MITSUBISHI

13″V COLOR DISPLAY MONITOR

AUM-1371A

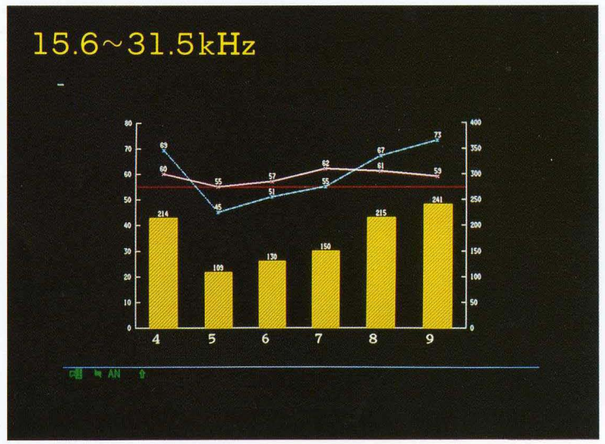
THE FINEST MONITOR PERFORMANCE FOR ALL APPLICATIONS

Home Video Entertainment

The outstanding sharpness and the true color rendition of the AUM-1371A make it an ideal choice for home video entertainment systems. Whether your source is TV, Satellite Tuner, VCR, Video Disc Player or Video Camera, the AUM-1371A offers the very finest all-around performance.

Communications

With the increasing popularity of video-text type communication systems and home automation, the AUM-1371A takes on another important role. It is directly compatible with such systems, and eliminates the need for several monitors.

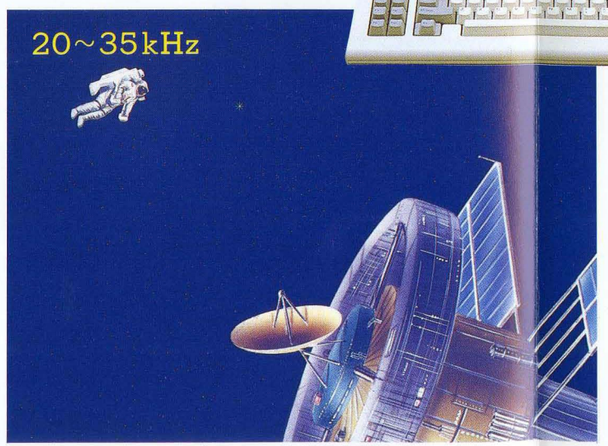


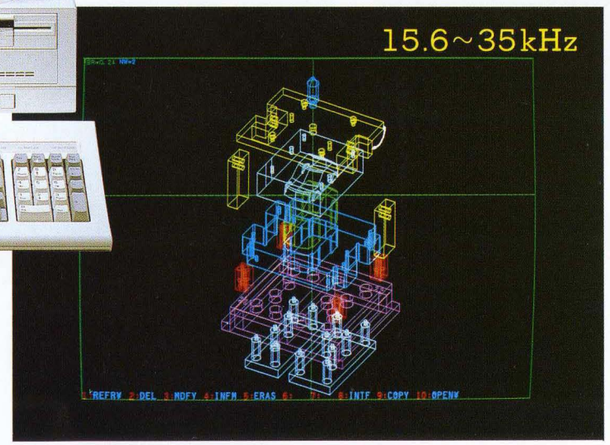
Personal Computer Display

The many personal and business computers available often have differing video output formats and scanning frequencies. The AUM-1371A will handle just about any personal computer video signal, while providing a crisp, high-quality display. Typically, the AUM-1371A can be used as a color display monitor for IBM® PC with CGA/EGA/PGC, and also as a monochrome display monitor for IBM® PC.

High-resolution Graphics

High-quality graphics applications generally employ high horizontal scanning rates in the 20 kHz to 35 kHz range. The AUM-1371A is compatible with a broad range of graphic controllers, and offers the superb resolution and performance demanded by professional CAD applications.



