SONY

TRINITRON® COLOR VIDEO MONITOR

PVM-1271Q/1371QM

OPERATING INSTRUCTIONS page 2

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

MODE D'EMPLOI page 13

Avant la mise en service de l'appareil, prière de lire attentivement ce mode d'emploi et de le conserver pour toute référence ultérieure.

BEDIENUNGSANLEITUNG Seite 22

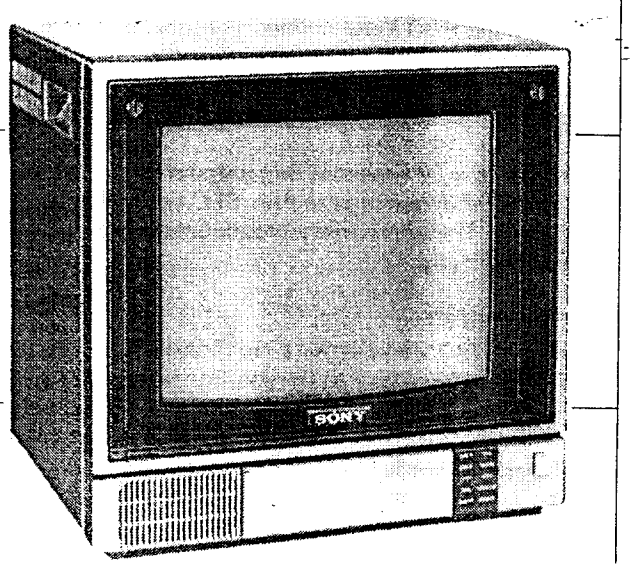
Vor Inbetriebnahme lesen Sie bitte diese Bedienungsanleitung aufmerksam durch, und bewahren Sie sie zum späteren Nachschlagen gut auf.

GEBRUIKSAANWIJZING blz. 31

Lees de gebruiksaanwijzing aandachtig door alvorens het apparaat in gebruik te nemen.
Bewaar de gebruiksaanwijzing voor eventuele naslag.

BRUKSANVISNING sidan 40

Läs igenom bruksanvisningen noggrant innan du använder apparaten och bevara den för framtida bruk.



OWNER'S RECORD

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

Model No._____ Serial No._____

WARNING

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

Dangerously high voltages are present inside the unit. Do not open the cabinet. Refer servicing to qualified personnel only.

FOR CUSTOMERS IN THE USA

INFORMATION

This equipment generates and uses radio frequency energy and if not installed and used properly, that is, in strict accordance with the manufacturer's instructions, may cause interference to radio and television reception. It has been type tested and found to comply with the limits for a Class B computing device in accordance with the specifications in Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

Reorient the receiving antenna
Relocate the equipment with respect to the receiver
Move the equipment away from the receiver
Plug the equipment into a different outlet so that equipment and receiver are on different branch circuits.

If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions. The user may find the following booklet prepared by the Federal Communications Commission helpful:
"How to Identify and Resolve Radio-TV Interference Problems". This booklet is available from the U.S. Government Printing Office, Washington, DC 20402, Stock No. 004-000-00345-4.

A shielded interface cable such as the cable recommended in this manual must be used with this equipment.

FOR CUSTOMERS IN THE UNITED KINGDOM

WARNING
THIS APPARATUS MUST BE EARTHED

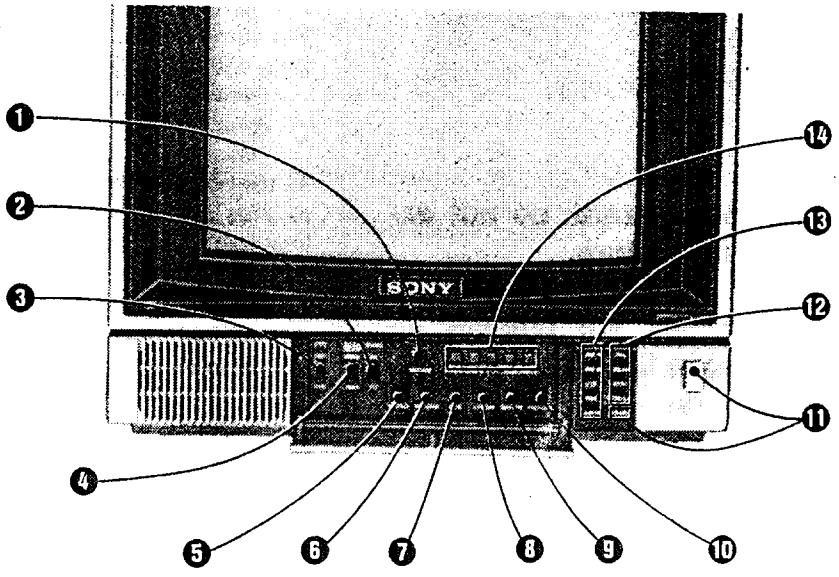
IMPORTANT
The wires in this mains lead are coloured in accordance with the following code:

Green-and-yellow : Earth
Blue : Neutral
Brown : Live

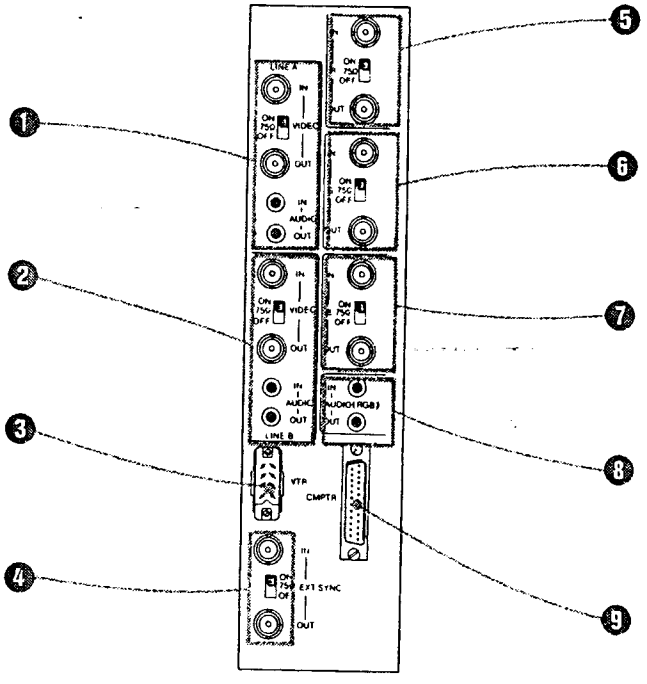
As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug proceed as follows:
The wire which is coloured green-and-yellow must be connected to the terminal in the plug which is marked by the letter E or by the safety earth symbol ⏚ or coloured green or green-and-yellow. The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black. The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.

LOCATION OF CONTROLS/EMPLACEMENT DES COMMANDES/ LAGE DER BEDIENUNGSELEMENTE/ PLAATS VAN DE BEDIENINGSORGANEN/KONTROLLERNAS PLACERING

Front panel/Panneau avant/Vorderseite/Voorpaneel/Frampanel



Rear panel/Panneau arrière/Rückseite/Achterpaneel/Bakpanel



English

This manual covers the following two models:
PVM-1271Q: U.S.A. model
PVM-1371QM: European model
The function and the appearance are the same. Any differences will be clearly described in this manual.

TABLE OF CONTENTS

FEATURES

High-resolution picture
The Super Fine Pitch Trinitron picture tube (0.25 mm aperture grill) gives high resolution (composite: 550 lines, RGB: 600 lines) picture. When used as a character display, up to 2000 characters (80 characters/line × 25 lines) can be displayed with great clarity.

Analog/digital RGB input
Analog RGB and digital (TTL level) RGB input signals can be fed to the RGB input connectors (BNC type and 25-pin multi connectors), which allows a microcomputer or a data information system such as teletext, to be connected to this monitor.

Receives 4 TV broadcasting standards
This monitor can receive PAL, SECAM, NTSC and $NTSC_{4.43}$ * signals. The appropriate broadcasting standard is selected automatically.

Colorpure Filter
When NTSC video signals are received, a colorpure filter activates to increase the resolution about 35%, resulting in fine picture detail without color spill or color noise.

Underscan mode
The signal normally scanned outside of the screen can be monitored in the underscan mode.

Automatic frequency control
The incoming sync timing error compensation speed can be set to fast or slow, according to the input signal. In the slow mode, the jitter from a video tape recorder can be easily monitored.

Superimposition of a picture from a microcomputer on a picture from video equipment
When a Sony SMC-70 or SMC-70G microcomputer, an SMI-7073 superimposer and video equipment such as a video disc player are used together with this monitor, a picture from the microcomputer can be superimposed on a picture from the video equipment.

