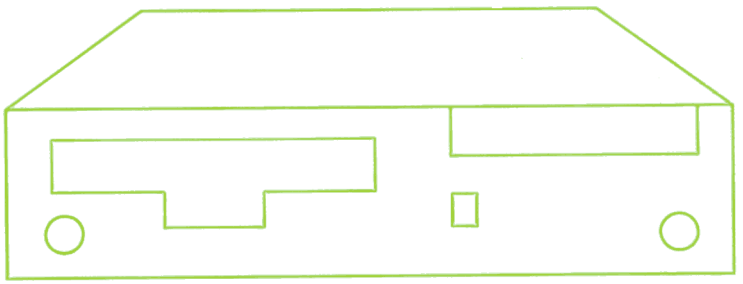
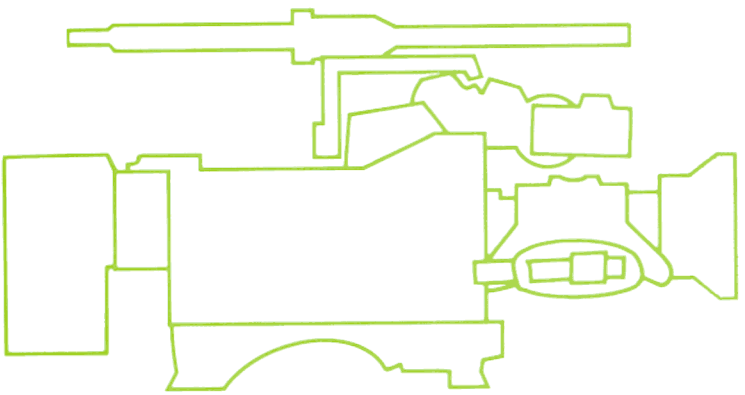
SONY



Sony Video Communications



PVM-1910/PVM-1911 19" Trinitron® Color Video Monitors

PVM-1910/PVM-1911
Universal Video Monitor

A powerful pair of color video monitors with the versatility of universal compatibility. Equipped for plug-in connections to Sony microcomputers. Video monitors that can also let you add the excitement of Trinitron® color to your microcomputer. Both monitors have built-in interface circuits for the IBM-PC and accept Analog/Digital RGB signals. And multiple connections are fast and easy thanks to their built-in RGB Loop-Through Outputs.

The PVM-1911 is the same high-quality monitor as the PVM-1910, and has the added versatility of a built-in Touch Screen with Controller. Over 760 screen addresses, accessible at the touch of a fingertip, make this a perfect Interactive Video System monitor.

The PVM-1911 is a natural companion for the SMC-70 Microcomputer, SMI-7073 Superimposer and LDP-1000A Laser Video Disc Player. As a part of Intelligent Video Systems, both monitors accept microcomputer generated character or graphic data superimposed on the video signal from the Laser Video Disc Player for use in virtually unlimited interactive applications. And the added dimension of touch screen selection available on the PVM-1911 reduces set-up times and keyboarding sequences to a quickly performed series of fingertip selections.

These video monitors come designed specifically for use as a studio monitor, video control room monitor, VTR playback monitor, classroom monitor or training room monitor.

The PVM-1910 and PVM-1911. Superbly accurate video signal reproduction from a superb set of monitors.

FEATURES

Full Array of Inputs and Outputs

INPUT	OUTPUT
Line A	Loop Through
Tuner	
Line B	Loop Through
VTR (8 Pin)	
RGB (BNC)	Loop Through
RGB (25 Pin)	
Ex. Sync.	Loop Through

Built-in Touch Screen and Controller (PVM-1911 only)

RGB Capability

Accepts Analog/Digital RGB Signal
Built-in interface for IBM-PC
Multiple connections using RGB Loop Through Output

RGB/NTSC Superimpose

When using SMI-7073 (RGB Superimposer), SMC-70 (Microcomputer) and LDP-1000A (Laser Video Disc Player) the character data or graphic data is superimposed over the video signal from the video disc player.