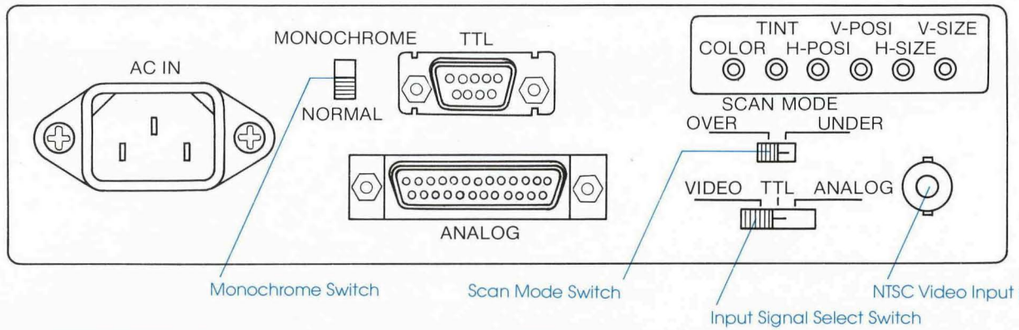


Industrial Applications

The AUM-1371A's ability to lock onto a broad range of scanning frequencies makes it ideal for use with NC machines, medical equipment and measuring instruments employing special scanning frequencies.

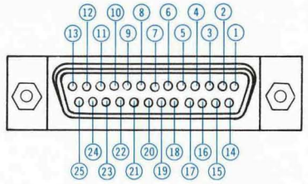
** IBM is a registered trade mark of International Business Machines Corporation.*

REAR PANEL DESCRIPTION



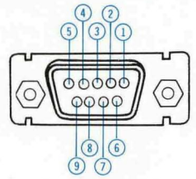
RGB INPUT TERMINALS

D-SUB 25 PIN ASSIGNMENTS AND SIGNAL LEVELS



1	Sync. GND	
2	Red video	0.6 Vp-p 75 ohms Positive
3	Red video GND	
4	Green video	0.6 Vp-p 75 ohms Positive
5	Green video GND	
6	Superimpose control	Low : 0 ~ 0.4 V Composite video High : 1 ~ 3 V RGB Analog 75 ohms High speed switching
7	Superimpose control GND	
8	Video input select	Low or open : BNC input video High : #9 video
9	Comp. video in	1.0 Vp-p 75 ohms Sync. negative
10	Comp. video in GND	
11	Comp. video out	1.0 Vp-p 75 ohms Sync. negative
12	Comp. video out GND	
13	PGA mode control	Low : 400 lines, High or open : 480 lines
14	Blue video	0.6 Vp-p 75 ohms Positive
15	Blue video GND	
16	Horizontal Sync.	TTL level Positive/Negative
17	Vertical Sync.	TTL level Positive/Negative
18	TTL color select	Low : 16 colors, High or open : depends on EGA card
19	NC	
20	NC	
21	INT	(5 V)
22	Comp./RGB select	Low : RGB, High : composite
23	Analog/TTL select	Low : TTL, High : Analog
24	Remote	Low : Mode Switch is invalid
25	GND (shield)	

D-SUB 9 PIN ASSIGNMENTS AND SIGNAL LEVELS



COLOR GRAPHICS TTL 16 COLORS

	Input signal	Polarity
1	GND	
2	Unused	
3	Red video	TTL positive
4	Green video	TTL positive
5	Blue video	TTL positive
6	Intensity	TTL positive
7	Unused	
8	H-sync	TTL positive
9	V-sync	TTL positive

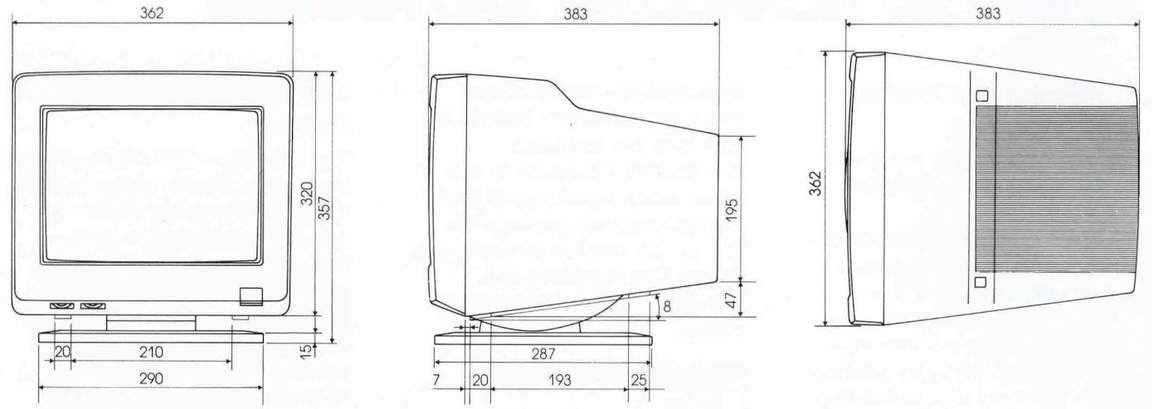
ENHANCED GRAPHICS TTL 16/64 COLORS

	Input signal	Polarity
1	GND	
2	Secondary Red video	TTL positive
3	Primary Red video	TTL positive
4	Primary Green video	TTL positive
5	Primary Blue video	TTL positive
6	Secondary green video/Intensity	TTL positive
7	Secondary blue video	TTL positive
8	H-sync	TTL positive
9	V-sync	TTL negative