* An $NTSC_{4.43}$ system signal is obtained by playing back NTSC-recorded video tapes with a video tape recorder/player specially designed for use with this system.

By using an optional MB-502 mounting bracket, the PVM-1271Q/1371QM can be mounted in an EIA standard 19-inch rack. An optional SLR-102 slide rail is also available.
For mounting details, see the appropriate instruction manual.

PRECAUTIONS

On safety
- Check that the operating voltage of your unit is identical with the voltage of your local power supply.
- 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.
- Unplug the unit from the wall outlet if it is not to be used for several days.
- To disconnect the ac power cord, pull it out by the plug. Never pull the cord itself.

On installation
- Allow adequate air circulation to prevent internal heat build-up.

Do not place the unit on surfaces (rugs, blankets, etc.) or near materials (curtains, draperies) that may block the ventilation holes.
- 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, mechanical vibration or shock.

On cleaning
To keep the unit 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. As a safety precaution, unplug the unit before cleaning it.

On repacking
Do not throw away the carton and packing materials. They make an ideal container in which to transport the unit. When shipping the unit to another location, repack it as illustrated on the carton.

FUNCTION OF CONTROLS

Each number in the text is keyed to that of the photo and the illustration on page 3.

FRONT PANEL

❶ SECAM button
Press this button when a picture from SECAM color sources is distorted. The picture will become clear.

❷ SYNC select switch
Sync may be supplied from an external sync generator to the EXT SYNC IN connector on the rear PANEL. When an external sync is supplied, with either a composite or non-composite video input, set the SYNC select switch to EXT. When composite video is supplied with no external sync, set the SYNC select switch to INT.

❸ AFC (automatic frequency control) switch
Select the AFC operation in the fast mode or slow mode.
FAST: incoming sync timing errors are compensated for. Normally, set this switch to this position.
SLOW: incoming sync timing errors are displayed on the screen.
This mode is used to monitor the jitter from a VTR.

❹ SCAN MODE select switch
Normal scanning or under scanning is achieved by proper setting of the SCAN MODE select switch. Set to NORMAL for normal scanning, or to UNDER for viewing a picture which does not appear in normal scanning. Under scanning reduces the display size by about 9%.

❺ V HOLD (vertical hold) control
If the picture rolls vertically, correct it with this control.

❻ VOLUME control
Turn this control clockwise or counterclockwise to obtain the desired volume.

❼ HUE control
This control is effective only for playing tapes of the NTSC or $NTSC_{4.43}$ system. Use to obtain the most natural skin tones. Clockwise rotation makes the skin tones more greenish; counterclockwise rotation makes them more purplish.

❽ COLOR control
Adjusts the color intensity of the picture. Clockwise rotation makes the picture more vivid; counterclockwise rotation makes it paler.

❾ BRIGHT (brightness) control
Adjusts the brightness. Normally set this control at the center detent position.

❿ PICTURE control
Adjusts the contrast, color intensity and brightness simultaneously in the proper ratio.

⓫ POWER switch and indicator
To turn the monitor on, depress the POWER switch. The indicator will light. To turn the monitor off, press the switch again.

⓬ Color system indicators
Indicate the color system of the input video signal.

⓭ Input indicators
Illuminate to indicate the input select button pressed.

⓮ Input select buttons
Press to select the program to be monitored.
LINE A: for a signal from the LINE A connectors.
LINE B: for a signal from the LINE B connectors.
VTR: for a signal from the 8-pin VTR connector.
RGB: for a signal from the R, G and B connectors.
CMPTR: for a signal from the 25-pin CMPTR connector.

REAR PANEL

❶ LINE A ❷ LINE B
Two groups (A and B) of line input connectors for the composite video and audio signals and their loop-through output connectors.
To monitor the input signals to these connectors, press the LINE A or LINE B input select button on the front panel.

VIDEO IN connector (BNC type)
Connect to the video output of a video equipment, such as a VTR or a color video camera. For a loop-through connection, connect to the video output of another monitor.

VIDEO OUT connector (BNC type)
Loop-through output of the VIDEO IN connector. Connect to the video input of a VTR or another monitor.

AUDIO IN jack (mini)
Connect to the audio output of a VTR or to a microphone via a suitable microphone amplifier. For a loop-through connection, connect to the audio output of another monitor.

