SONY®

Signal Interface Switcher
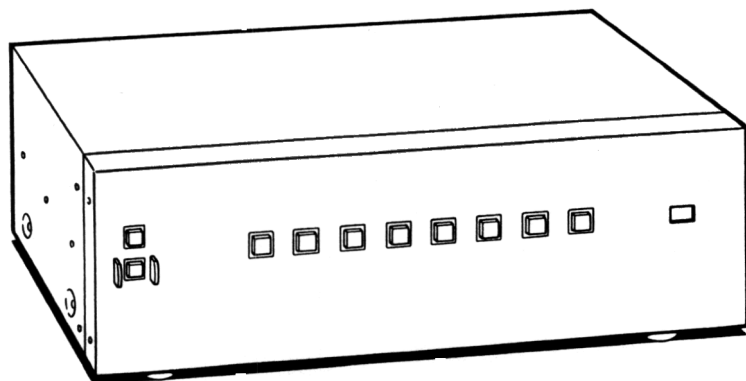
PC-1270

Operating Instructions page 2

Before operating the unit, please read this manual thoroughly
and retain it for future reference.

Mode d'emploi page 12

Avant la mise en service de cet appareil, prière de lire attentivement
ce mode d'emploi que l'on conservera pour toute référence ultérieure.

Owner's Record

The model and serial numbers are located on the rear. Record the serial number in the space provided below. Refer to these numbers whenever you call upon your Sony dealer regarding this product.

Model No. PC-1270   Serial No. _____

WARNING

Contents

To prevent fire or shock hazard, do not expose the unit to rain or moisture.

To avoid electrical shock, do not open the cabinet. Refer servicing to qualified personnel only.

Warning — This equipment generates, uses, and can radiate radio frequency energy and if not installed and used in accordance with the instructions manual, may cause interference to radio communications. It has been tested and found to comply with the limits for a Class A computing device pursuant to Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference in which case the user at his own expense will be required to take whatever measures may be required to correct the interference.

Important-To insure that the complete system (including this peripheral) is capable of complying with the FCC requirements, it is recommended that the user make sure that the individual equipment of the complete system has a label with one of the following statements.

   "This equipment has been tested with a Class A Computing Device and has been found to comply with Part 15 of FCC Rules."

-or-

   "This equipment complies with the requirements in Part 15 of FCC Rules for a Class A Computing Device."

-or equivalent.

For the customers in Canada

This apparatus complies with the Class A limits for radio noise emissions set out in Radio Interference Regulations.

Precautions

On safety

- Should any liquid or solid object fall into the cabinet, unplug the unit and have it checked by qualified personnel before operating it any further.
- Disconnect the AC power cord from the wall outlet if the unit is not to be used for an extended period of time.
- Only a qualified personnel should mount or dismount the signal interface board.

On installation

- Allow adequate air circulation to prevent internal head build-up. Do not place the unit on surfaces (rugs, blankets, etc.) or near materials (curtains, draperies) that may block the ventilation holes.
  Be aware that room heat rises to the ceiling; check that temperature near the installation location is not excessive.
- Do not install the unit in a location near heat sources such as radiators or air ducts, or in a place subject to direct sunlight, excessive dust or humidity, mechanical vibration or shock.

On cleaning

To keep the cabinet looking brand-new, periodically clean it with a soft cloth. Stubborn stains may be removed with a cloth lightly dampened with a mild detergent solution. Never use strong solvents, such as thinner or benzine, or abrasive cleansers, since these will damage the cabinet.

On repacking

Save the original shipping carton and packing material; they will come in handy if you ever have to ship your unit. For maximum protection, repack your unit as it was originally packed at the factory.

