

Network Board Operating Instructions

Model No. **WJ-PB65E01**

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

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Precautions

CAUTION: These servicing instructions are for use by qualified service personnel only. To reduce the risk of electric shock do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so.

- **Do not attempt to disassemble the apparatus.**
To prevent electric shock, do not remove screws or covers.
There are no user-serviceable parts inside. Contact qualified service personnel for maintenance.

- **Do not strike or give a strong shock to the apparatus.**
It may cause damage or allow water to enter the apparatus.

- **Pay attention to static electricity**
Make certain to keep boards inside the anti-static sack until it is installed.
Put your hand on a metallic surface, other than the boards to discharge static electricity before installation.
Do not touch components mounted on the boards directly by hand.
Hold only both edges of the boards when installing.

References

Along with this document, refer to Central Processing Unit WJ-MPU955A Operating Instructions for major operating

controls, their functions, and switch settings.

Preface

Network Board WJ-PB65E01 is designed for the connection with Central Processing Unit WJ-MPU955A and system

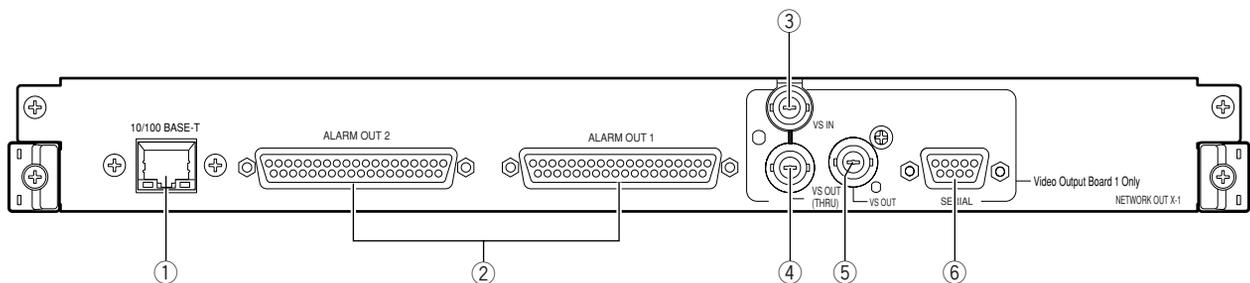
expansion of Matrix Switcher WJ-SX650 Series.

Features

- With this board, the network connection between Central Processing Unit WJ-MPU955A and Matrix Switcher WJ-SX650 Series becomes available to expand the system composition. Up to 512 cameras and 64 monitors become connectable.

Major Operating Controls and Their Functions

■ Front View

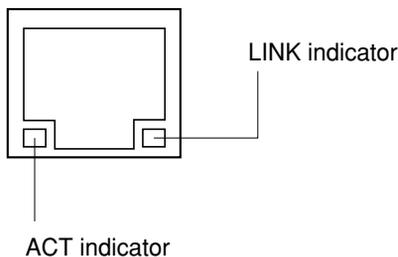


① Ethernet Port (10/100BASE-T)

This port is used for connection with Central Processing Unit WJ-MPU955A via an Ethernet network.

LINK indicator: This indicator lights up when the matrix switcher is linked to a network through this port.

ACT indicator: This indicator lights up when the matrix switcher receives or sends data through this port.



② Alarm Output Ports 1, 2 (ALARM OUT 1, 2)

Supplies alarm output signals controlled by Central Processing Unit WJ-MPU955A.

Note: Refer to WJ-SX650 Series Operating Instructions for the ALARM OUT port details. (Pin Nos. 3, 5, 7, 9, 12, 14, 16, 18, 36, and 37 are unavailable.)

③ VS Input Connector (VS IN)

Accepts a VS input signal from an external device.

④ VS Output Loop-thru Connector (VS OUT (THRU))

Loops through VS input signals supplied to ③.

⑤ VS Output Connector (VS OUT)

Supplies VS output signals to external devices. While ③ is accepting a VS input signal, ⑤ supplies an output signal synchronizing the VS input signal. While ③ is not accepting the VS input signal, ⑤ supplies an internal synchronization output signal.

⑥ Serial Port (SERIAL)

Connects to a PC.

