector Positions for Cage Extension

Examples of jumper connector settings are shown below.



### Initial-stage cage

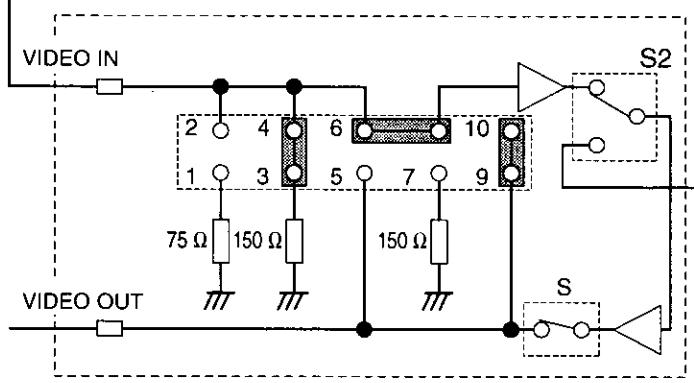
- This stage has a configuration that enables it to accept an extended video input in the form of an input terminated at  $75\Omega$ . Actually, however, this external input terminal is invalid.
- When an input of this cage is selected, S of this cage is turned on and S of other cages is turned off.
- In order to secure  $75\Omega$  for signal send-out from the initial stage, a  $150\Omega$  termination is provided for the  $75\Omega$  impedance dive and another  $150\Omega$  termination is provided at the final stage.



### Middle-stage cage

- When an input of this cage is selected, S of this cage is turned on and S of other cages is turned off.
- A wired loop-through system is used for the common output video bus of the cage. Therefore, a failure of the power supply to the middle-stage cage would not cause any problem in the successive stages.

**Note:** If the video output is 768 or above, this middle-stage cage may need further extension.



### Final-stage cage: Final-stage

- The selected output of all cross-point inputs obtained at the final stage is generated from the VIDEO OUT terminal of this cage and can be applied to a video monitor.
- S of this cage is turned on at all times. S2 is used for the changeover between the cross-point input of this cage and that of other cages.

## ■ Specifications

VIDEO Input (1 - 2):	1.0 V[p-p]/75 Ω composite video signal 8 inputs 25-pin D-sub connector (x2)
Video Output (1 - 2):	1.0 V[p-p]/75 Ω composite video signal 8 outputs 25-pin D-sub connector (x2)
Dimensions:	Front Board: 255(W) x 250(H) x 12(D) mm 10-1/16"(W) x 9-13/16"(H) x 1/2"(D) Rear Board: 117.5(W) x 265(H) x 20(D) mm 4-5/8"(W) x 10-7/16"(H) x 13/16"(D)
Weight:	0.5 kg (1.1 lbs)

Weight and dimensions indicated are approximate.

Specifications are subject to change without notice.



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