Display Center

The left hand margin of all personal computers is pre-set, but can vary from unit to unit. This control allows the left-hand margin to be adjusted thus accommodating a larger range of personal computers.

Color TV Tuner (Optional)

Permits connection of an optional color TV tuner with a single connecting cable.

Color Temperature Selector (9300°K/6500°K)

Calibrated at the factory and easily selected with switch located on the unit, 9300°K delivers a more pleasing picture (good for computer-generated displays). 6500°K will render all aspects of the color video signal as accurately as possible.

Comb Filter Select Switch (COMB/TRAP)

The comb filter captures fine video detail while preventing color spill and color noise.

AFC (Automatic Frequency Control) Switch

Incoming sync timing errors are compensated for in the FAST mode and incoming sync timing errors are displayed on the screen in the SLOW mode.

Built-In Speaker

The built-in speaker allows convenient audio monitoring.

Totally New Cosmetic Design

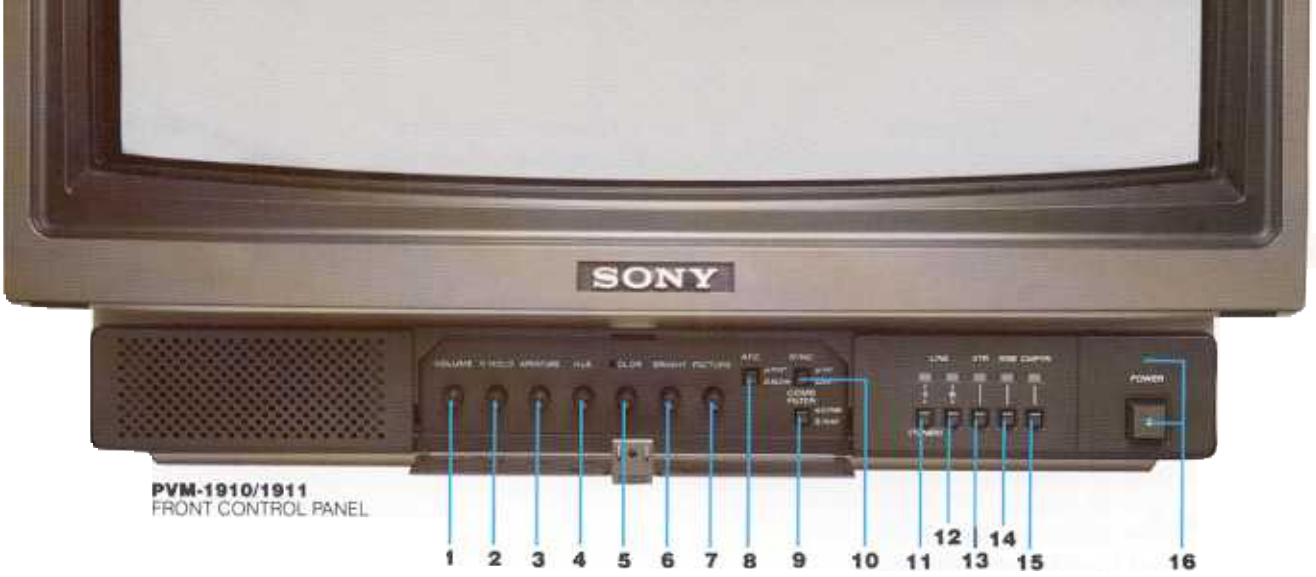
New design to fit a wider range of applications.