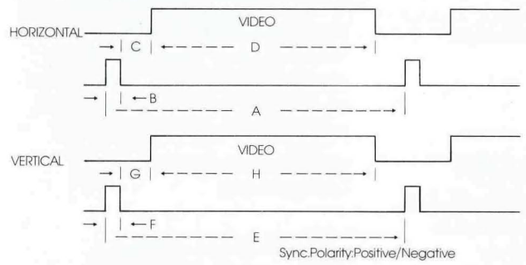
MONOCHROME

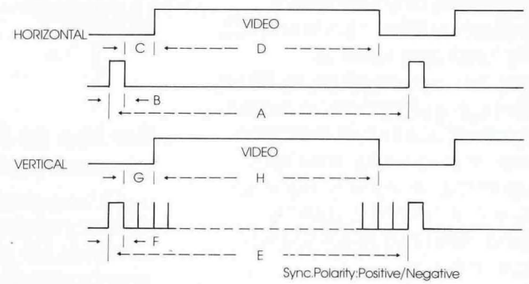
	Input signal	Polarity
1	GND	
2	Unused	
3	Unused	
4	Unused	
5	Unused	
6	High Intensity	
7	Video	TTL positive
8	H-sync	TTL positive
9	V-sync	TTL negative

DIMENSIONS(mm)



TIMING CHART





TIMING EXAMPLE

	fH	15.75 KHz	18.4 KHz	21.8 KHz	31.25 KHz
Horizontal	A μs	63.78	54.34	45.75	32
	B μs	4.45	8.29	4.92	5.12
	C μs	8.03	1.49	1.65	0.64
	D μs	44.69	44.21	39.36	25.6
Vertical	E ms	16.68	20.04	16.75	16.67
	F ms	0.19	0.86	0.59	0.51
	G ms	2.11	0.13	0.1	0.31
	H ms	12.75	19.02	16.01	15.45

TIMING EXAMPLE

	fH	30.5 KHz
Horizontal	A μs	32.7
	B μs	4.48
	C μs	2.36
	D μs	25.66
Vertical	E ms	16.65
	F ms	0.06
	G ms	0.81
	H ms	15.67

SPECIFICATIONS

FRONT CONTROLS Brightness, Contrast
Power ON/OFF switch
(Power ON Indicator)

CRT
- Size: 13"V
- Gun: In-line (multi-step focus)
- Deflection: 90°
- Dot pitch: 0.31 mm
- Phosphor: P22 medium-short
- Faceplate: Super-High Contrast glass (selective light absorption), non-glare Diamond Matte coating

INPUTS Composite video (Mode A)
RGB TTL (Mode B)
RGB Analog (Mode C)
Monochrome TTL (Mode D)

SCANNING FREQUENCY
- NTSC (Mode A): fH = 15.75 kHz, fV = 60 Hz
- Modes B, C, D: fH = 15.6 — 35.0 kHz, fV = 45 — 75 Hz

VIDEO BANDWIDTH 30 MHz (min.)

RESOLUTION (H x V)
- Mode A: 300 dots × 500 lines
- Modes B, C: 800 dots × 560 lines

DISPLAY SIZE
- NTSC (Mode A): Over-Scan
- Modes B, C: Adjustable (external control)

MISCONVERGENCE
- Center: 0.4 mm max.
- Corner: 0.6 mm max.

POWER SUPPLY
- Voltage: AC 120 V, 60 Hz
- Power Consumption: 90 W

WEIGHT 12 kg (26.5 lb)

All pictures simulated.

ADVANCED TECHNOLOGY AND FEATURES

Horizontal and Vertical Auto-scanning

Many of the newer monitors available boast switchable horizontal scanning frequencies to accommodate different sources. Some even automatically select the proper frequency. None, however, automatically lock onto any scanning frequency within a broad range like the AUM-1371A does.
An original Mitsubishi PLL (Phase-Locked Loop) auto-scanning circuit automatically locks onto any horizontal frequency from 15.6 kHz to 35 kHz, and any vertical frequency from 45 Hz to 75 Hz. This high-performance system also features a fast response time and permits easy sync adjustments. All you have to do is connect the source signal and the AUM-1371A does the rest.