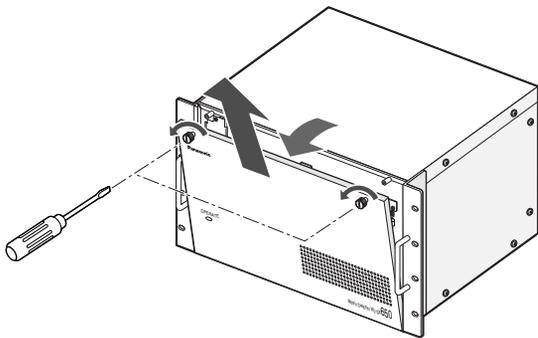
Board Mounting Procedure

The following example is the procedure to mount a network board into the OUT X-1 slot of WJ-SX650 Series.

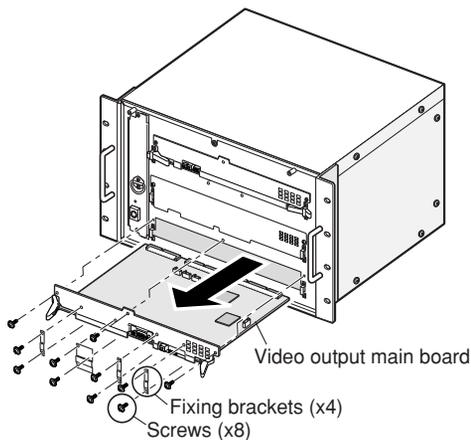
Notes:

- This network board can be inserted into the OUT X-1 slot only.
- Before the procedure, power off WJ-SX650 Series.
- Remove the screws and fixing brackets surely when dismantling.
- Fix the screws surely when mounting.
- Do not hit the boards against the chassis of WJ-SX650 Series.

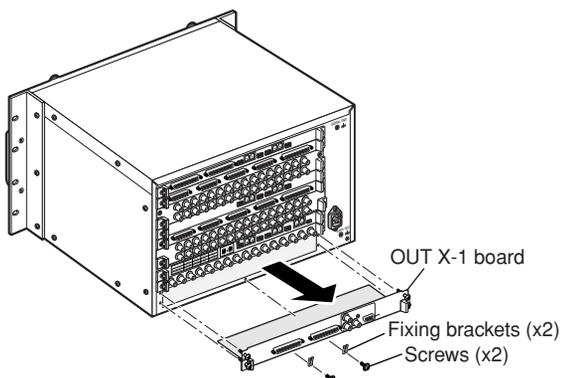
1. Remove the front panel by loosening the screws.



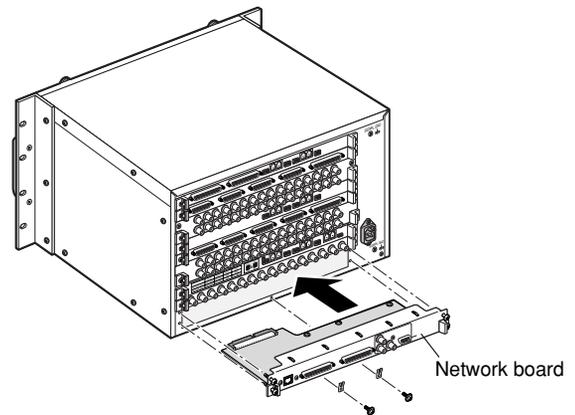
2. Dismount the video output main board from the front side.



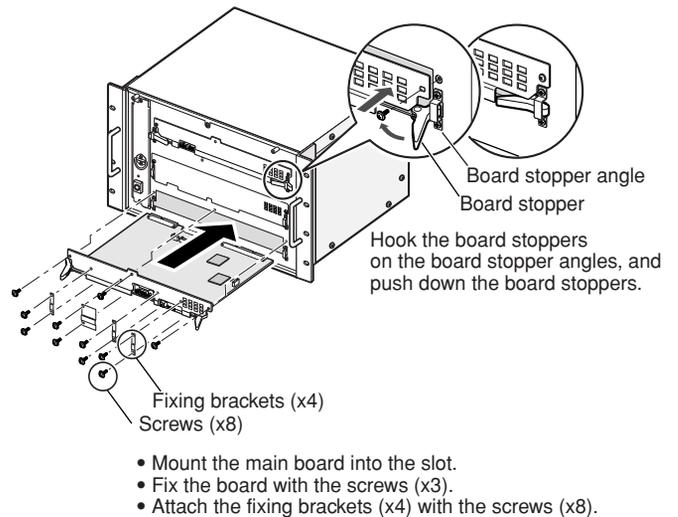
3. Dismount the OUT X-1 board from the rear side.



