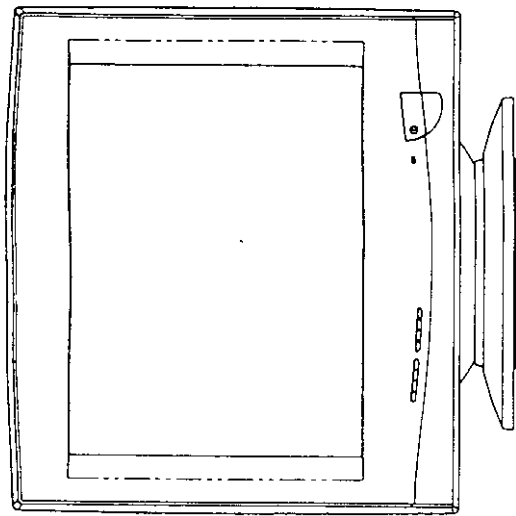


Appendix D

User Manual

High Resolution Color Monitor Operating Manual



READ THIS MANUAL BEFORE OPERATION

5011070800

Federal communications commission (FCC) Statement

This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful 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 or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Warning:

It is essential that only the supplied power cord be used and use shielded cables to connect I/O devices to this equipment.

You are cautioned that changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

IMPORTANT SAFETY INSTRUCTIONS

- I. SEE INSTALLATION INSTRUCTIONS BEFORE CONNECTING TO THE SUPPLY.
- II. THE APPLIANCE COUPLER IS CONSIDERED AS A DISCONNECT DEVICE. SHALL BE CONNECTED AS CLOSELY AS PRACTICABLE TO THE INCOMING SUPPLY.
- III. TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THE UNIT TO RAIN OR MOISTURE.
- IV. REFRAIN FROM OPENING THE CABINET AS THERE ARE HIGHVOLTAGE COMPONENTS INSIDE.REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.
- V. IF USED IN INDUSTRIAL ENVIRONMENTS, SPECIAL PRECAUTIONS MAY NEED TO BE TAKEN TO LIMIT TRANSIENT VOLTAGES.

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INTRODUCTION

Our monitors is high resolution color monitors for use with IBM PC/XT/AT and PS/2 computers or compatibles with analog RGB output.

The monitors support timings of graphics adapters including: VGA, super VGA, XGA, 1024 x 768 and 1280 x 1024.

FEATURES

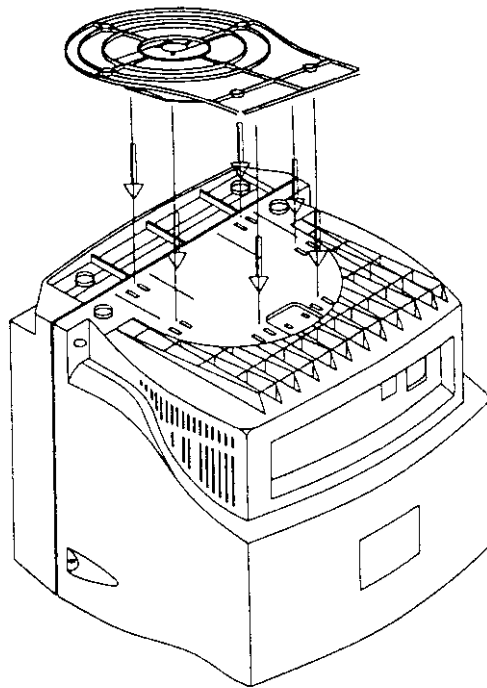
- . Automatically scan horizontal and vertical frequencies.
- . Analog input signal provides the capability of unlimited display colors.
- . Auto sizing and auto centering between modes of graphics standards.
- . Horizontal size/center, vertical size/center, pincushion, trapezoid and color temperature are adjustable to adapt to a variety of graphics cards.
- . Fine phosphor pitch and non-glare CRT provides greater image clarity.

