

SONY®

DEVICE CONTROL UNIT PACK

DCU-2000-C

DEVICE CONTROL UNIT

MKS-2700

HK-PSU01

INSTALLATION MANUAL

1st Edition

警告

このマニュアルは、サービス専用です。

お客様が、このマニュアルに記載された設置や保守、点検、修理などを行うと感電や火災、人身事故につながる可能性があります。

危険をさけるため、サービストレーニングを受けた技術者のみご使用ください。

WARNING

This manual is intended for qualified service personnel only.

To reduce the risk of electric shock, fire or injury, do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so. Refer all servicing to qualified service personnel.

WARNUNG

Die Anleitung ist nur für qualifiziertes Fachpersonal bestimmt.

Alle Wartungsarbeiten dürfen nur von qualifiziertem Fachpersonal ausgeführt werden. Um die Gefahr eines elektrischen Schlages, Feuergefahr und Verletzungen zu vermeiden, sind bei Wartungsarbeiten strikt die Angaben in der Anleitung zu befolgen. Andere als die angegebenen Wartungsarbeiten dürfen nur von Personen ausgeführt werden, die eine spezielle Befähigung dazu besitzen.

AVERTISSEMENT

Ce manuel est destiné uniquement aux personnes compétentes en charge de l'entretien. Afin de réduire les risques de décharge électrique, d'incendie ou de blessure n'effectuer que les réparations indiquées dans le mode d'emploi à moins d'être qualifié pour en effectuer d'autres. Pour toute réparation faire appel à une personne compétente uniquement.

Attention-when the product is installed in Rack:

1. Prevention against overloading of branch circuit

When this product is installed in a rack and is supplied power from an outlet on the rack, please make sure that the rack does not overload the supply circuit.

2. Providing protective earth

When this product is installed in a rack and is supplied power from an outlet on the rack, please confirm that the outlet is provided with a suitable protective earth connection.

3. Internal air ambient temperature of the rack

When this product is installed in a rack, please make sure that the internal air ambient temperature of the rack is within the specified limit of this product.

4. Prevention against achieving hazardous condition due to uneven mechanical loading

When this product is installed in a rack, please make sure that the rack does not achieve hazardous condition due to uneven mechanical loading.

5. Install the equipment while taking the operating temperature of the equipment into consideration

For the operating temperature of the equipment, refer to the specifications of the Operation Manual.

6. When performing the installation, keep the rear of the unit 10 cm (4 inches) or more away from walls in order to obtain proper exhaust and radiation of heat.

When using a LAN cable:

For safety, do not connect to the connector for peripheral device wiring that might have excessive voltage.

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Manual Structure

Purpose of this manual

This manual is the installation manual of Device Control Unit Pack DCU-2000-C and the optional boards and units.

This manual is intended for use by trained system and service engineers, and describes the information on installing the DCU-2000-C.

Related manuals

The following manuals are prepared for DCU-2000-C and the optional boards and units.

- **Operation Manual (Supplied with DCU-2000-C)**

This manual describes the application and operation of DCU-2000-C.

- **Maintenance Manual (Available on request)**

This manual describes the detailed service information.

If this manual is required, please contact your local Sony Sales Office/Service Center.

- **“Semiconductor Pin Assignments” CD-ROM (Available on request)**

This “Semiconductor Pin Assignments” CD-ROM allows you to search for semiconductors used in B&P Company equipment.

Semiconductors that cannot be searched for on this CD-ROM are listed in the maintenance manual for the corresponding unit. The maintenance manual contains a complete list of all semiconductors and their ID Nos., and thus should be used together with the CD-ROM.

Part number: 9-968-546-XX

Contents

This manual is organized by following sections.

Section 1 Installation

This section describes the operating environment, power supply, installation space, installation of optional boards and units, rack mounting, connectors, input and output signals of connectors, checking upon completion of installation, and system configuration.

Section 2 Service Overview

This section describes the troubleshooting and periodic inspection and maintenance.

Section 1

Installation

1-1. Operating Environment

Operating guaranteed temperature :	+5 °C to +40 °C
Performance guaranteed temperature :	+10 °C to +35 °C
Operating humidity :	10 % to 90 %
Storage temperature :	−20 °C to +60 °C
Mass :	Approx. 9.8 kg (with all options installed)

Prohibited locations for installation

- Areas where the unit will be exposed do direct sunlight or any other strong lights.
- Dusty areas
- Areas is subject to vibration.
- Areas with strong electric or magnetic fields.
- Areas near heat sources.
- Areas subject to electrical noise.
- Areas subject to static electricity.

Ventilation

The inside of the DCU-2000-C is cooled by a fan (right side on the rear).

The power supply can be damaged if the exhaust vent (right side on the rear) and air intake (front panel) are blocked or the fan is stopped.

Therefore, leave a blank space of more than 10 cm in the front and back of the DCU-2000-C.

1-2. Power Supply

1-2-1. Power Specifications

A switching regulator is used for the power supply of this unit. A voltage within the range of 100 V to 240 V can be used without changing the supply voltage.

Power requirements :	AC 100 to 240 V
Power frequency :	50/60 Hz
Current consumption :	0.7 to 0.5 A

Note

As the inrush current at turn-on is a maximum 10 A (at 100 V)/25 A (at 240 V), the capacity of the AC power must be commensurate with this source load.

If the capacity of the AC power is not adequately large, the AC power source breaker will operate or the unit will abnormally operate.

1-2-2. Recommended Power Cord

WARNING

- Use the approved Power Cord (3-core mains lead)/Appliance Connector/Plug with earthing-contacts that conforms to the safety regulations of each country if applicable.
- Use the Power Cord (3-core mains lead)/Appliance Connector/Plug conforming to the proper ratings (Voltage, Ampere).

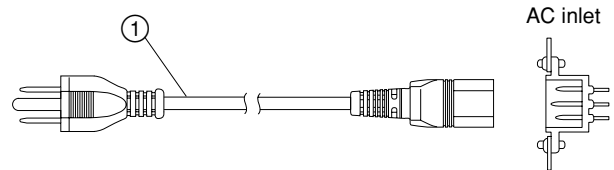
If you have questions on the use of the above Power Cord/ Appliance Connector/Plug, please contact your local Sony Sales Office/Service Center.

CAUTION

- Never use an injured power cord.
- Plugging the power cord in the AC inlet, push as far as it will go.