Features

- **Eight pictures can be selected to send to a monitor or a projector**
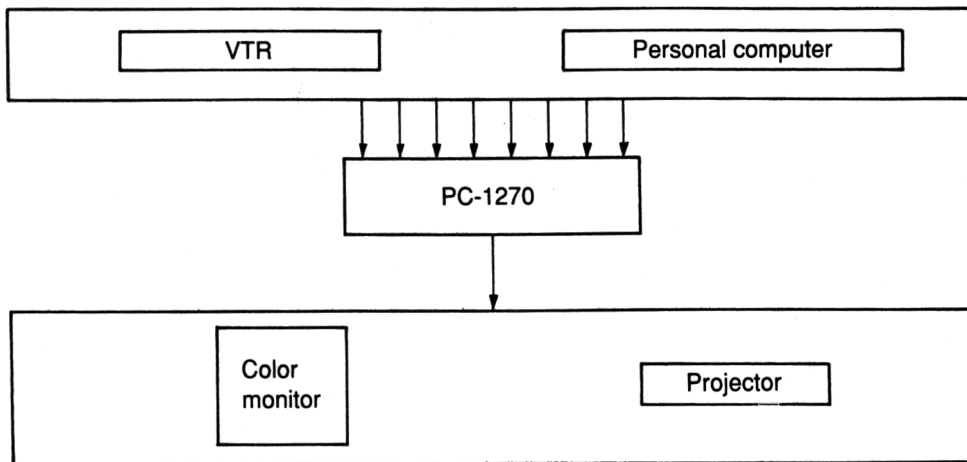 This unit can mount up to eight signal interface boards which allow the connection of up to eight VTRs or personal computers with this unit. The picture from connected equipment can be selected with the INPUT SELECT button on the front panel.

- **The input source of the projector can be selected.**
  With the supplied remote commander, the picture which is input from other equipment than this unit to the projector can be selected.
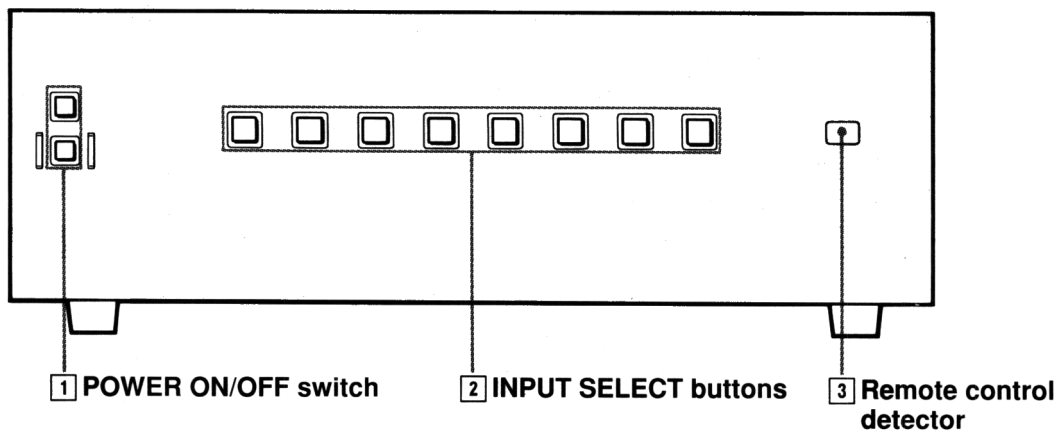
- **CONTROL S connectors**
  By connecting the CONTROL S connectors of this unit and those on the other Sony equipment, this unit can be operated through the other Sony equipment, or the other Sony equipment can be operated through this unit.
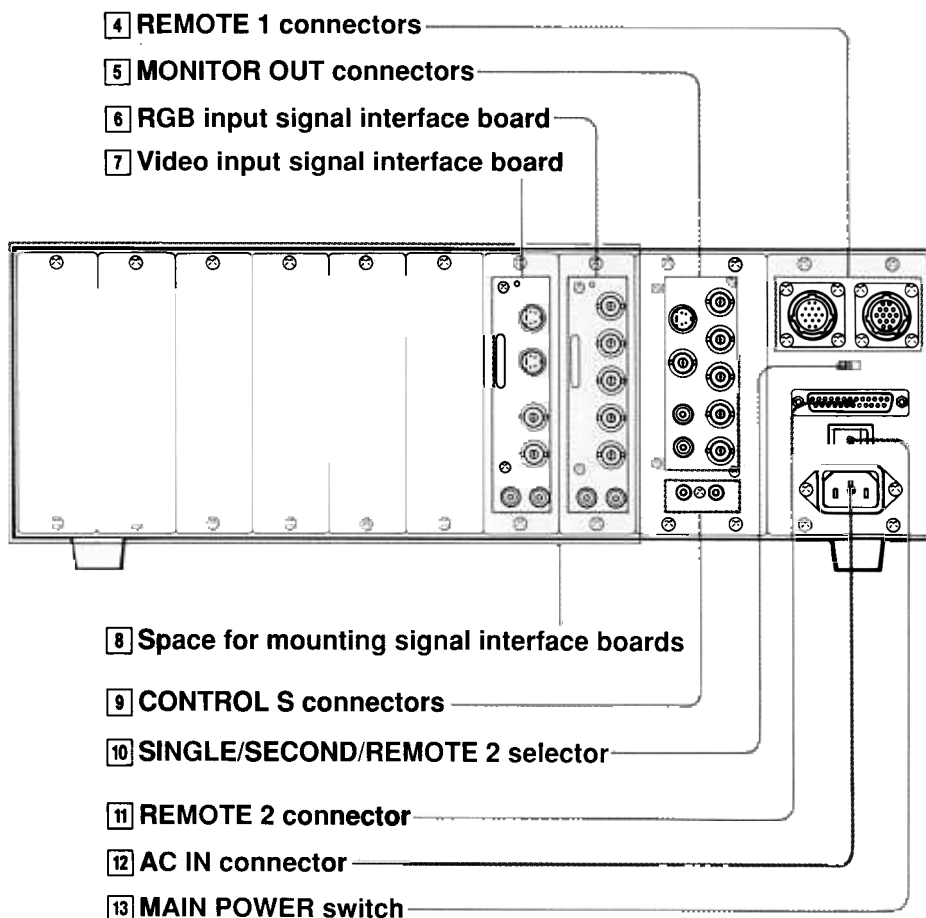
VTR		Personal computer