Broad Input Compatibility

In addition to a standard composite video input (Mode A), the AUM-1371A offers RGB TTL (Mode B), RGB Analog (Mode C) and Monochrome TTL (Mode D) inputs with standard connector types. This gives you full plug-in compatibility with virtually any video source signal, providing immediate, trouble-free access to an exceptionally broad range of applications.

Superimpose Capability

NTSC video pictures can be overlayed with computer text and graphics via the RGB analog unit. (In this case, the superimpose control signal should be derived from a personal computer.)

Remote Mode Control of Selecting Input Signals

Normally, each input signal is selected by means of the Input Signal Select Switch. It can also be selected electrically, however. In this case, each input signal can be selected by putting Pins No. 22, 23, and 24 of the D-Sub 25-pin Connector to the condition shown in the table below.

D-Sub 25-Pin Assignment

Pin No.			Specification
22	23	24	
0	0	0	Dependent on ISSS
0	0/G	G	Composite/Superimpose
G	0	G	RGB Analog
G	G	G	RGB TTL

Note: ISSS = Input Signal Select Switch
0 = Open
G = Ground

For Use as IBM® Monochrome Monitor

Set Monochrome switch to the Monochrome side when the unit is to be used in the monochrome mode of IBM® PC.

The Super-High Contrast (SHC) Glass

The Mitsubishi SHC glass incorporates a specially developed panel glass which goes way beyond conventional neutral-density panels in improving image quality. It features selective light-transmission characteristics that effectively control the spectra emitted by the CRT phosphors. The result is exceptionally clean, true primary colors and natural overall color balance. A second advantage of the SHC glass that the panel absorbs ambient light both on entry and on reflection from the phosphor screen. This dramatically improves contrast and visibility even in brightly lit rooms.

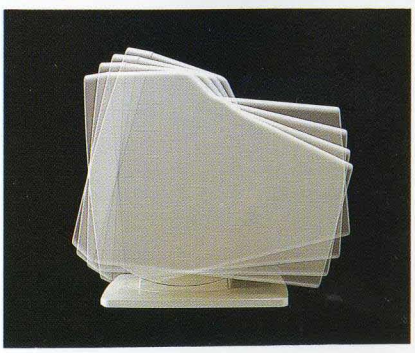
Diamond Matte (DM) Coating

The Mitsubishi DM coating has been specifically designed to improve resolution while providing maximum glare reduction. Particulate silica is chemically deposited on the CRT surface through a special process, forming a durable, permanently bonded coating of amorphous silica. The DM coating is strong enough to withstand scratches as well as most chemicals. The resultant surface is smooth so scattering is eliminated, and it helps to suppress static buildup.
Anyone who uses a video display terminal for extended periods will really appreciate the significant reduction in eye fatigue provided by the DM coating.

Scan Mode Switch

For the medium frequency range of 18 kHz to 25 kHz, a selection can be made by this switch between the Under-scan and the Over-scan phases. (Under-scan refers to a smaller-size display area.)

Compact Cabinet with newly designed Tilt and Swivel base



−5° to +15° Vertical
−45° to +45° Horizontal

MITSUBISHI ELECTRONICS AMERICA, INC.
HEAD OFFICE: 991 KNOX STREET TORRANCE, CALIFORNIA 90502 (213) 515-3993

PERIPHERALS DIVISION NETWORK

1050 East Arques Avenue
Sunnyvale, California 94086
(408) 730-5900

Two University Plaza
Suite 402
Hackensack, New Jersey 07601
(201) 488-1001

808 Biermann Court
Mt. Prospect, Illinois 60056
(312) 298-9223

6575 The Corners Parkway
Suite 100
Norcross, Georgia 30092
(404) 662-0758

200 Unicorn Park Drive
Woburn, Massachusetts 01801
(617) 938-1220

Highwood Office Center
15612 Highway 7
Suite 243
Minnetonka, Minnesota 55345
(612) 938-7779

2105 Luna Road
Suite 320
Carrollton, Texas 75006
(214) 241-5300

E-C9747-A KY-8703 Printed in Japan (ROD)

New publication, effective Mar. 1987.
Specifications subject to change without notice.