Removable Screen Frame/Screen Shield

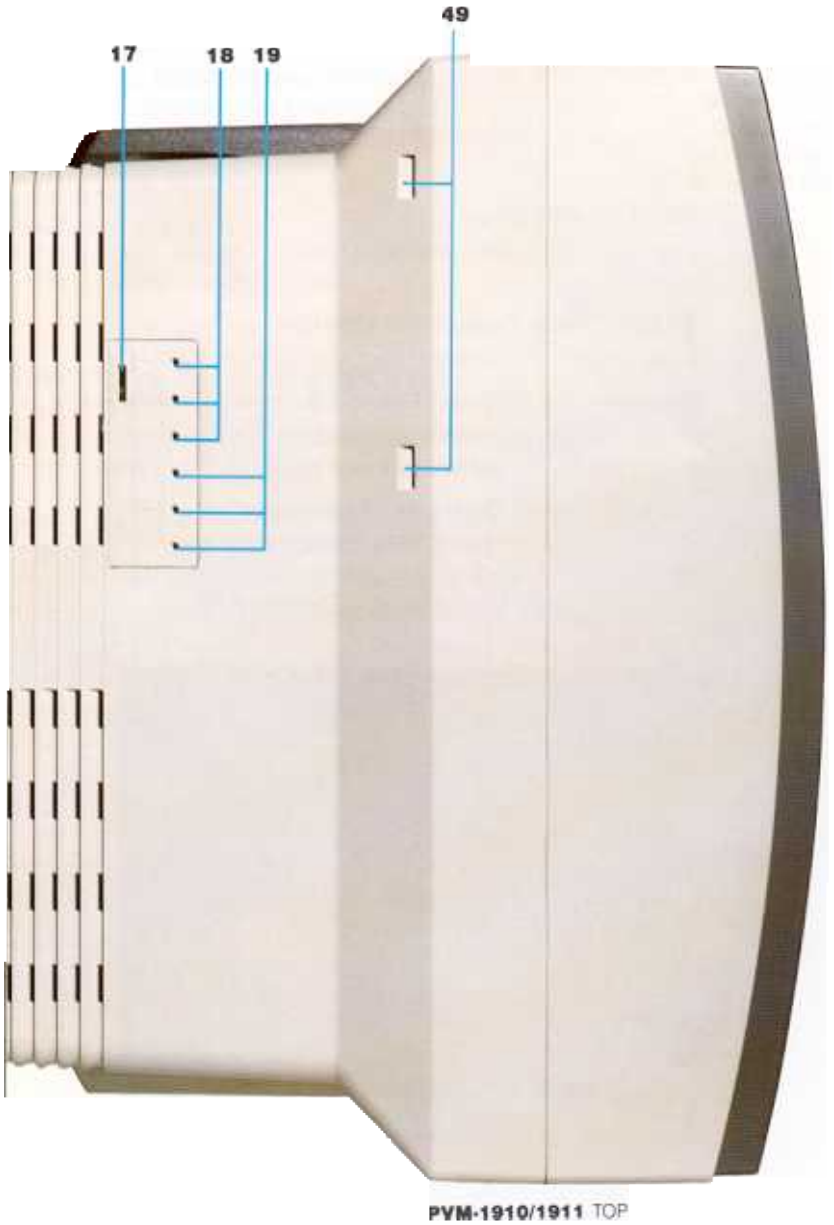
The frame and screen may be easily removed with a coin for easy access and cleaning.

Full Range of Optional Accessories

SU-530 Monitor Stand, VF-500 Monitor Hood, TU-1110 Tuner, SMF-500 RGB Cable for IBM PC, SMF-501 Cable for Videotex Unit VDX-1000.