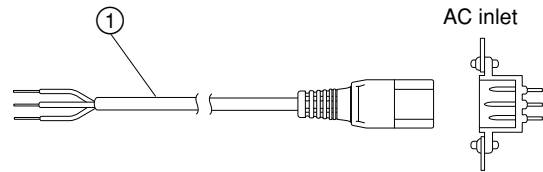
For customers in the U.S.A. and Canada

- ① Power cord, 125 V 10 A (2.4 m) : △ 1-557-377-11

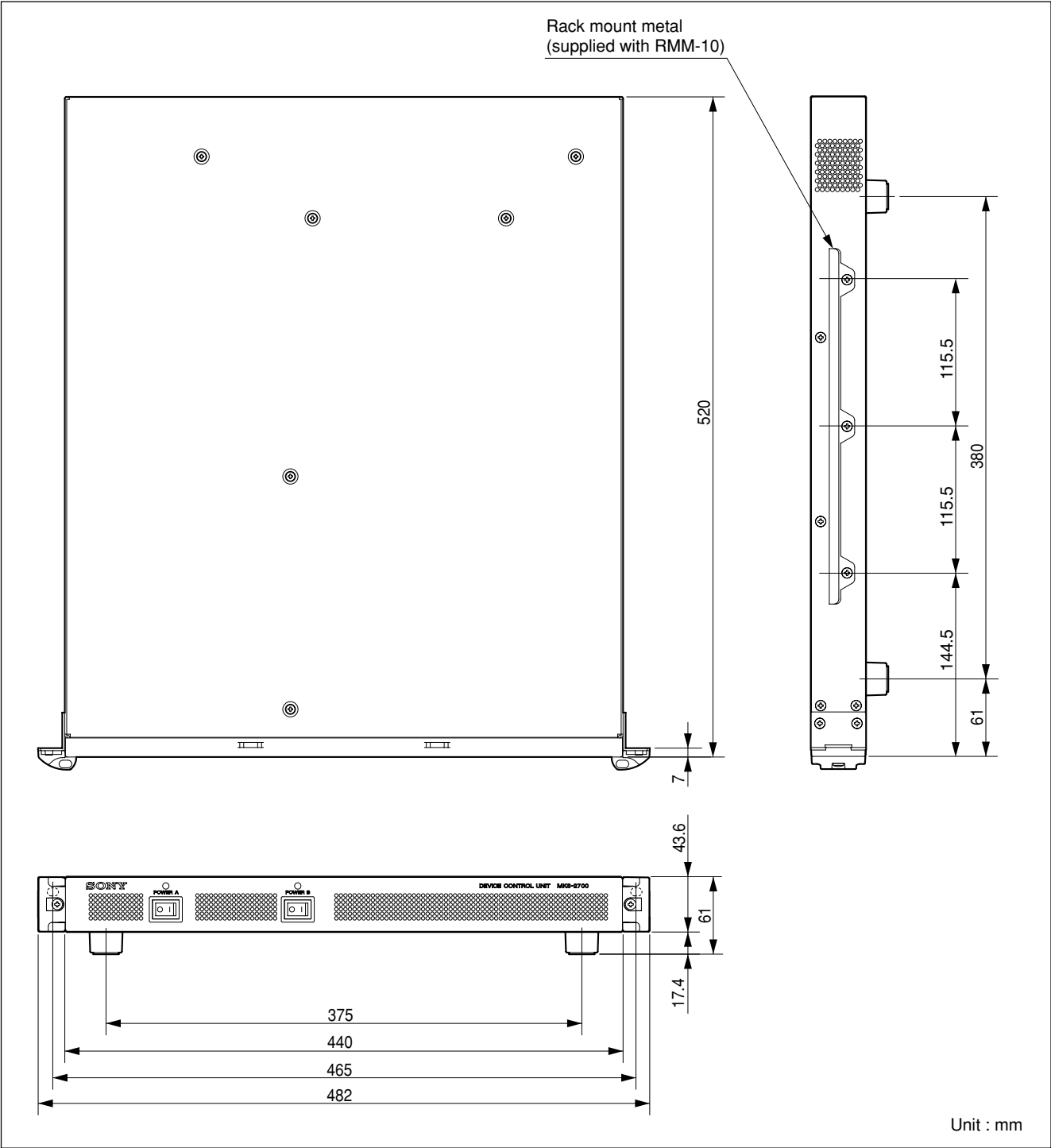


For customers in the all European countries

- ① Power cord, 250 V 10 A (2.4 m) : △ 1-782-929-21



1-3. Installation Space (External dimensions)



1-4. Installing the Optional Power Supply Unit

The optional power supply unit HK-PSU01 is used after it is installed in the MKS-2700.

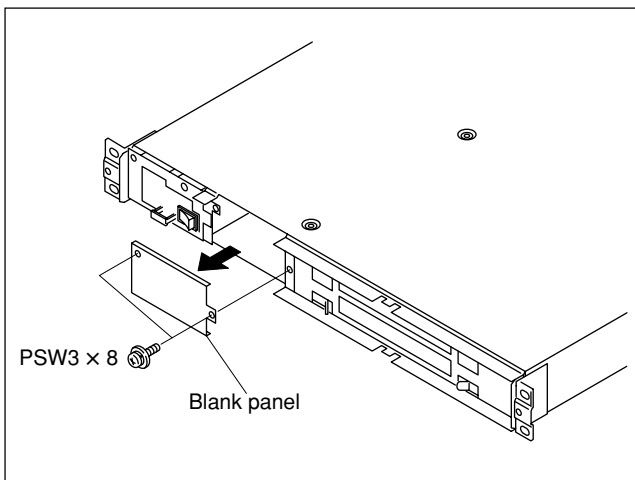
Note

Be sure to turn off the POWER switch before starting installation work.

If installation work is started with the POWER switch left on, it may cause electrical shock or damage to printed circuit boards.

Installation

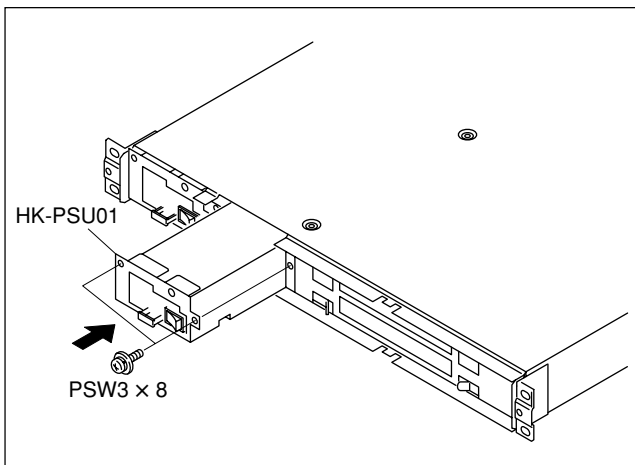
1. Remove the front panel. (Refer to Section 2-2.)
2. Loosen the two screws fixing the blank panel of the slot to which you want to install the HK-PSU01.
Remove the blank panel.



Note

Store the removed blank panel in a safe location.