AUDIO OUT jack (mini)
Loop-through output of the AUDIO IN jack. Connect to the video input of a VTR or another monitor.

75-ohm termination switch
When only the VIDEO IN connector is used (nothing is connected to the VIDEO OUT connector), set this switch to ON.
When both the VIDEO IN and VIDEO OUT connectors are used together for loop-through connection, set this switch to OFF.

❸ VTR connector (8-pin)
Line input for the video and audio signals. When connected with the 8-pin TV connector of a VTR, the video and audio playback signal from the VTR can be connected with a single cable.
To monitor the input signal to this connector, press the VTR input select button on the front panel.
● For connection, use an optional video cable VMC-3P (3 m, 9 feet), -5P (5 m, 15 feet) or -10P (10 m, 33 feet).

❹ EXT SYNC (external sync) IN connector (BNC type)
When this monitor operates on an external sync signal, connect the reference signal from a sync generator here.

OUT connector (BNC type)
Loop-through output of the EXT SYNC IN connector. Connect to the external sync input of video equipment to be synchronized with this monitor.

75-ohm termination switch
When only the EXT SYNC IN connector is used (nothing is connected to the EXT SYNC OUT connector), set this switch to ON.
When both the EXT SYNC IN and EXT SYNC OUT connectors are used together for a loop-through connection, set this switch to OFF.

❺ R ❻ G ❼ B ❽ AUDIO (RGB)
Analog RGB and audio input connectors and their loop-through output connectors.
To monitor the input signal to these connectors, press the RGB input select button on the front panel.

R/G/B IN conectors (BNC type)
Connect a character generator, microcomputer or video camera having RGB outputs here.

R/G/B OUT connectors (BNC type)
Loop through output of the R/G/B IN connectors. Connect to the RGB inputs of another monitor here.

75-ohm termination switch
When only the R/G/B IN connector is used (nothing is connected to the R/G/B OUT connector), set this switch to ON.
When both the R/G/B IN and R/G/B OUT connectors are used together for a loop-through connection, set this switch to OFF.

AUDIO (RGB) IN jack (mini)
Connect the audio output of the equipment connected to the R/G/B IN connectors here.

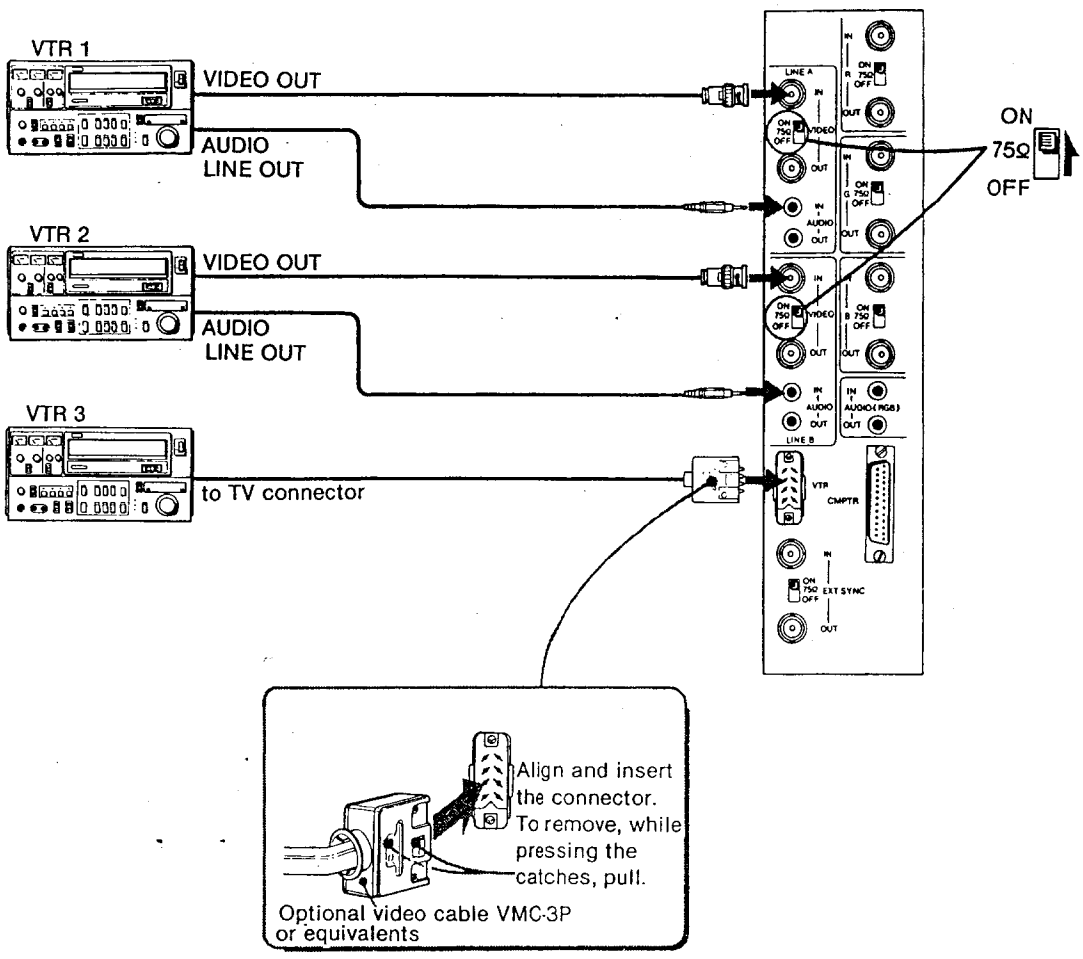
AUDIO (RGB) OUT jack (mini)
Loop-through output of the AUDIO (RGB) IN jack.