PVM-1910/1911
FRONT CONTROL PANEL

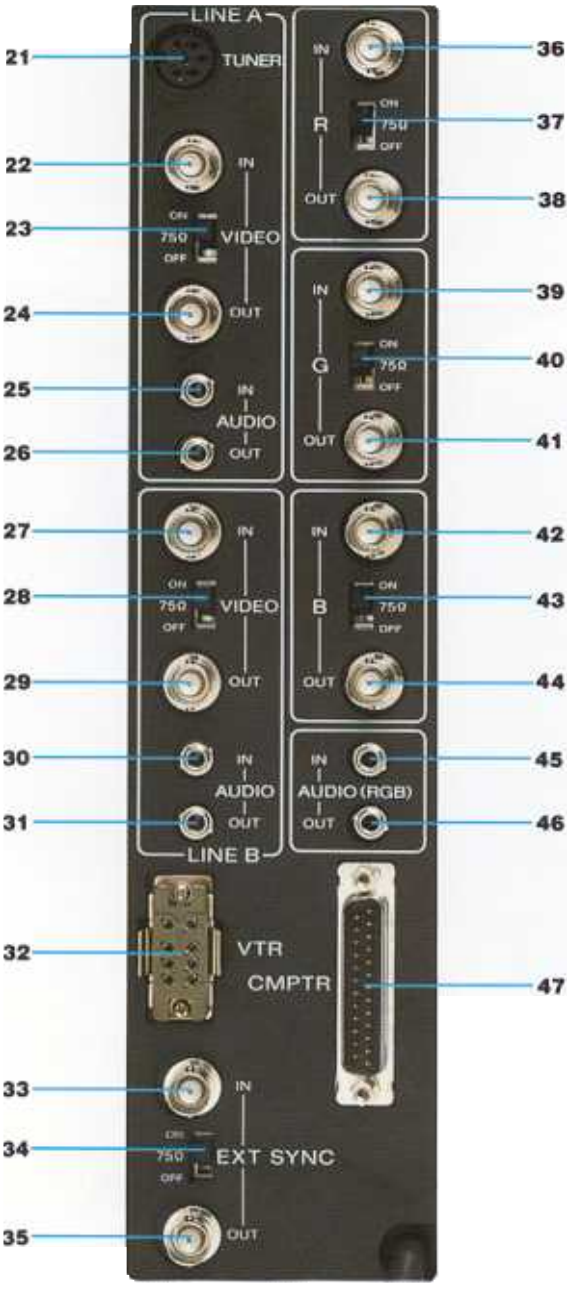


PVM-1910/1911 TOP

PVM-1910 BACK

20

PVM-1911 BACK



PVM-1910/1911
REAR CONTROL PANEL

1. VOLUME CONTROL
2. VERTICAL HOLD CONTROL
3. APERTURE CONTROL
4. HUE CONTROL
5. COLOR CONTROL
6. BRIGHTNESS CONTROL
7. PICTURE CONTROL
8. AFC SWITCH
9. COMB FILTER SWITCH
10. SYNC SELECT SWITCH
11. LINE A INPUT SELECTOR AND INDICATOR
12. LINE B INPUT SELECTOR AND INDICATOR
13. VTR INPUT SELECTOR AND INDICATOR
14. RGB INPUT SELECTOR AND INDICATOR
15. CMPTR INPUT SELECTOR AND INDICATOR
16. POWER SWITCH AND INDICATOR
17. COLOR TEMP SELECTOR
18. 9300° BKG(R/G/B)
19. 6500° BKG(R/G/B)
20. DISPLAY CENTER ADJUST

LINE A
21. TUNER CONNECTOR
22. VIDEO IN CONNECTOR
23. 75Ω TERMINATION SWITCH
24. VIDEO OUT CONNECTOR
25. AUDIO IN JACK
26. AUDIO OUT JACK

LINE B
27. VIDEO IN CONNECTOR
28. 75Ω TERMINATION SWITCH
29. VIDEO OUT CONNECTOR
30. AUDIO IN JACK
31. AUDIO OUT JACK

VTR
32. VTR CONNECTOR (8-PIN)

EXT SYNC
33. EX. SYNC IN CONNECTOR
34. 75Ω TERMINATION SWITCH
35. EX. SYNC OUT CONNECTOR

R
36. IN CONNECTOR
37. 75Ω TERMINATION SWITCH
38. OUT CONNECTOR

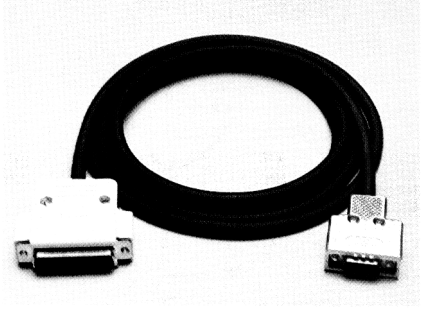
G
39. IN CONNECTOR
40. 75Ω TERMINATION SWITCH
41. OUT CONNECTOR