3. Install the HK-PSU01 firmly as far as it will go.
4. Secure the HK-PSU01 with the two screws.



1-5. Rack Mounting

The DCU-2000-C installs in a 19-inch standard rack.
To mount the DCU-2000-C in a rack, use the specified rack mount kit and follow the procedure described below.

Specified rack mount kit : RMM-10

Note

If a rack mount kit other than the specified one is used, the unit may not correctly install in 19-inch standard rack.

Parts of the RMM-10

- | | |
|--|-------|
| • Rack tools | 2 pcs |
| • Right rack mount adaptor | 1 pc |
| • Left rack mount adaptor | 1 pc |
| • Rack tool attaching screws
(B4 × 6 : 7-682-560-09) | 6 pcs |
| • Rack tool attaching screws
(B4 × 10 : 7-682-560-10) | 6 pcs |

1. Precautions for rack mounting

WARNING

- To prevent the rack from falling or moving, fix the rack on a flat and steady floor using bolts or others fixings.
If the rack falls due to the weight of the equipment, it may cause death or injury.
- Be sure to use the specified rack mount kit.
If not, injury may result and the equipment may fall due to insufficient strength.
- After rack mounting, be sure to tighten the screws on the rack angle and fix the unit in the rack.
If the screws on the rack angle are not tightened, the unit may slip from the rack and fall, causing injury.

CAUTION

When mounting the unit in the rack, note the following:

- Be sure to mount in the rack with two persons or more.
- Be careful not to catch your fingers or hands in the rack mount rail or others.
- Mount in the rack in a stable position.

Note

If several units are mounted in a rack, it is recommended that a ventilation fan is installed to prevent temperature rise inside the rack.

2. Rack mounting procedure

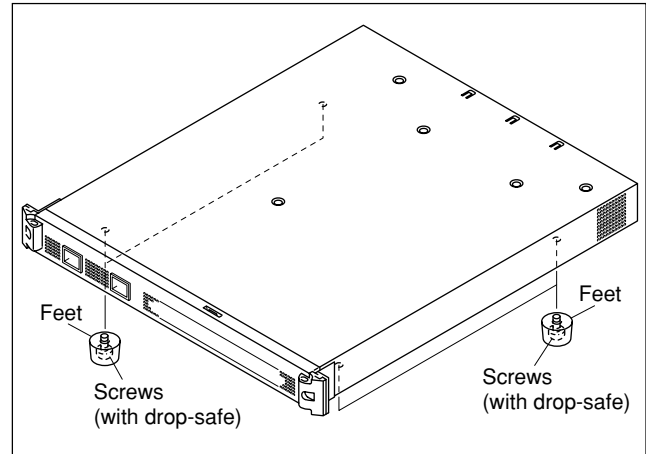
This section describes the rack mounting procedure using the RMM-10 rack mount kit.

Note

Tighten the screws to the following torque.

Tightening torque : $120 \times 10^{-2} \text{ N}\cdot\text{m}$ { 12.2 kgf·cm }

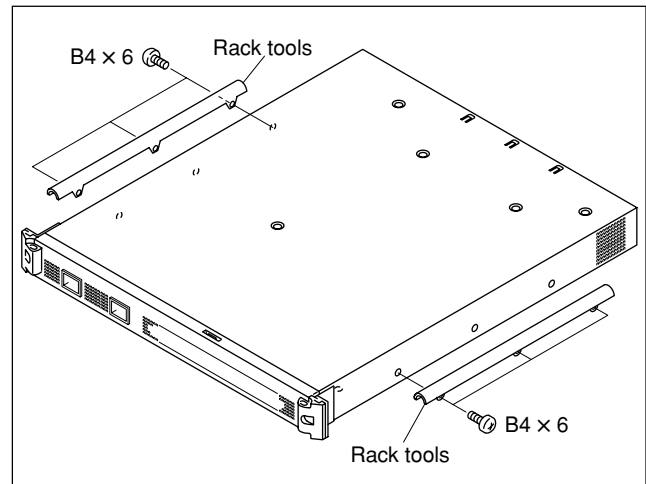
1. Loosen the four screws (with drop-safe) and remove the four feet.



2. Attach the rack tool to the side of the equipment using the specified six screws.

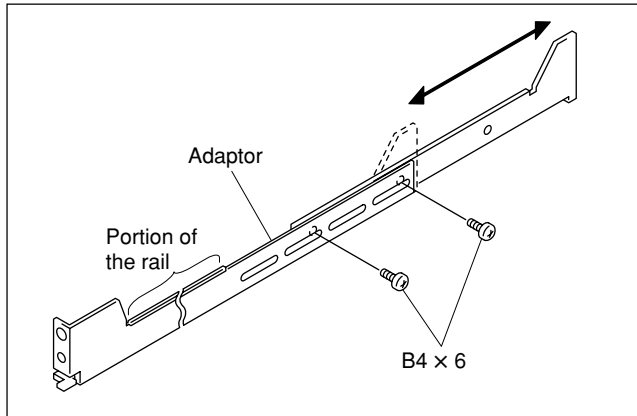
Note

Use B4 × 6 screws.



- Loosen the screws on the rear of the right and left adaptors and adjust the length of the adaptor according to the depth of the rack.

(The illustration below shows the left adaptor.)



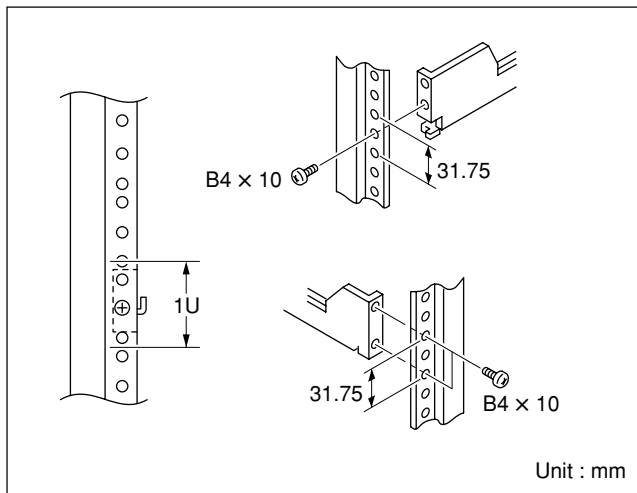
Note

Maximum depth of adaptor : 750 mm

Minimum depth of adaptor : 595 mm

- Attach the right and left adaptors to the rack completely using the specified six screws.

(The illustration below shows the left adaptor.)