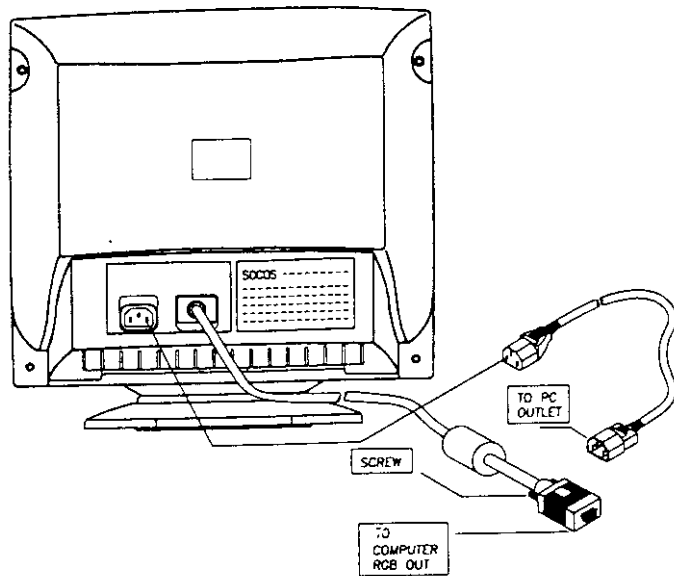
INSTALLATION INSTRUCTIONS

CAUTION:

Be sure to turn off the AC Power to the monitor before making connections

1. Assemble the tilt/swivel base as shown below.
2. Connect the power cord as shown on page 8.
3. Connect the end of the signal cable to the display connector of computer and tighten the screws as shown on page 8.



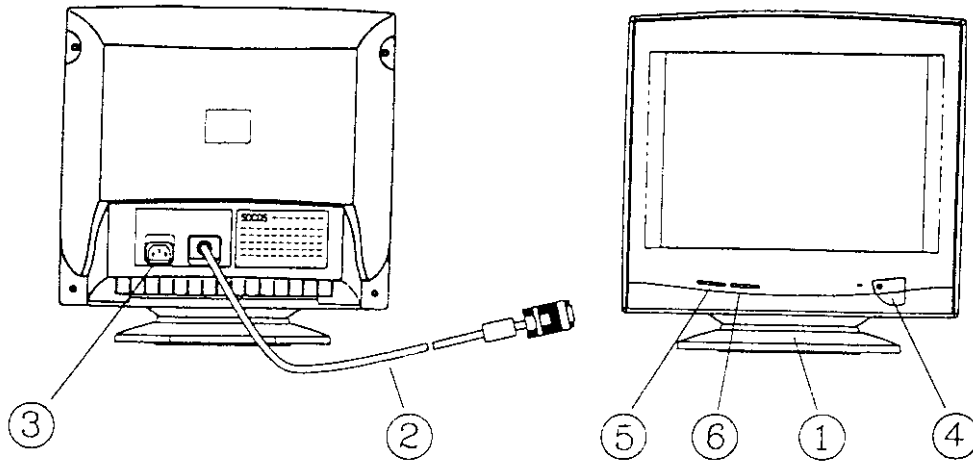


USING THE RIGHT POWER CORD FOR 230VAC

For units used at 120V: Use a UL Listed cord set consisting of a minimum NO.18 AWG, Type SVT or SJT, rated 6A minimum 125V, three-conductor cord a maximum of 15 ft in length and a parallel blade, grounding type attachment plug.

For units used at 230V (domestic use): Use a UL Listed cord set consisting of a minimum No. 18 AWG, Type SVT or SJT, rated 3A minimum 250V, three conductor cord a maximum of 15 ft in length and a tandem blade, grounding type attachment plug.

For units used at 230V (outside of U.S.): Use a cord set consisting of a minimum No. 18 AWG cord and grounding type attachment plug rated 3A minimum 250 V. The cord set should have the appropriate safety approvals for the country in which the equipment will be installed and marked HAR.



CONTROLS AND OPERATION

1. TILT/SWIVEL BASE

Turn the monitor for comfortable viewing angle within 180 degrees horizontally and 20 degrees vertically. (Please refer to instructions on bottom of rear cover for installation.)

2. SIGNAL INPUT CONNECTOR (15-pin mini D-SUB)

Connect to the display adapter output of a computer having analog video output. (Please see installation instructions.)