PC-1270

Color monitor	Projector

Location and Function of Parts

Front panel

[1] POWER ON/OFF switch   [2] INPUT SELECT buttons   [3] Remote control detector

Rear panel

[4] REMOTE 1 connectors

[5] MONITOR OUT connectors

[6] RGB input signal interface board

[7] Video input signal interface board

[8] Space for mounting signal interface boards

[9] CONTROL S connectors

[10] SINGLE/SECOND/REMOTE 2 selector

[11] REMOTE 2 connector

[12] AC IN connector

[13] MAIN POWER switch

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1 POWER ON/OFF switch

To turn on the power, press ON with the MAIN POWER switch on the rear panel set to ON. The ON button lights up in green.

To turn off the power, press OFF(STANDBY). The OFF button lights up in red and the unit enters the standby mode.

2 INPUT SELECT buttons

The number of each button indicates the position of the signal interface board to which the input source is connected.

To select the equipment to be monitored, press the INPUT SELECT button which corresponds the board to which the equipment is connected. The button lights up. When the power is turned on in the standby mode, the button of the previously selected board lights up. Once the MAIN POWER switch has been turned off, no button will light up when the power is turned on afterwards.

3 Remote control detector

Point the supplied RM-1270S remote commander here

4 REMOTE 1 connectors (14-pin)

IN: Use this connector when expanding the system connection by mounting signal interface boards.

OUT: Connect to the REMOTE connector of a projector.

5 MONITOR OUT connector

Outputs the signal selected with the INPUT SELECT buttons. Connect to a video monitor or a projector.

Y/C (4-pin): Outputs the luminance (Y) signal and chrominance (C) signal separately.

VIDEO (BNC type): Outputs the composite video signal.

AUDIO L/R (phono jack): Outputs the stereo audio signal. In case of the monaural audio signal, the same signal is output from both L and R jacks.

R (BNC type): Outputs the red signal.

G (BNC type): Outputs the green signal.

B (BNC type): Outputs the blue signal.

SYNC/HD (BNC type): Outputs the composite sync signal or the horizontal sync signal.

VD (BNC type): Outputs the vertical sync signal.

CONTROL S IN (mini jack): Connect to the CONTROL S OUT jack of a Sony equipment. The connected Sony equipment can be controlled on the switcher.

CONTROL S OUT (mini jack): Connect to the CONTROL S IN jack of a Sony equipment. The switcher can be controlled on the connected Sony equipment.

6 RGB input signal interface board

Indicator (red): Lights up when the signal connected to this board is selected with the INPUT SELECT button

RGB IN connector (BNC type)

R: Input the red signal here.

G/G SYNC: Input the green signal or the sync on green signal.

B: Input the blue signal.

SYNC/HD: Input the composite sync signal or the horizontal sync signal.