4. Mount the network board into the OUT X-1 slot, and fix the board with the supplied screws.



5. Mount the video output main board by hooking the board stoppers on the board stopper angles at the front side, by pushing down the board stoppers, and by fixing the screws. Then, attach the front panel.



Note: When mounting, insert the main board surely into slits.

Firmware Update

This chapter explains about how to update the firmware version of WJ-SX650 Series. To update the firmware version, installation of the Firmware update tool on the PC is required.

■ System Requirements of a PC

The PC should meet the following requirements.

OS:

Microsoft® Windows® 2000 Professional SP4
Microsoft® Windows® XP Professional SP2
Microsoft® Windows® XP Home Edition SP2

Note: To work the Firmware update software on the PC, Microsoft® .NET Framework 1.1 needs to be installed.

If you try to install the Firmware update software on a PC without Microsoft® .NET Framework 1.1, it will be installed along with the software.

OS language:

English

PC:

IBM PC/AT Compatible

CPU:

Intel® Pentium® III, 500 MHz or faster

Memory:

128 MB or more

Hard drive space:

30 MB or more for installation of the Firmware update software

50 MB or more for installation of WJ-SX650 Series Initial Setup Tool

Note: If Microsoft® .NET Framework 1.1 has not been installed on the PC, 160 MB or more is required.

Monitor:

1 024 x 768 pixels or more, HIGH color 16 bit or more

Serial Interface:

9-pin D-sub connector

■ Installation and Uninstallation

● Installation

1. Insert the supplied CD-ROM into the CD-ROM drive on the PC.
2. Double-click "setup.exe" in the "PWriter" folder of CD-ROM.
The installation wizard will be displayed on the PC screen.
3. Follow the instruction message on the PC screen to complete the installation.

Note: In the factory default installation, C:\Program Files\Panasonic\Firmware is created, and files will be copied to the directory.

● Uninstallation

1. Select "Control Panel" - "Add/Remove Programs". Add/Remove Programs window will be displayed on the PC screen.
2. Select "Firmware version up software". Click "Remove" or "Change/Remove", and follow the directions.

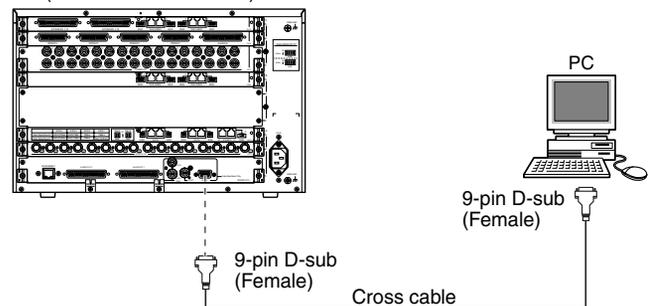
Note: If the Firmware update software has already been installed on a PC, installation is impossible. Install the application again after uninstallation.

■ PC Connection

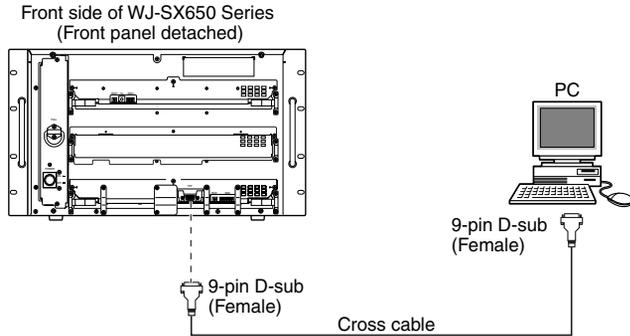
An RS-232C crossing cable (9-pin D-sub) is used for connection between WJ-SX650 Series and PC.

<SERIAL port> (Output rear board)

Rear Side of WJ-SX650 Series
(WJ-PB65E01 installed)



<TEST port> (Output front board)



■ Firmware Update Procedure

Note: The following is the procedure when using the Windows XP operating system.

If you performed wrong operations, the monitor display will return to Step 3. In this case, retry the operations.

1. Select "Start" - "All Programs" - "Panasonic" - "Firmware version up software" - "Firmware version up software x.xx". (x.xx is the version number.) Then, run the program.
2. Firmware update software will start up, and the login window will be displayed on the PC screen.