❾ CMPTR (computer) connector (25-pin)
Connect with a microcomputer having a digital (TTL level) or analog RGB video output.
To monitor the input signal to this connector, press the CMPTR input select button on the front panel.

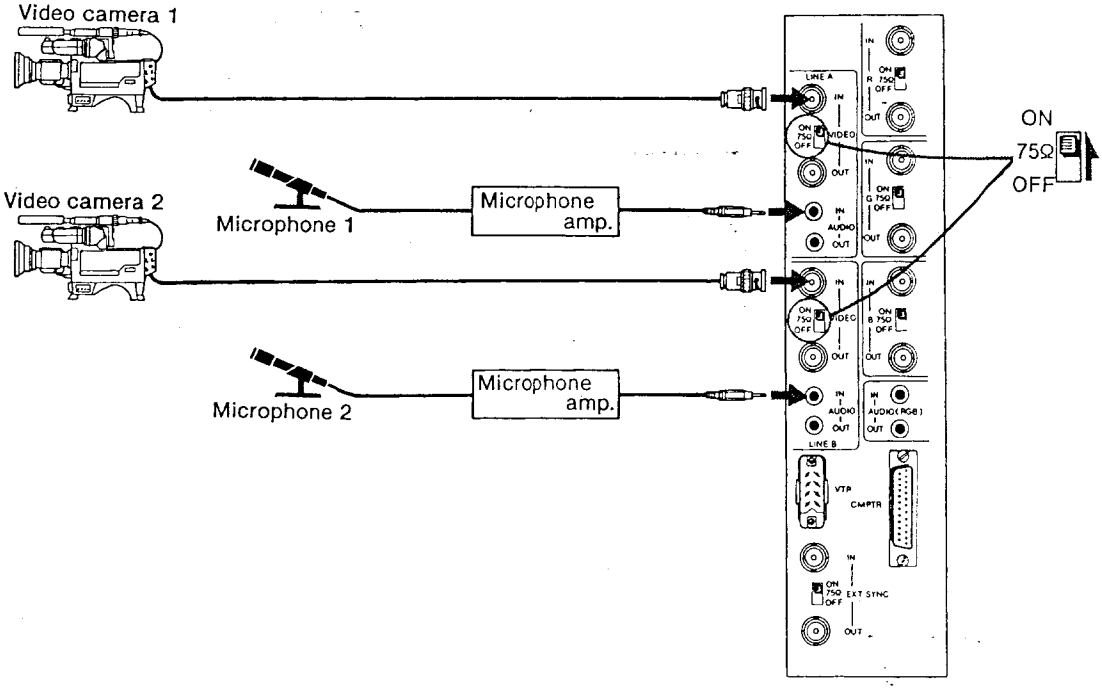
Color temperature selection
The color temperature of the PVM-1271Q has been preset at the factory to 9,300°K, and can be changed to 6,500°K.
The color temperature of the PVM-1371QM has been preset to 6,500°K, and can be changed to 9,300°K.
If the switching of the color temperature is required, consult your authorized Sony dealer.