VD: Input the vertical sync signal.

AUDIO IN L/R connectors (phono jack): Connect to the audio output connectors of an audio equipment. Connect a monaural audio source to L(MONO).

7 Video input signal interface board

Indicator (red): Lights up when the signal connected to this board is selected with the INPUT SELECT button.

Y/C IN connector (4-pin): Connect the Y/C output of a video equipment. The luminance (Y) signal and chrominance (C) signal can be input separately. This connector is terminated at 75 ohms.

Y/C OUT connector (4-pin): Through-output of the signal input to the Y/C IN connector. Connect to the Y/C input of a monitor. When a cable is connected to this connector, the 75 ohms termination of the Y/C IN connector is released.

VIDEO IN connector (BNC type): Connect to a video equipment to input the composite video signal. This connector is terminated at 75 ohms.

VIDEO OUT connector (BNC type): Through-output of the signal input to the VIDEO IN connector. Connect to a monitor. When a cable is connected to this connector, the 75 ohms termination of the VIDEO IN connector is released.

AUDIO IN L/R connectors (phono jack): Same as that of the RGB input signal interface board.

Note

When cables are connected to both Y/C IN and VIDEO IN connectors, the signal input to the Y/C IN connector has priority over the one input to the VIDEO IN connector, and output from the Y/C connector of the MONITOR OUT connectors. The signal input to the VIDEO IN connector can be output from the VIDEO connector of the MONITOR OUT connectors only when no cable is connected to the Y/C IN connector.

⑧ Space for mounting signal interface boards
Up to eight signal interface boards of 35 mm panel width can be mounted.

Note

Mounting or dismounting of signal interface boards must be performed by a qualified personnel only.

⑨ CONTROL S connectors
Connect to the CONTROL S connector on the other Sony equipment. This unit can be operated through the connected equipment, or the connected equipment can be operated through this unit.

⑩ SINGLE/SECOND/REMOTE 2 selector
SINGLE/SECOND: Usually set to SINGLE.
REMOTE 2: Set to this position when operating this unit on a console connected to the REMOTE 2 connector. In this case, the input source cannot be selected with the remote commander.

⑪ REMOTE 2 connector (25-pin)
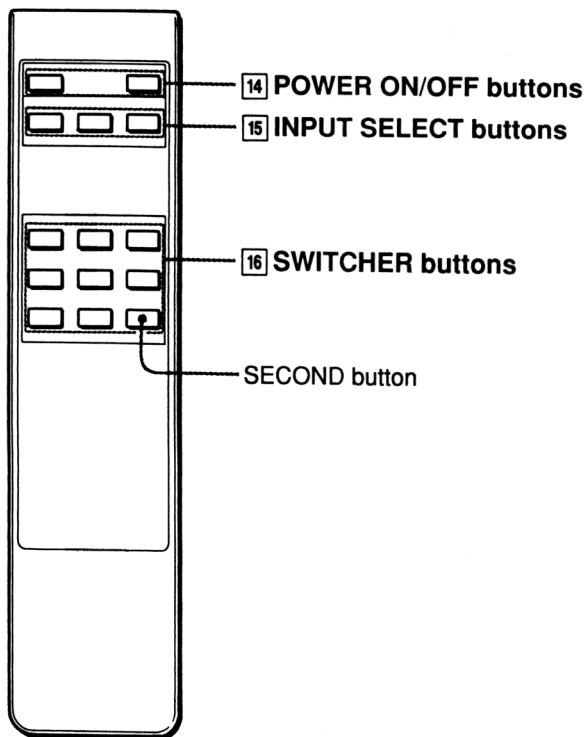When operating the unit on a console located in other room, connect to the console.

Note

The connection of the REMOTE 2 connector must be performed by a qualified personnel only.

⑫ AC IN connector
Connect to an AC outlet.

⑬ MAIN POWER switch
Press the ON side to set the unit in the standby mode.
The OFF button on the front panel lights up.
Press the OFF side to turn off the power supply.

RM-1270S Remote commander

- [14] POWER ON/OFF buttons
- [15] INPUT SELECT buttons
- [16] SWITCHER buttons
- SECOND button

[14] POWER ON/OFF switch

To turn on the power, press ON in the standby mode (when the OFF button on the front panel lights up).

[15] INPUT SELECT buttons

The input source to the projector can be selected.