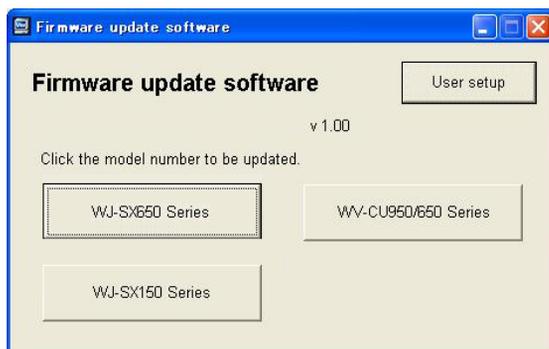


Enter the user name and password. The factory default is as follows.

User Name: user

Password: 12345

3. Click "OK". "Firmware update software" window is displayed. Then, click "WJ-SX650 Series".



4. The following message will be displayed. Then, click "OK".



5. "File Selection" window is displayed.



Click "Browse" to select the firmware file of WJ-SX650 Series for update.

The file is located in the following directory.

E:\PWriter\SX650_vXXXXX_yyyy.mot

(E is the CD-ROM drive, "X" is the software version, and "y" is the checksum.)

Note: Make a note of version displayed in the "File Selection" window. The version will be required for checking in Step 7.

6. Connect the SERIAL port of WJ-SX650 Series and PC. (Refer to the illustration of <SERIAL port> in p. 4.) Then, perform the firmware update by following the instructions given.

Notes:

- Firmware update procedure is as follows:
Current version check → Firmware update → New version check

If the current version is the same as the version you have noted down in Step 5, firmware update is not required.

- When the "Version check completed" message or "Firmware update confirmation" message appears during firmware update, reconnect the cable (SERIAL port ↔ TEST port) and perform the MODE switch setting of video output board for update.

SERIAL port: Connected for version check

TEST port: Connected for firmware update

- When finishing the firmware update, "Completed" window is displayed.



Check that the version of Video Output Board 1 is the same as the version you have noted down in Step 5.

Notes:

- To prevent misuse, be sure to change the factory default user name and password. The user name and password can be changed by clicking "User setup" and changing the settings.
- If the matrix switcher has Video Output Board 2, update the firmware version of Video Output Board 2 by performing Step 3 to 7.

WJ-SX650 Series Initial Setup Tool

This chapter explains about WJ-SX650 Series Initial Setup Tool. Before controlling WJ-SX650 Series Initial Setup Tool, installation on the PC is required.

■ Features

WJ-SX650 Series Initial Setup Tool is used for special configuration of Matrix Switcher WJ-SX650 Series with network card. (Usually, the modification of default configuration is not required when a network card is installed.)

WJ-SX650 Series Initial Setup Tool has the following configuration menus:

- **RS485 Camera**

This menu is used for RS-485 camera settings.

Factory default: All coaxial cameras

Note: WJ-MPU955A Administration Console cannot configure the RS-485 camera settings for the matrix switcher.

- **OSD Character Font**

This menu is used for adjusting the OSD font. When a user set the camera title with WJ-MPU955A Administration Console, the expected font is not displayed on monitors. However, the user can change the SX650 Text Code by selecting from the font list.

Factory default: Normal ASCII code

- **Alarm Input State**

In this menu, the user can reverse Normally Open contact and Normally Close contact for alarm input ports.

Factory default: Normally Open

- **Ethernet Communication**

This menu is used for the Ethernet Communication Property. Select "Auto Negotiation".

Factory default: Auto Negotiation

■ Installation and Uninstallation

● Installation

- Insert the supplied CD-ROM into the CD-ROM drive on the PC.
- Double-click "setup.exe" in the "Setup_Tool" folder of CD-ROM.
The installation wizard will be displayed on the PC screen.
- Follow the instruction message on the PC screen to complete the installation.

Note: In the factory default installation, C:\Program Files\Panasonic\WJ-SX650Cnfg is created, and files will be copied to the directory.

● Uninstallation

- Select "Control Panel" – "Add/Remove Programs". "Add/Remove Programs" window will be displayed on the PC screen.
- Select "WJ-SX650 Series Initial Setup Tool".
- Click "Remove" or "Change/Remove", and follow the directions.

Note: If WJ-SX650 Series Initial Setup Tool has already been installed on a PC, installation is impossible. Install the application again after uninstallation.

■ Starting Up

Note: The following is the procedure when using the Windows XP operating system.