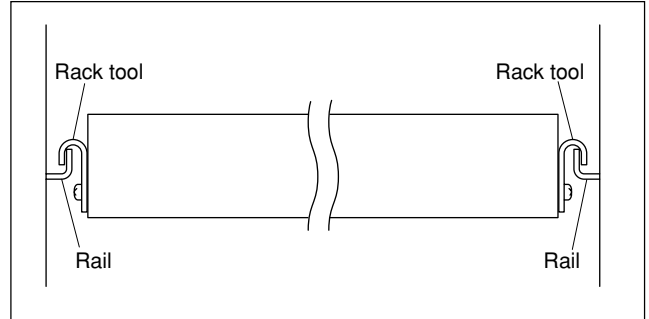


- Tighten the screws (B4 x 6 : two screws each on the right and left) for adjusting the length of the adaptor completely (the screws that were loosened in step 3).

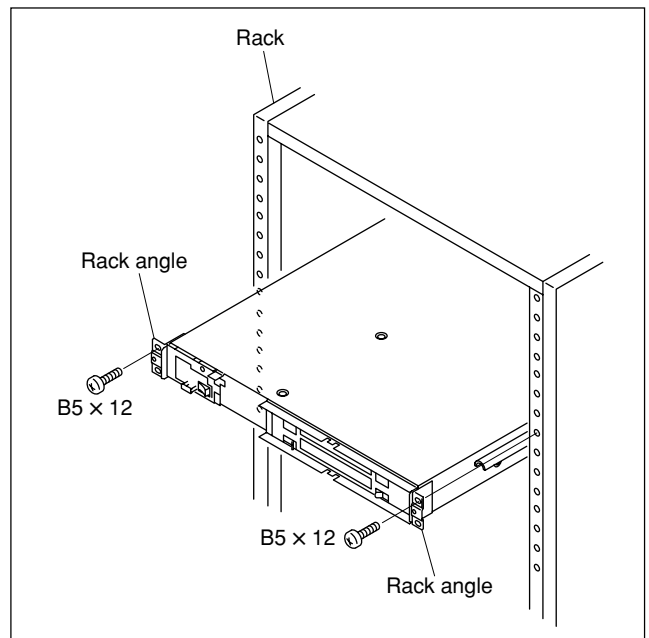
- Align the groove of the rack tool at the side of the equipment with the rail, and slide the equipment to the rear.

Note

The rack tools are hooked on the rails as shown below.



- Remove the front panel. (Refer to Section 2-2.)
- Fix the rack angle in the rack using the specified screws.



- Attach the front panel to the equipment.

1-6. Matching Connectors and Cables

Use the following connectors, cables or equivalents when connecting cables to the unit.

Model name	Panel indication	Connector name	Matching connector and cable	
			Name	Sony part No.
MKS-2700	TALLY/GPI IN 1-34	D-sub 37-pin, Female	D-sub 37-pin, Male Connector 37-pin, Male Junction Shell 37-pin	1-566-357-11*1 1-563-378-11
	TALLY/GPI OUT 1-18, 19-36	D-sub 37-pin, Female	D-sub 37-pin, Male Connector 37-pin, Male Junction Shell 37-pin	1-566-357-11*1 1-563-378-11
	PERIPH	RJ-45 modular jack*2	—	—
	REF IN	BNC, 75 Ω	BNC, 75 Ω Belden 8281 coaxial cable	—
	REMOTE 1 to 6	D-sub 9-pin, Female	D-sub 9-pin, Male Connector 9-pin, Male Junction Shell 9-pin	1-560-651-00*1 1-561-749-00

*1 : The following crimp contact is required for the plug.

AWG#18 to #22 : 1-566-493-21

AWG#22 to #24 : 1-564-774-11

AWG#24 to #30 : 1-564-775-11

*2 : Conforms to the IEEE 802.3 Ethernet 100BASE-TX standards.

1-7. Input/Output Signals of Connectors

The input/output signals of the connectors at the MKS-2700 rear panel are as follows.

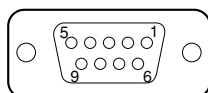
Note

<CONTROLLER> indicates a controlling device.

<DEVICE> indicates a controlled device.

REMOTE1 to 6 : RS-422A (D-sub 9-pin, Female)

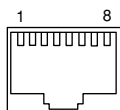
<CONTROLLER> to External Device



– EXT VIEW –

Pin No.	Signal Name	Function
1	FG	Frame ground
2	RX–	Received data (–)
3	TX+	Transmitted data (+)
4	GND	Common ground
5	–	No Connection
6	GND	Common ground
7	RX+	Received data (+)
8	TX–	Transmitted data (–)
9	FG	Frame ground

PERIPH : 100BASE-TX, RJ-45 (8-pin)

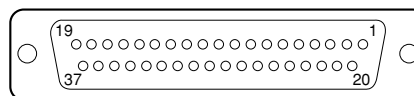


– EXT VIEW –

Pin No.	Signal Name	Function
1	TX+	Transmitted data (+)
2	TX–	Transmitted data (–)
3	RX+	Received data (+)
4	–	No Connection
5	–	No Connection
6	RX–	Received data (–)
7	–	No Connection
8	–	No Connection

TALLY/GPI IN 1-34 : D-sub 37-pin, Female

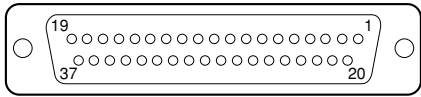
INPUT × 34, TTL, 2 INPUT TTL/+12 V Switchable (*1)



–EXT VIEW–

Pin No.	Signal Name	Function
1	TALLY/GPI IN 1	Tally/GPI inputs
2	TALLY/GPI IN 3	
3	TALLY/GPI IN 5	
4	TALLY/GPI IN 7	
5	TALLY/GPI IN 9	
6	TALLY/GPI IN 11	
7	TALLY/GPI IN 13	
8	TALLY/GPI IN 15	
9	TALLY/GPI IN 17	
10	TALLY/GPI IN 19	
11	TALLY/GPI IN 21	
12	TALLY/GPI IN 23	
13	TALLY/GPI IN 25	
14	TALLY/GPI IN 27	
15	TALLY/GPI IN 29	
16	TALLY/GPI IN 31	
17	TALLY/GPI IN 33 (*1)	
18	GND	Ground
19	GND	Ground
20	TALLY/GPI IN 2	Tally/GPI inputs
21	TALLY/GPI IN 4	
22	TALLY/GPI IN 6	
23	TALLY/GPI IN 8	
24	TALLY/GPI IN 10	
25	TALLY/GPI IN 12	
26	TALLY/GPI IN 14	
27	TALLY/GPI IN 16	
28	TALLY/GPI IN 18	
29	TALLY/GPI IN 20	
30	TALLY/GPI IN 22	
31	TALLY/GPI IN 24	
32	TALLY/GPI IN 26	
33	TALLY/GPI IN 28	
34	TALLY/GPI IN 30	
35	TALLY/GPI IN 32	
36	TALLY/GPI IN 34 (*1)	
37	GND	Ground