VIDEO: Press this button to select the picture connected to the VIDEO IN connector of the projector.

A: Press this button to select the picture connected to the INPUT A connector of the projector.

B: Press this button to select the picture connected to the INPUT B connector of the projector.
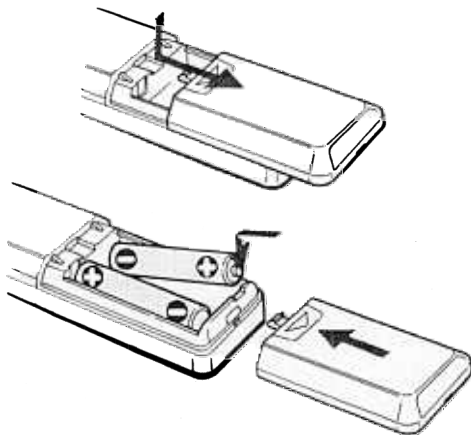
[16] SWITCHER buttons

Use these buttons when monitoring the pictures output from this switcher to a projector or a monitor.

Press a button among 1 to 8 to select the board to which the equipment to be monitored is connected.

When the SINGLE/SECOND/REMOTE 2 selector is set to SECOND, to select the board, press a button among 1 to 8 within 2 seconds after the SECOND button is pressed.

Battery installation

Insert the supplied two size AA batteries (IEC designation R6) with the correct polarity.
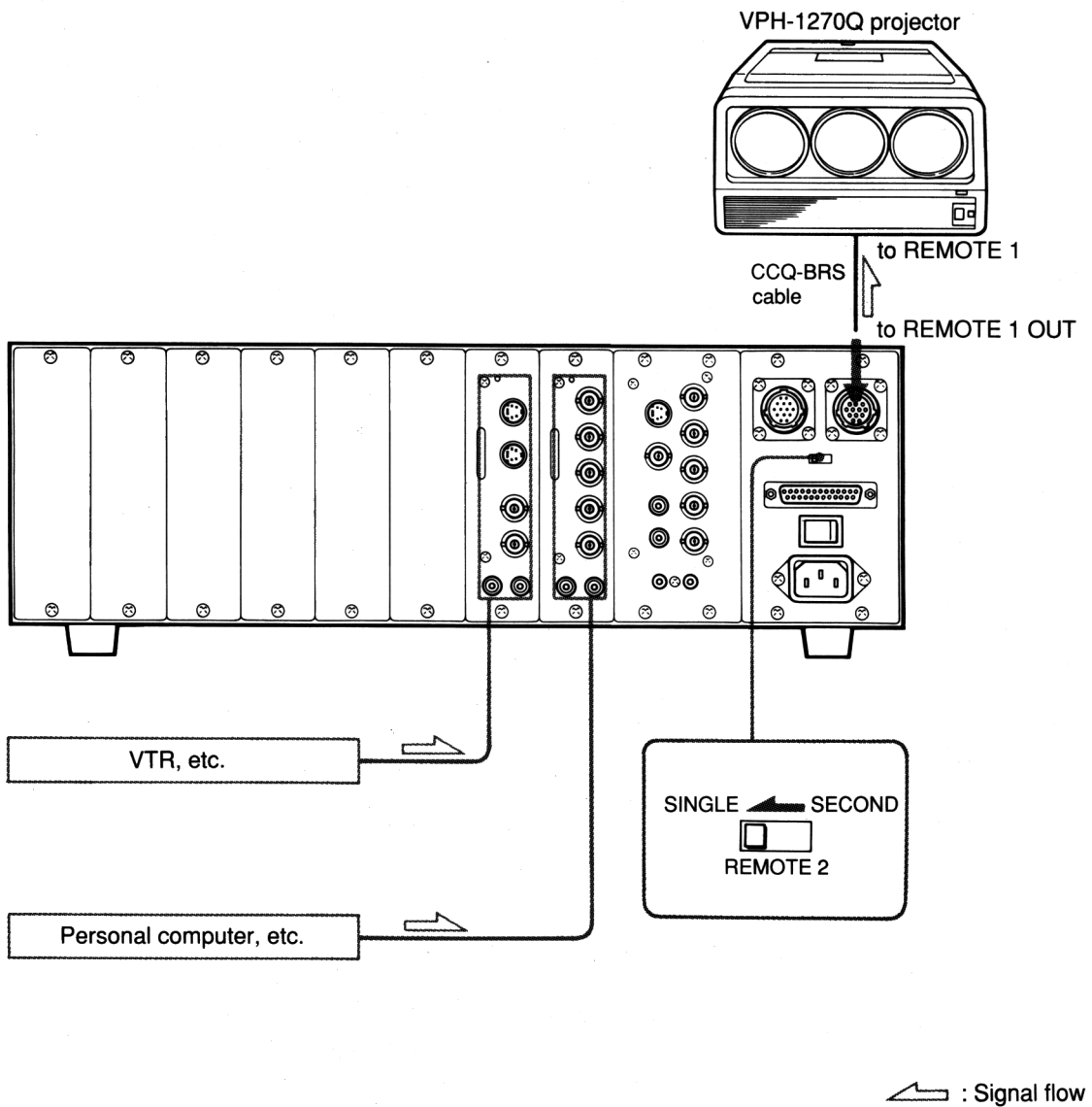