B
42. IN CONNECTOR
43. 75Ω TERMINATION SWITCH
44. OUT CONNECTOR

RGB (AUDIO)
45. AUDIO IN JACK
46. AUDIO OUT JACK

CMPTR
47. CMPTR CONNECTOR (25-PIN)
48. RS-232C CONNECTOR
49. HOLDER FOR TV TUNER

PVM-1910/PVM-1911 OPTIONAL ACCESSORIES



SMF-500 RGB CABLE FOR IBM-PC

SMF-501 CABLE FOR VIDEOTEX

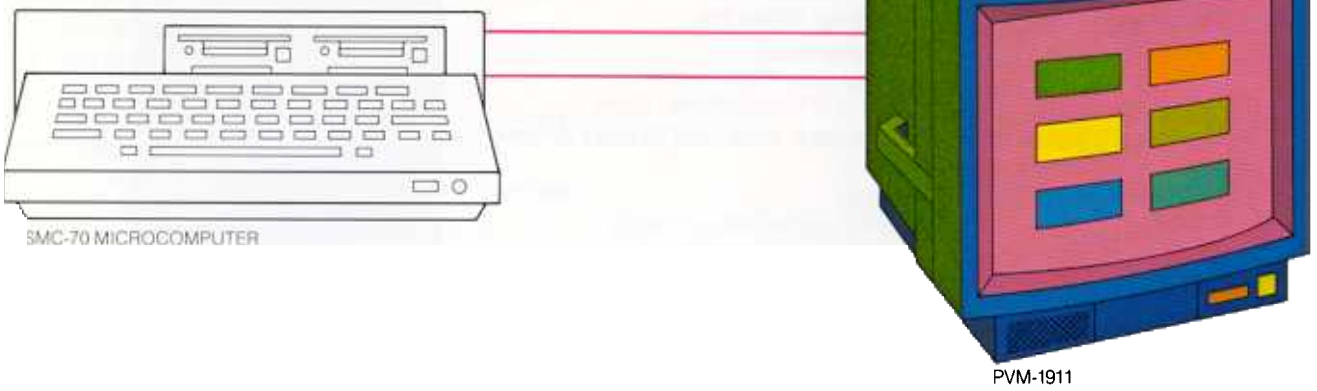
TOUCH SCREEN OPERATION

The touch screen is composed of a 32 (horizontal) X 24 (vertical) matrix of electronic switches. These switches are vertically scanned beginning from the upper left corner. The monitor's built-in controller recognizes when a switch is pressed, and can store up to eight pairs of coordinate data (X,Y) for the switch pressed. This information is stored in the internal buffer, irrespective of whether the host computer reads the data or not.

To obtain a screen address, the host computer reads the data stored in the controller through the RS-232C interface. Before reading each coordinate value a pair of 55H and FFH data are output, functioning as the command to read data. The first data transferred from the controller is the Y data and the second is the X. Coordinate data are represented in binary numbers.