TALLY/GPI OUT 1-18 : D-sub 37-pin, Female
OUTPUT × 18, relay contacts 30 V 0.1 A (*2)



–EXT VIEW–

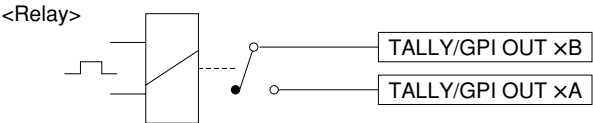
Pin No.	Signal Name	Function
1	TALLY/GPI OUT 1A	Tally/GPI outputs
2	TALLY/GPI OUT 2A	
3	TALLY/GPI OUT 3A	
4	TALLY/GPI OUT 4A	
5	TALLY/GPI OUT 5A	
6	TALLY/GPI OUT 6A	
7	TALLY/GPI OUT 7A	
8	TALLY/GPI OUT 8A	
9	TALLY/GPI OUT 9A	
10	TALLY/GPI OUT 10A	
11	TALLY/GPI OUT 11A	
12	TALLY/GPI OUT 12A	
13	TALLY/GPI OUT 13A	
14	TALLY/GPI OUT 14A	
15	TALLY/GPI OUT 15A	
16	TALLY/GPI OUT 16A	
17	TALLY/GPI OUT 17A	
18	TALLY/GPI OUT 18A	
19	GND	Ground
20	TALLY/GPI OUT 1B	Tally/GPI outputs
21	TALLY/GPI OUT 2B	
22	TALLY/GPI OUT 3B	
23	TALLY/GPI OUT 4B	
24	TALLY/GPI OUT 5B	
25	TALLY/GPI OUT 6B	
26	TALLY/GPI OUT 7B	
27	TALLY/GPI OUT 8B	
28	TALLY/GPI OUT 9B	
29	TALLY/GPI OUT 10B	

Pin No.	Signal Name	Function
30	TALLY/GPI OUT 11B	Tally/GPI outputs
31	TALLY/GPI OUT 12B	
32	TALLY/GPI OUT 13B	
33	TALLY/GPI OUT 14B	
34	TALLY/GPI OUT 15B	
35	TALLY/GPI OUT 16B	
36	TALLY/GPI OUT 17B	
37	TALLY/GPI OUT 18B	

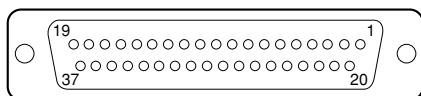
(*2)

Note

A and B of the same number constitute a pair of relay contacts.



TALLY/GPI OUT 19-36 : D-sub 37-pin, Female
 OUTPUT × 18, relay contacts 30 V 0.1 A (*2)



–EXT VIEW–

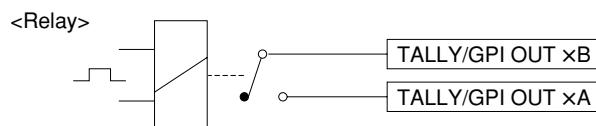
Pin No.	Signal Name	Function
1	TALLY/GPI OUT 19A	Tally/GPI outputs
2	TALLY/GPI OUT 20A	
3	TALLY/GPI OUT 21A	
4	TALLY/GPI OUT 22A	
5	TALLY/GPI OUT 23A	
6	TALLY/GPI OUT 24A	
7	TALLY/GPI OUT 25A	
8	TALLY/GPI OUT 26A	
9	TALLY/GPI OUT 27A	
10	TALLY/GPI OUT 28A	
11	TALLY/GPI OUT 29A	
12	TALLY/GPI OUT 30A	
13	TALLY/GPI OUT 31A	
14	TALLY/GPI OUT 32A	
15	TALLY/GPI OUT 33A	
16	TALLY/GPI OUT 34A	
17	TALLY/GPI OUT 35A	
18	TALLY/GPI OUT 36A	
19	GND	Ground
20	TALLY/GPI OUT 19B	Tally/GPI outputs
21	TALLY/GPI OUT 20B	
22	TALLY/GPI OUT 21B	
23	TALLY/GPI OUT 22B	
24	TALLY/GPI OUT 23B	
25	TALLY/GPI OUT 24B	
26	TALLY/GPI OUT 25B	
27	TALLY/GPI OUT 26B	
28	TALLY/GPI OUT 27B	
29	TALLY/GPI OUT 28B	

Pin No.	Signal Name	Function
30	TALLY/GPI OUT 29B	Tally/GPI outputs
31	TALLY/GPI OUT 30B	
32	TALLY/GPI OUT 31B	
33	TALLY/GPI OUT 32B	
34	TALLY/GPI OUT 33B	
35	TALLY/GPI OUT 34B	
36	TALLY/GPI OUT 35B	
37	TALLY/GPI OUT 36B	

(*2)

Note

A and B of the same number constitute a pair of relay contacts.