Notes

- In normal operation, batteries will last up to half a year. If the unit does not operate properly, the batteries might be exhausted. Replace all with new ones.
- To avoid damage from possible battery leakage, remove the batteries for extended unused periods.
- Be sure that there are no obstructions between the commander and the unit.
- Operable range is limited.
  The shorter the distance between the commander and the unit, the wider the angle within which the commander can control the unit.

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Connections

Connection Example

VPH-1270Q projector

to REMOTE 1

CCQ-BRS cable

to REMOTE 1 OUT

VTR, etc.

Personal computer, etc.

SINGLE ◄── SECOND
REMOTE 2

◁──── : Signal flow

Notes on connection

- Turn off the power to all equipment before making any connection.
- Make firm connection. A loose connection may cause hum or noise.
- When disconnecting a cord, pull it out by grasping the plug. Never pull the cord itself.

- To prevent interference, turn off all connected equipment which is not currently in use.
- If there is noise in the picture or sound, try moving the equipment further apart.

Specifications

Frequency response
  RGB: 100 MHz ±3 dB (MONITOR OUT)
    40 MHz ±3 dB (REMOTE 1)
  Video: 15 MHz ±3 dB
  Audio: 25 kHz ±2 dB

MONITOR OUT connectors
  R: BNC type
    Red signal output, 0.7 Vp-p ±3 dB, 75 ohms impedance
  G: BNC type
    Green signal output, 0.7 Vp-p ±3 dB, 75 ohms impedance
    Sync on green signal output, 1 Vp-p ±3 dB, 75 ohms impedance
  B: BNC type
    Blue signal output, 0.7 Vp-p ±3 dB, 75 ohms impedance
  SYNC HD: BNC type
    Horizontal sync signal/composite sync signal output, 1 Vp-p ±3 dB, 75 ohms impedance
  VD: BNC type
    Vertical sync signal output, 1 Vp-p ±3 dB, 75 ohms impedance
  Y/C: 4-pin DIN
    Y - 1 Vp-p ±3 dB, 75 ohms impedance
    C(NTSC) - 0.286 Vp-p ±3 dB, 75 ohms impedance
    C(PAL) - 0.3 Vp-p ±3 dB, 75 ohms impedance
  VIDEO: BNC type
    Composite video signal output, 1 Vp-p ±3 dB, 75 ohms impedance
  AUDIO L/R: phono jack
    Audio signal output, 436 mVrms, less than 1 kohm impedance

CONTROL S connectors
  IN: minijack, 5 Vp-p ±2 V, less than 47 kohms impedance
  OUT: minijack, 5 Vp-p ±1 V, less than 100 ohms impedance

HGB input signal interface board
  R: BNC type
    Red signal input, 0.7 Vp-p ±3 dB, 75 ohms terminated
  G/G SYNC: BNC type
    Green signal input, 0.7 Vp-p ±3 dB, 75 ohms terminated
    Sync on green signal input, 1 Vp-p ±3 dB, 75 ohms terminated
  B: BNC type
    Blue signal input, 0.7 Vp-p ±3 dB, 75 ohms terminated
  SYNC/HD: BNC type
    Horizontal sync signal and composite sync signal input, 0.6 to 8 Vp-p, (fH=15 kHz to 75 kHz), high impedacne
  VD: BNC type
    Vertical sync signal input, 0.6 to 8 Vp-p, (fV=38 Hz to 150 Hz), high impedance
  AUDIO IN: phono jack
    Audio signal input, 436 mVrms