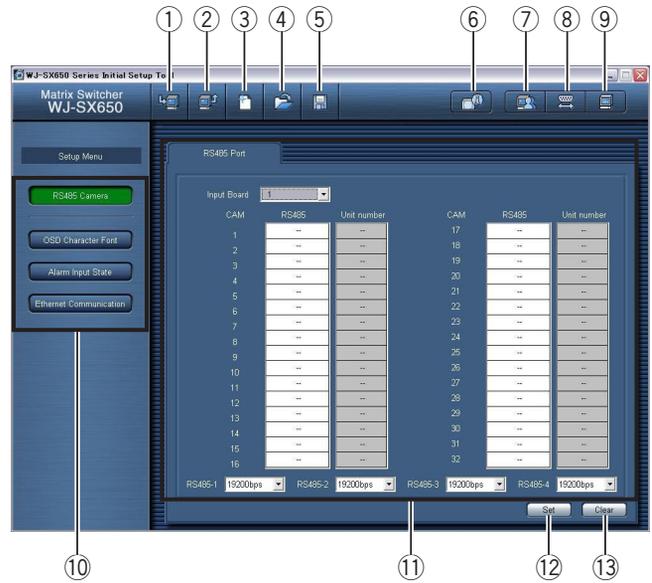
1. Select "Start" – "All Programs" – "Panasonic" – "WJ-SX650 Series" – "WJ-SX650 Series Initial Setup Tool x.xx". (x.xx is the version number.) Then, run the program.
WJ-SX650 Series Initial Setup Tool will start up, and the login window will be displayed on the PC screen.
2. Enter the user name and password. The factory default is as follows.
User Name: admin
Password: sx650
3. Click "OK". "WJ-SX650 Series Initial Setup Tool" window is displayed.



4. To download setting data from WJ-SX650 Series, click on the icon pointed in the illustration. "Download" window will be displayed.
5. Click on "Start Download". The setting data will be downloaded from WJ-SX650 Series to the PC.
Note: Connect the SERIAL port of WJ-SX650 Series and PC.
(Refer to the illustration of <SERIAL port> in p. 4.)
6. When download is complete, a message window is displayed. Then, click "OK". "RS485 Camera" – "RS485 Port" is displayed.

Note: If you upload the setting data from the PC to WJ-SX650 Series while SETUP MENU is open on a monitor, SETUP MENU will be closed forcibly. Settings performed in SETUP MENU will be canceled and replaced by those uploaded from the PC.

■ Window Details



● Tool Bar

- ① : Downloads the current setup data of WJ-SX650 Series to the PC.
- ② : Uploads the setup data (configured in WJ-SX650 Series Initial Setup Tool) from the PC to WJ-SX650 Series.
- ③ : Creates the initial settings.
- ④ : Opens the file in which the setup data was saved.
- ⑤ : Saves the setup data as a file.
- ⑥ : Displays the information of video input board/output board.
- ⑦ : Displays the user settings page.
- ⑧ : Displays the settings page of SERIAL port.
- ⑨ : Displays the version of WJ-SX650 Series Initial Setup Tool.
- ⑩ These buttons are clicked when setting categories are selected.
- ⑪ Setting details are displayed when ⑩ is clicked.
- ⑫ : Determines the settings.
- ⑬ : Clears the settings.

Notes:

- Do not edit the setup data files by using text editors, etc. You may become unable to open the setup data files.
- To perform ①, ②, and ⑥, WJ-SX650 Series needs to be connected to the PC with an RS-232C cable.

Specifications

Ethernet Port:	10/100BASE-T, RJ-45 x 1
Alarm Output (ALARM OUT 1, 2) Alarm Output:	Open collector output x 32, Max. 24 V DC, 100 mA
VS Input:	1 V[P-P]/75 Ω (VS IN)
VS Output:	(VS OUT (THRU)): VS loop-thru output (VS OUT): 1 V[P-P]/75 Ω (VS)
Serial Port:	9-pin D-sub connector x 1
Dimensions Network Board:	355 mm (W) X 38 mm (H) X 134 mm (D) {14" (W) X 1-1/2" (H) X 5-3/10" (D)}

Standard Accessories

Operating Instructions (This Document)	1 pc.
CD-ROM	1 pc.

Note: The files specified below are included on the CD-ROM.

- WJ-SX650 Series Firmware
- Program Writer (Firmware update tool)
- WJ-SX650 Series Initial Setup Tool

Warranty Card	1 pc.
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