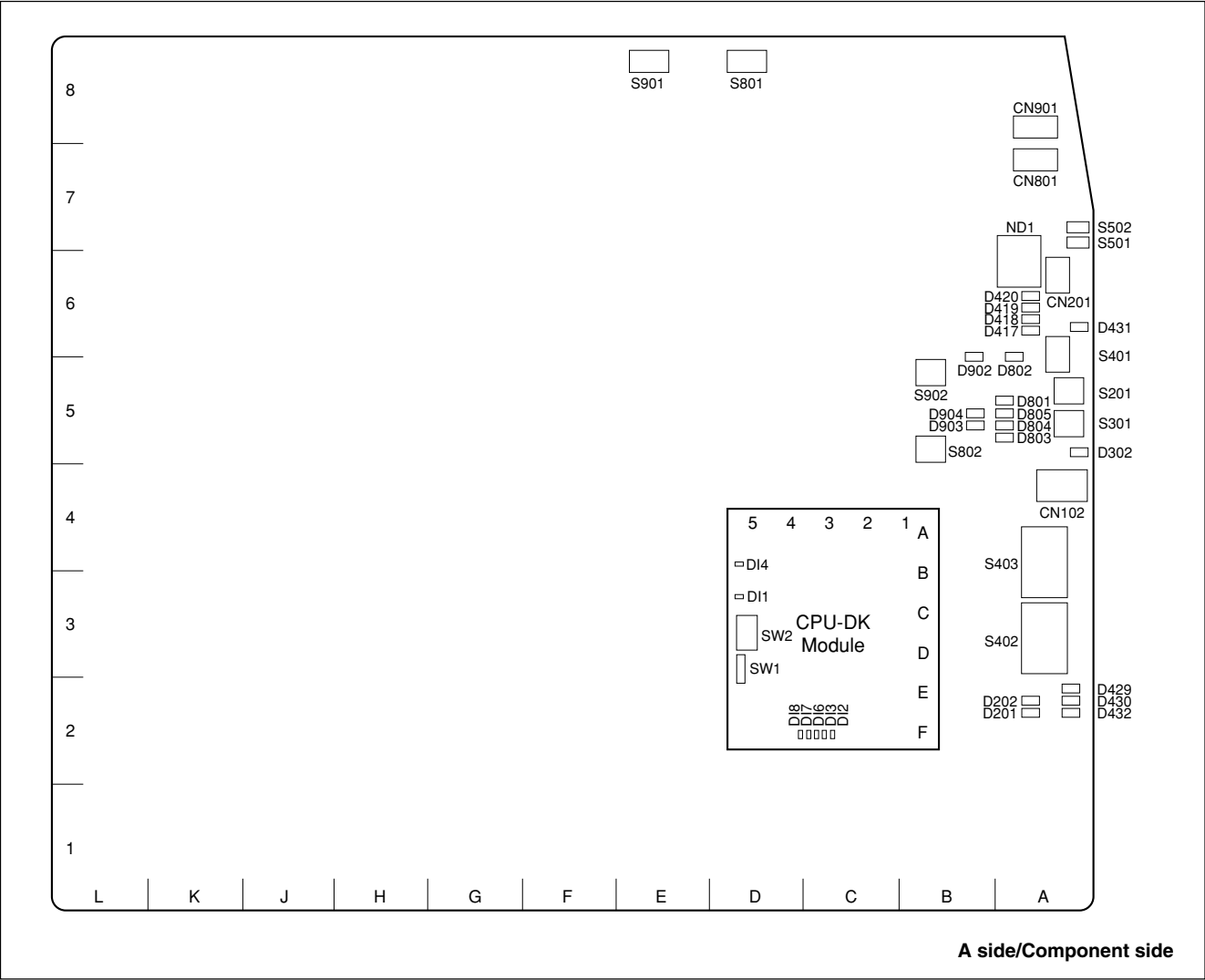
1-8. Checks on Completion of Installation

1-8-1. Description of On-board Switches and LEDs

Note

The number shown in parentheses () indicates the address on the circuit board.

1. IF-963 board



<LEDs>

D201 (A-2) : LAN status LED

LAN (IC201/IF-963 board) status indication.
Flashes while communication with the main panel is in progress.

D202 (A-2) : 100

LAN (IC201/IF-963 board) status indication
Lit while communication with the main panel is in progress at 100 Mb/s.

D302 (A-5) : RESET

Lit at reset.

D417 (A-6) : Main CPU status LED

Main CPU status indication. Used only for production in the assembly factory.

D418 (A-6) : Main CPU status LED

Main CPU status indication. Used only for production in the assembly factory.

D419 (A-6) : Main CPU status LED

Main CPU status indication. Used only for production in the assembly factory.

D420 (A-6) : Main CPU status LED

Main CPU status indication. Used only for production in the assembly factory.

D429 (A-2) : +3.3 V

+3.3 V power supply status indication.
Lit when the +3.3 V power is supplied.

D430 (A-2) : +5 V

+5 V power supply status indication.
Lit when the +5 V power is supplied.

D431 (A-6) : REF-OK status LED

REF IN signal presence/absence status indication.
Not lit when the REF signal is not input.
Lit when the REF signal is input via the REF IN connector.

D432 (A-2) : +12 V

+12 V power supply status indication.
If this LED does not light on, the fuse may have blown.
Lit when the +12 V power is supplied.

D801 (A-5) : CH3

Flashes while communication with the equipment that is connected to the serial I/F (the IC801/IF-963 board) is in progress.

D802 (A-5) : SIO 1/2

Serial I/F (the IC801/IF-963 board) status indication
Not lit : The IC has started up correctly.
Lit : The IC has not started up correctly.
Flashing : Memory is faulty.

D803 (A-5) : CH0

Flashes while communication with the equipment that is connected to the serial I/F (the IC801/IF-963 board) is in progress.

D804 (A-5) : CH1

Flashes while communication with the equipment that is connected to the serial I/F (the IC801/IF-963 board) is in progress.

D805 (A-5) : CH2

Flashes while communication with the equipment that is connected to the serial I/F (the IC801/IF-963 board) is in progress.

D902 (B-5) : SIO 3/4

Serial I/F (the IC901/IF-963 board) status indication
Not lit : The IC has started up correctly.
Lit : The IC has not started up correctly.
Flashing : Memory is faulty.

D903 (B-5) : CH4

Flashes while communication with the equipment that is connected to the serial I/F (the IC901/IF-963 board) is in progress.

D904 (B-5) : CH5

Flashes while communication with the equipment that is connected to the serial I/F (the IC901/IF-963 board) is in progress.

ND1 (A-6) : Main CPU status LED

Main CPU status indication.

<Switches>**S201 (A-5) : Monitor setting switch for the main CPU**

Reset switch that is used during maintenance of the main CPU from the TERMINAL pin.

S301 (A-5) : System reset switch

Reset switch for the entire DCU-2000-C.

S401 (A-5) : Modes setting switch for the main CPU

Reserved for future expansion. Used only for production in the assembly factory. Default setting when shipped from the factory is all OFF.

S402 (A-3) : Group ID setting switch for LAN

Sets the network group ID.
This switch is used to set the PERIPH terminal.
Refer to System Setup Manual for details.

S403 (A-4) : Unit ID setting switch for LAN

Sets the unit ID within a network.
This switch is used to set the PERIPH terminal.
Refer to System Setup Manual for details.

S501 (A-7) : Tally/GPI IN MODE 33

Selects either TTL level or +12 V for Tally/GPI IN 33
The “V” position of the circuit board indication : 12 V
The “N” position of the circuit board indication : TTL level

S502 (A-7) : Tally/GPI IN MODE 34

Selects either TTL level or +12 V for Tally/GPI IN 34
 The “V” position of the circuit board indication : 12 V
 The “N” position of the circuit board indication : TTL level

S801 (D-8) : Modes setting switch for the serial I/F

Reserved for future expansion. Only the switch 3 is set to ON at the default setup when shipped from the factory.

S802 (B-5) : Reset switch for the serial I/F

Reset switch for the serial I/F (the IC801/IF-963 board).

S901 (E-8) : Modes setting switch for the serial I/F

Reserved for future expansion. Only the switch 3 is set to ON at the default setup when shipped from the factory.

S902 (B-5) : Reset switch for the serial I/F

Reset switch for the serial I/F (the IC901/IF-963 board).

<Connectors>**CN102 (A-4) : TERMINAL pin**

This pin is connected to the main CPU control terminal and used during maintenance.
 Used only for production in the assembly factory.

CN201 (A-6) : ISP common connector

Used only for production in the assembly factory. Used for program writing into the JTAG device with ISP.