TOUCH SCREEN SYSTEM BASIC WIRING DIAGRAMS

EXAMPLE-1: WITH MICROCOMPUTER

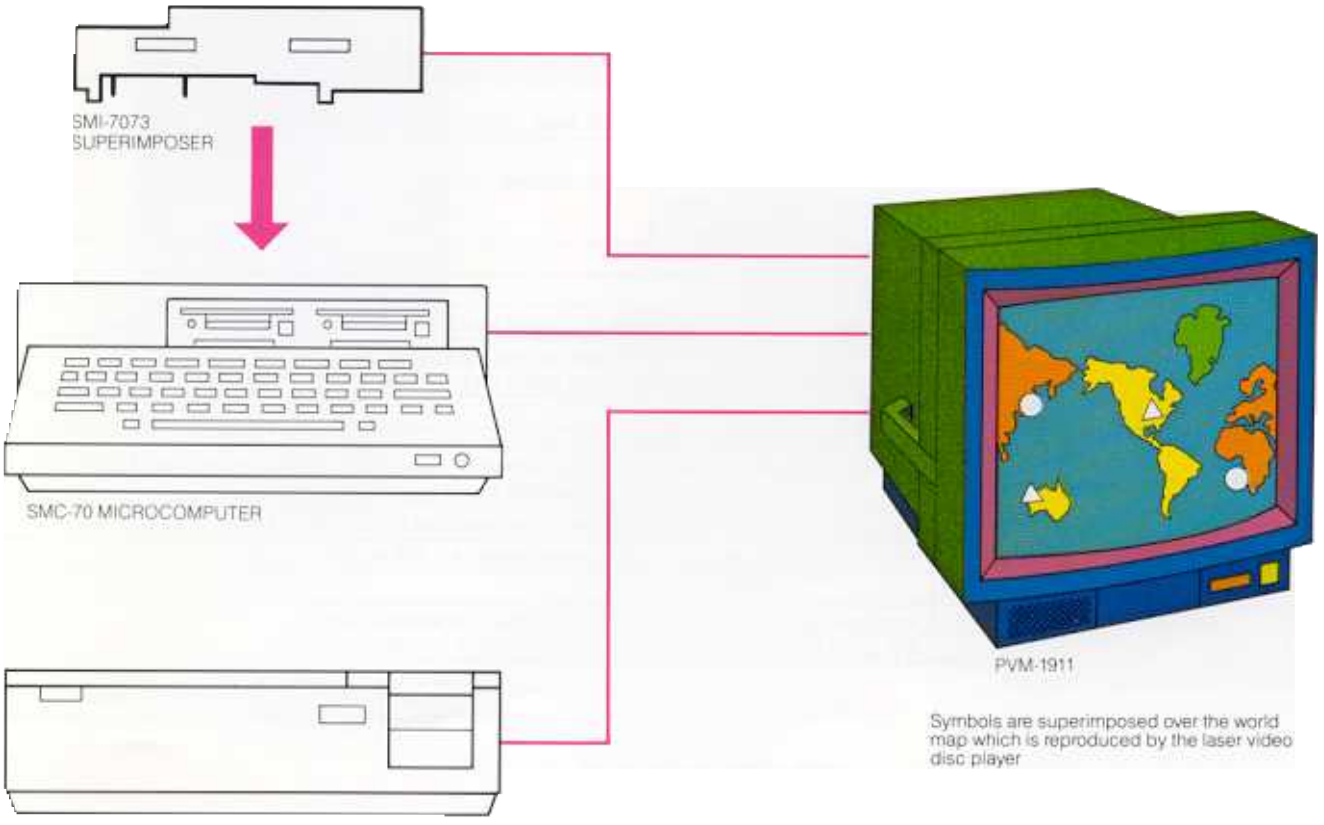


SMC-70 MICROCOMPUTER

PVM-1911

Which game do you play?

EXAMPLE-2: RGB/NTSC SUPERIMPOSE



SMI-7073
SUPERIMPOSER

SMC-70 MICROCOMPUTER

LDP-1000A VIDEODISC PLAYER

PVM-1911

Symbols are superimposed over the world map which is reproduced by the laser video disc player

SPECIFICATIONS FOR TOUCH SCREEN

Number of Switches: 768 [32 (horizontal) X 24 (vertical)]

Range of Programmable Coordinates:
Mode zero (0) 32 X 24
Mode one (1) 64 X 48

Pressure Requirement: 20g to 180g

Controller LSI: CX-564-080 (ROM 4 Kbyte)

Communication Protocol:
Baud Rate: 1200 Buad to 4800 Buad (selected automatically)
Character Length: 8 bits
Stop Bits: One or two bits
Parity Check: No parity