Video input signal interface board
  Y/C IN: 4-pin DIN
    Y - 1 Vp-p ±3 dB, 75 ohms terminated
    C(NTSC) - 0.286 Vp-p ±3 dB, 75 ohms terminated
    C(PAL) - 0.3 Vp-p ±3 dB, 75 ohms terminated
  VIDEO IN: BNC type
    Composite video signal input, 1 Vp-p ±3 dB, 75 ohms terminated
  AUDIO IN: phono jack
    Audio signal input, 436 mVrms

Power requirements 120 V AC, 50/60 Hz
Power consumption 50 W
Dimensions 424 x 133 x 290 mm (w/h/d)
  (16³/₄ × 5¹/₄ × 11¹/₂ inches)
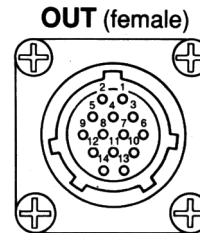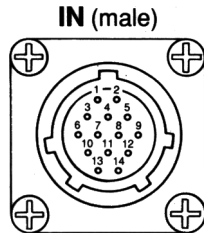Weight Approx. 7 kg (15 lb 7 oz)
Accessories supplied
  Remote commander RM-1270S (1)
  Size AA (IEC designation R6) batteries (2)
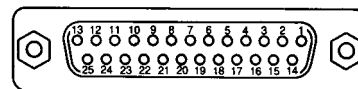 AC power cord (1)
  L-shaped holder (1 set)

Pin assignment
REMOTE 1 connectors (14-pin)

IN (male)   **OUT** (female)

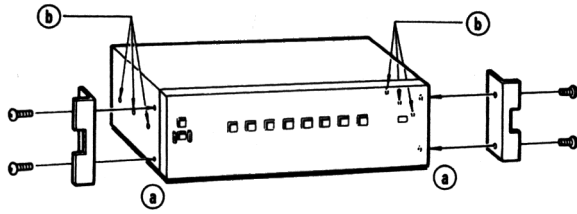| Pin No.	Signal	Signal level
1	GND	Ground
2	HD/C.SYNC	1 Vp-p±3 dB, 75 ohms
3	SIRCS	5 Vp-p±1 dB
4	N.C.	No connection
5	GND (SIRCS)	Ground
6	B/C	B: 0.7 Vp-p±3 dB, 75 ohms C (NTSC): 0.286 Vp-p±3 dB, 75 ohms C (PAL): 0.3 Vp-p±3 dB, 75 ohms
7	GND (B.R)	Ground
8	GND (G)	Ground
9	G/Y	G: 0.7 Vp-p (or 1 Vp-p for sync on green) ±3 dB, 75 ohms Y: 1 Vp-p±3 dB, 75 ohms
10	RGB/Video	5 V/0 V
11	R/C. video	R: 0.7 Vp-p±3 dB, 75 ohms Composite video: 1 Vp-p±3 dB, 75 ohms
12	C.video/YC	5 V/0 V
13	Audio	436 mVrms, output impedance 1 kohm
14	V.sync	1 Vp-p±3 dB, 75 ohms

REMOTE 2 connectors (D-sub, 25-pin, female)

Pin No.	Name	Pin No.	Name	Pin No.	Name	Pin No.	Name
1	B1	8	SEL 2	15	B4	22	SEL 5
2	B3	9	SEL 4	16	B6	23	SEL 7
3	B5	10	SEL 6	17	B8	24	SELECT
4	B7	11	SEL 8	18	P2	25	GND
5	P1	12	GND	19	POWER ON		
6	GND	13	GND	20	SEL 1		
7	POWER OFF	14	B2	21	SEL 3		

Design and specifications are subject to change without notice.

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To Mount in the EIA 19-inch Rack

Attach the supplied holders by using the mounting holes
ⓐ (× 4), with the supplied screws.
Attach also the sliding rails (optional) by the mounting
holes ⓑ (× 6).
Then, mount the unit in the rack.
For mounting details, refer to the instruction manual of the
19-inch rack.

Note

Be sure to use the supplied screws to attach the holders
and sliding rails to this unit.