<LEDs on the CPU DK module> (C-2)**DI1 (green) (B-5) : CD (Card Detect) status LED**

Lit when the CPU-DK module is inserted correctly to the parent board.

DI2 (green) (F-3) : RUN status LED

Lit when the CPU-DK module starts operating.

DI3 (green) (F-3) : STATUS4 status LED

Used for maintenance purpose. Only the STATUS1 LED is lit in normal operation.

DI4 (green) (B-5) : +3.3 V

Indicates the status of the VCC (CORE) and VCC (I/O) power supplied to the CPU-DK module.
 Lit while the specified powers are turned on.

DI6 (green) (F-3) : STATUS3 status LED

Used for maintenance purpose. Only the STATUS1 LED is lit in normal operation.

DI7 (green) (F-3) : STATUS2 status LED

Used for maintenance purpose. Only the STATUS1 LED is lit in normal operation.

DI8 (green) (F-4) : STATUS1 status LED

Used for maintenance purpose. Only the STATUS1 LED is lit in normal operation.

<Switches on the CPU-DK module> (C-2)**SW1 (D-5) : RESET switch**

Pressing this switch resets the CPU-DK module.

Note

In some machines in which the CPU-DK module is installed, the system reset may be activated.

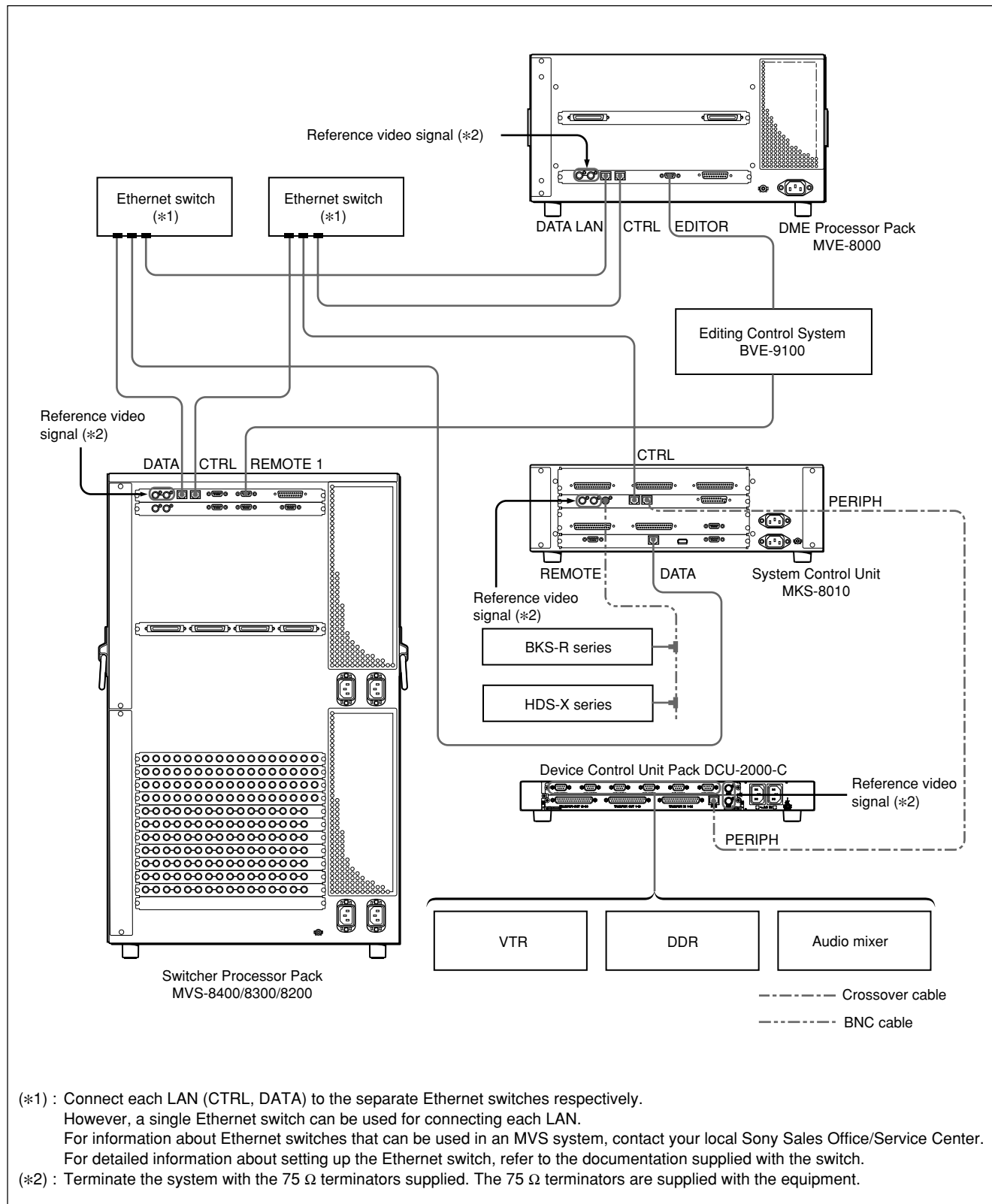
SW2 (C-5) : MODE switch**8-pin DIP switch**

Used only for production in the assembly factory.
 All switches are set to OFF for normal operation.
 Default setting when shipped from the factory is all OFF.

1-9. System Connection

Configure the MVS-8000 series system connection referring to the connection example as shown below.