Dimensions of Screen: 10½" X 13⅞"(HW)

GENERAL SPECIFICATIONS

Color System: NTSC system

Picture Tube: Trinitron tube, 19 inch measured diagonally, 100 degree deflection

Resolution: 350 TV lines, 440 X 240 dots

Color Temperature: 6,500°K/9,300°K switchable

Frequency Response:
8 MHz (−3 dB, RGB)
6 MHz (−3 dB, composite video)

Horizontal Linearity: ±5%

Vertical Linearity: ±5%

Line Pull Range:
Horizontal ±500Hz
Vertical 8 Hz

Overscan of the Picture: 5%

Return Loss: 4MHz,35dB(LINE A,LINE B)

Zooming: Within 2%

Convergence:
Central Area 1 mm
Outside of Central Area 1.3 mm

Brightness: More than 50 foot-Lamberts

Inputs:
TUNER: 6-pin DIN connector
VIDEO IN: BNC connector
VTR: 8-pin connector (pins 2 and 6)
Composite 1 V p-p ±6 dB, sync negative, 75 Ohms and high impedance switchable
AUDIO IN: Minijack
VTR: 8-pin connector (pins 1 and 5)
−5 dB high impedance
EXT SYNC IN: BNC connector
Composite sync 2-8 V p-p, negative, 75 Ohms and high impedance switchable
RGB IN: BNC connectors
0.7V p-p, non-composite
AUDIO (RGB) IN: Minijack
−5 dB high impedance

Outputs: Loop through
VIDEO OUT: BNC connector
AUDIO OUT: Minijack
EXT SYNC OUT: BNC connector
RGB OUT: BNC connector
AUDIO (RGB) OUT: Minijack

Audio output: 1.5 W

Power Requirement: 120 V AC, 60 Hz

Power Consumption: 120 W (max.)

Dimensions: Approx. 18¼" X 19¼" X 21¼" (HWD)

Weight:
PVM-1910: Approx. 63 lb. 15 oz.
PVM-1911: Approx. 66 lb. 2 oz.

OPTIONAL ACCESSORIES:
SU-530 Monitor Stand
VF-500 Monitor Hood
TU-1110 Color TV Tuner
SMF-500 RGB Cable for IBM PC
SMF-501 Cable for Videotex Unit VDX-1000

CMPTR: 25-PIN D CONNECTOR

Pin No.	Signal	Signal Level
1	IBM Select	High state (5 V): IBM mode, Low state: 3 Bit TTL
2	Audio Select	High state (5 V or open): Audio inputs from the CMPTR connector Low state (less than 0.4 V): Audio inputs from the LINE A AUDIO IN jack
3	H. Sync or Composite Sync	Negative polarity (1) 1 V p-p, 75Ω terminated, (2) TTL level, (1) or (2) is selected by pin 9.
4	Blue Input	Positive polarity (1) Analog signal (0.7 V p-p, 75Ω terminated, non sync) (2) Digital signal (TTL level) (1) or (2) is selected by pin 9.
5	Green Input	
6	Red Input	
7	+12 V Power Supply	
8	+5 V Power Supply	
9	Analog/Digital Mode Select	High state (open): Analog Signal (0.7 V p-p), Low state (ground): Digital signal (TTL level)
10	RGB/NORMAL Mode Select	High state (5 V or open): RGB inputs from the 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 the microcomputer Low state (ground): Superimposed signal of composite video inputs from the LINE A VIDEO IN connector and the RGB inputs from the microcomputer
13	Audio Input	Input level −5 dB (100% modulation), input impedance more than 47 kΩ
14	EXT/INT Mode Sync Switch	High state (open): Microcomputer sync, Low state: LINE A sync
15−24	Ground	
25	IBM Luminance Signal	Positive polarity, TTL level when the high state is selected at the pin 1. Set to the low state (ground) when the low state is selected at the pin 1

Design and specifications subject to change without notice

SONY®

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