SYSTEM CONNECTIONS

CONNECTING A VTR

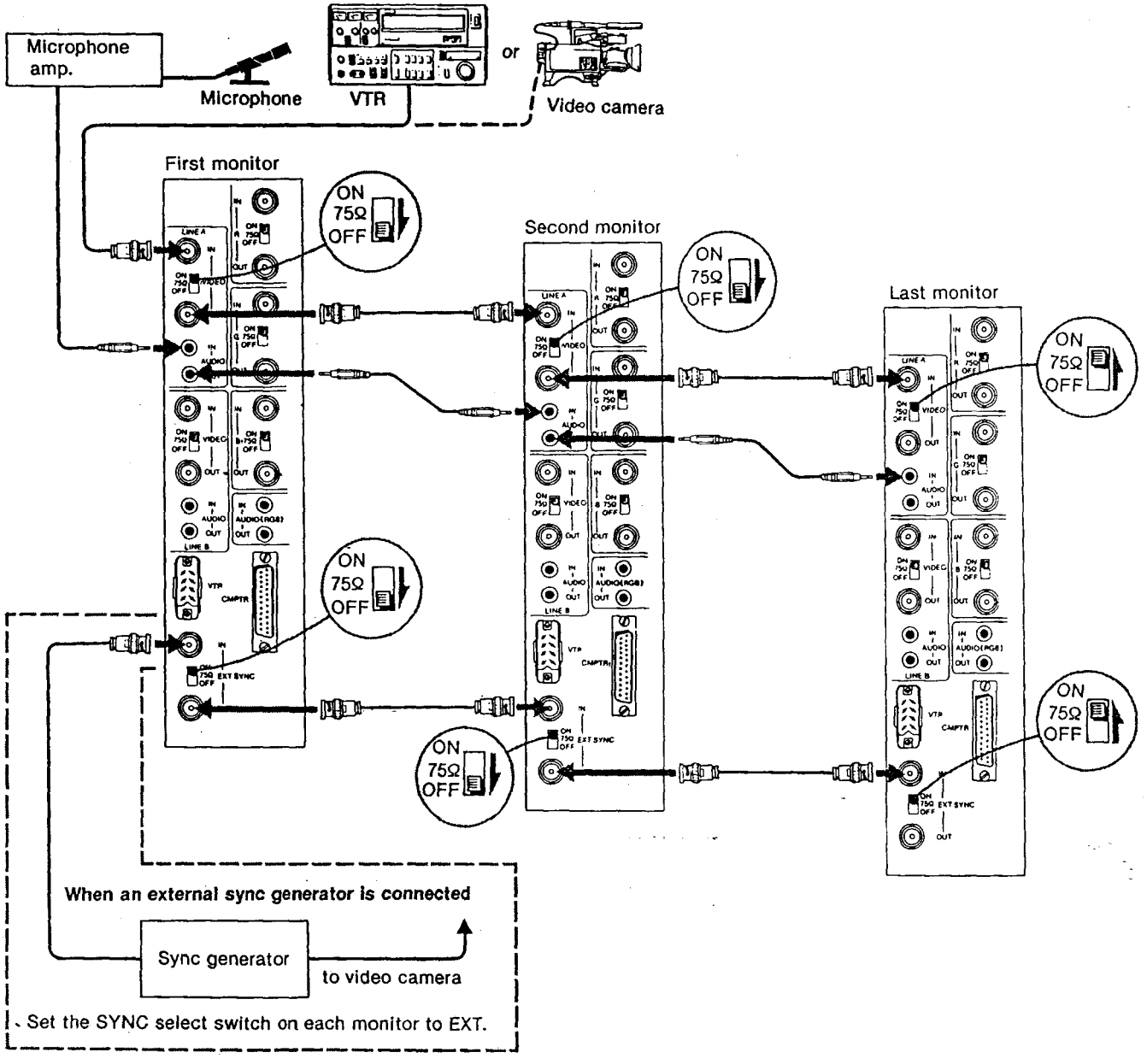


CONNECTING A CAMERA AND A MICROPHONE

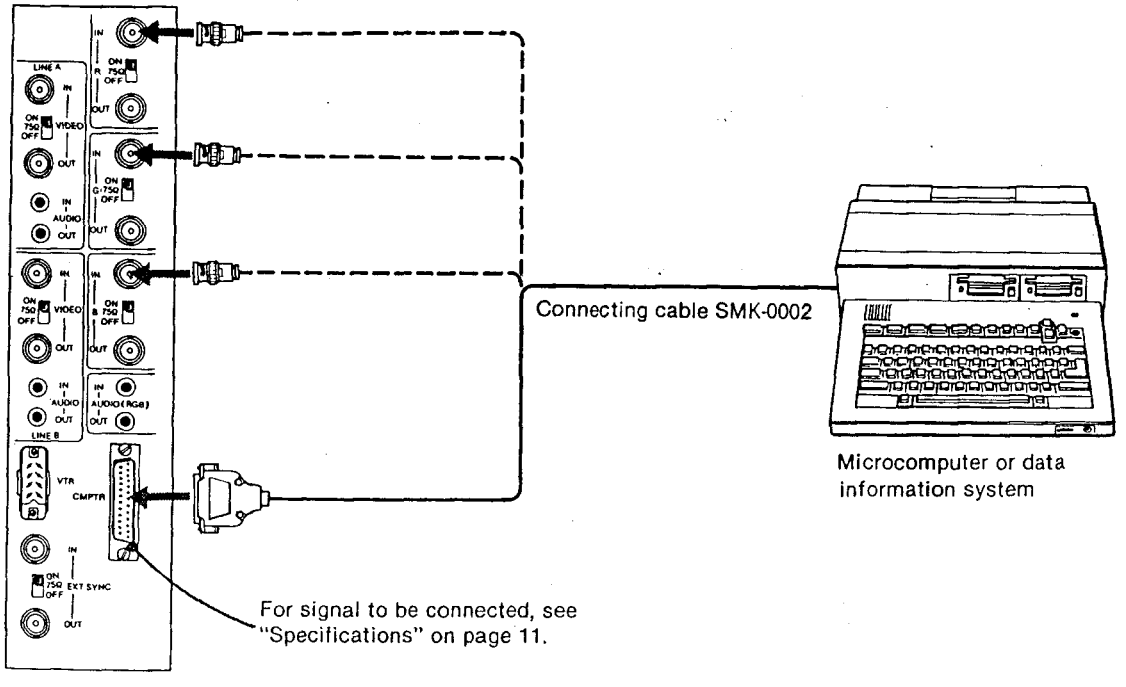


CONNECTING SEVERAL MONITORS

A loop-through connection is convenient for monitoring the same signal on other monitors. Use the video/audio input and output connectors of LINE A or LINE B to connect the monitors. Up to 10 monitors can be connected.
Set the 75-ohm termination switch of the last monitor to ON and that of the other monitors to OFF.



CONNECTING A MICROCOMPUTER OR A TERMINAL FOR DATA INFORMATION SYSTEM



When a microcomputer has only a composite video output connector, connect it to the LINE A or LINE B VIDEO IN connector.

Pin No.	Signal	Signal level
10	RGB/NORMAL mode select	High state (5 V or open): RGB inputs from a microcomputer Low state (ground): Composite video inputs from the LINE A VIDEO IN connector
11	V-sync	Negative polarity TTL level
12	Blanking	High state (5 V or open): Video inputs from a microcomputer only Low state (ground): Composite video input from the LINE A VIDEO IN connector During the low state, the video signal from the microcomputer is blanked and the composite video signal from the LINE A VIDEO IN connector is superimposed over the signal from the microcomputer.
13	Audio input	Input level −5 dB (100% modulation), input impedance more than 47 k ohms
14	EXT/INT mode sync switch	High state (open): Sync signal input from the CMPTR connector Low state: Sync signal input from the LINE A VIDEO IN connector
15-24	Ground	
25*	IBM luminance signal	Positive polarity When the high state is selected at pin 1: TTL level When the low state is selected at pin 1: Low state (ground)

*Examples for microcomputer connections

Pin No. / Microcomputer	1	9	25
SMC-70/SMC-70C	—	High state	—
IBM computer	High state	Low state	IBM luminance signal
TTL 3BIT computer	Low state	Low state	Low state

While the information given is true at the time of printing, small production changes in the course of our company's policy of improvement through research and design might not necessarily be indicated in the specifications. We would ask you to check with your appointed Sony dealer if clarification on any point is required.