Connection example



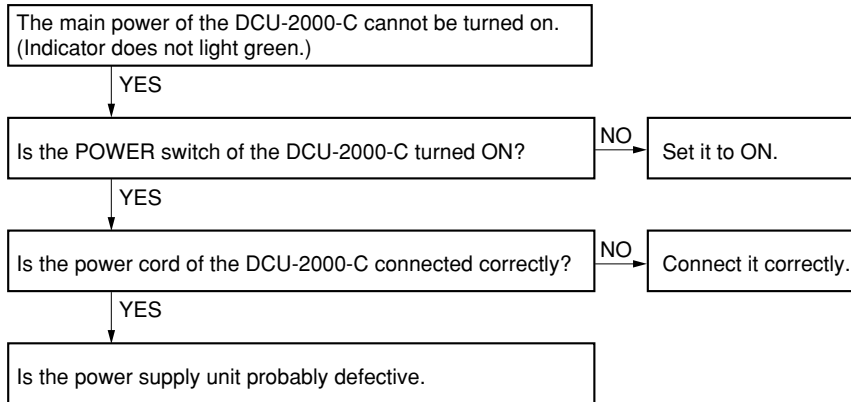
Section 2

Service Overview

2-1. Troubleshooting

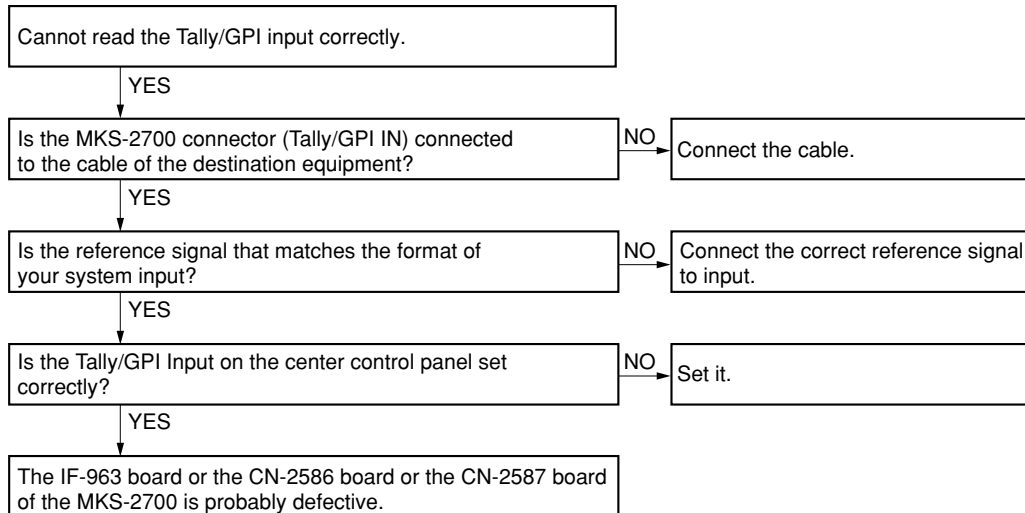
The main power cannot be turned on. (Indicator does not light green.)

Flow1



Cannot read the Tally/GPI input correctly.

Flow2



Tally/GPI Output does not work correctly.

Flow3

The Tally/GPI Output does not work correctly.
(The Tally lamp is not lit.)

YES

Is the MKS-2700 connector (Tally/GPI IN) connected
to the cable of the destination equipment (display unit)?

NO

Connect the cable.

YES

Is the reference signal that matches the format of your
system input?

NO

Connect the right reference signal to
input.

YES

Is the Tally/GPI Input on the center control panel set
correctly?

NO

Set it.

YES

The IF-963 board or the CN-2586 board or the CN-2587 board
of the MKS-2700 is probably defective.

The device that is connected to Remote does not work correctly.

Flow4

The device that is connected to the Remote does not
work correctly.

YES

Is the cable connected between the Remote connector of
the MKS-2700 and the device?

NO

Connect the cable.

YES

Is the controllable device connected?

NO

Connect the controllable device.

YES

Is the reference signal that matches the format of your
system input?

NO

Connect the connect reference
signal to input.

YES

Is the center control panel side already set?

NO

Set it.

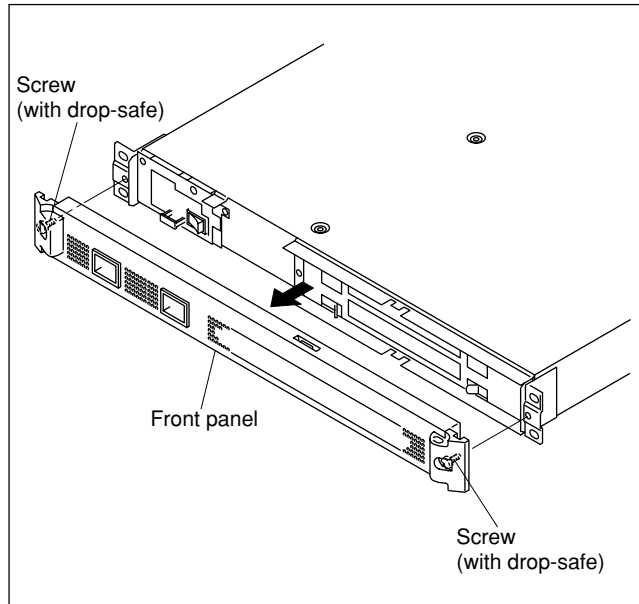
YES

The IF-963 board or the CN-2586 board or the CN-2587 board
of the MKS-2700 is probably defective.

2-2. Removal/Installation the Front Panel

Removal

Loosen the two screws (with drop safe) and remove the front panel in the direction of the arrow as shown below.



Installation

Install the front panel by reversing the steps of removal procedure.

2-3. Periodic Inspection and Maintenance

2-3-1. Cleaning

1. Front panel

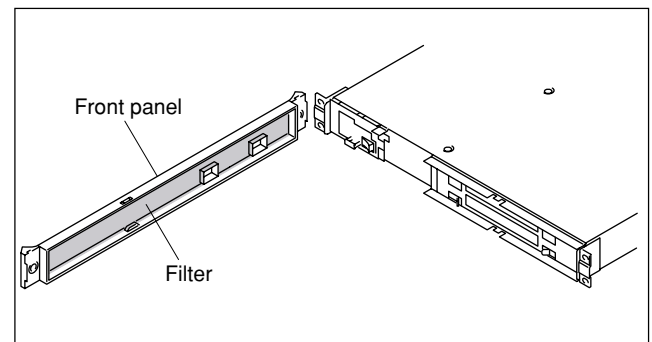
The filter on the rear of the front panel can easily accumulate the dust. Be sure to remove dust by cleaning as follows.

1. Remove the front panel. (Refer to Section 2-2.)
2. Remove the dust accumulated on the filter with a vacuum cleaner.

Note

Cleaning the filter by washing in water is recommended when there is a heavy accumulation of dust.

Be sure to dry the filter completely after it has been washed is cleaned by water.

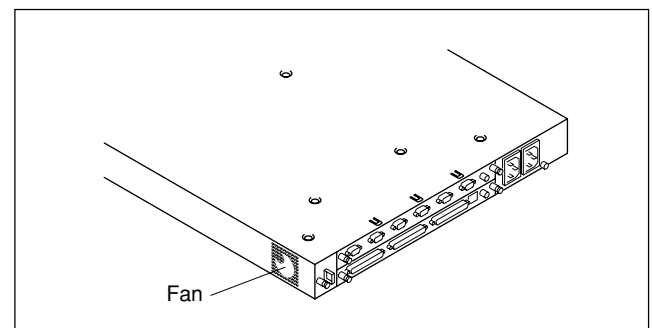


2. Fan

The inside of the DCU-2000-C is cooled by a fan (right side on the rear).

If dust has accumulated in the intake of the fan, air is prevented from flowing smoothly and this may result in a temperature rise inside the machine. This may have an adverse effect on performance and life of the machine. Cleaning of the fan every month is recommended.

Contact your local Sony Sales Office/Service Center for information on cleaning the fan.



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