3. AC INPUT CONNECTOR (Appliance coupler)

Connect to AC outlet with supplied power cord.

4. POWER SWITCH AND INDICATOR

Press this switch to turn on the monitor and the indicator will light up. To turn off the monitor, press it again.

5. SELECT BUTTON

Push "Menu" button to display OSD manu then press "▽" key to select item to be adjusted.

6. ADJUST BUTTON

Push +/- button to obtain preferred picture performance or to execute a function.

OSD MANUAL

- VOLUME (AUDIO MODEL ONLY)
- BASIC
 - HORIZONTAL SIZE
 - HORIZONTAL POSITION
 - VERTICAL SIZE
 - VERTICAL POSITION
 - DEGAUSS
 - V-MOIRE
- GEMETRY
 - PINCUSHION
 - TRAPEZOID
 - PARALLEL
 - ROTATION
- COLOR
 - 9300K / 6500K
 - R.G.B
- STATUS
- RECALL
 - BASIC & GEMETRY
 - COLOR
- EXIT

NOTE:

1. To enter OSD : Push " MENU " bottom.
2. To exit OSD : 1. Push " MENU " + " ▽ " two keys simultaneously or
2. Select " exit " and push an adjusting button
3. At default state (screen without OSD), " +/- " buttons function as contrast or Brightness control.

Focus HY70E-590

SPECIFICATIONS

MODEL		DE-570 AA
CRT	SIZE	15 INCH DIAGONAL (13.8 VIEWABLE)
	DEFLECTION ANGLE	90 DEGREES
	PHOSPHOR PITCH	0.28mm
	SCREEN	DOT TYPE
GRAPHICS STANDARDS COMPATIBILITY		NON-INTERLACED 1280 X 1024, NON-INTERLACED 1024 X 768, XGA, SUPER VGA, VAG.
RESOLUTION(MAX)		1280X1024 NON-INTERLACED
VIDEO BANDWIDTH (DOT RATE)		100MHz
SYNCHRONIZATION	HORIZONTAL	30-70KHz
	VERTICAL	50-120Hz
INPUT SIGNAL	VIDEO	RGB ANALOG 0.7VP-P/75 OHMS POSITIVE
	SYNC	TTL SEPARATE/COMPOSITE (+/-)
DISPLAY COLORS		UNLIMITED
DISPLAY AREA (H x V)		266mm X 200mm(RECOMMENDED) THE DISPLAY AREA DEPENDS ON ACTUAL SIGNAL TIMINGS
POWER SOURCE		90-264 VAC
POWER CONSUMPTION		75W
INPUT CONNECTOR		15 PIN MINI D-SUB
DIMENSION		365mm (D) x 398mm (w) x 328mm(H)
WEIGHT		14KG (30.8LBS)
USER CONTROLS		POWER SWITCH, BRIGHTNESS, CONTRAST, H. SIZE, H. CENTER, V. SIZE, V. CENTER AND PINCUSHION, TRAPEZOID, PARALLEL, TILT, DEGAUSS, COLOR TEMP, RESET, OSD OFF
OPERATING TEMPERATURE		0 DEGREE C TO 40 DEGREES C
OPERATING HUMIDITY		10% TO 80%
PLUG & PLAY		DDC 1/2 B
POWER MANAGEMENT		VESA (NUTEK)

SPECIFICATIONS

MODEL		DE-570 BA/UA	
CRT	SIZE	15 INCH DIAGONAL (13.8 VIEWABLE)	
	DEFLECTION ANGLE	90 DEGREES	
	PHOSPHOR PITCH	0.28mm	
	SCREEN	DOT TYPE NON-GLARE	
GRAPHICS STANDARDS COMPATIBILITY		NON-INTERLACED 1280 X 1024, NON-INTERLACED 1024 X 768, XGA, SUPER VGA, VAG.	
RESOLUTION(MAX)		1280X1024 NON-INTERLACED	
VIDEO BANDWIDTH (DOT RATE)		100MHz	
SYNCHRONI-ZATION	HORIZONTAL	30-70KHz	
	VERTICAL	50-120Hz	
INPUT SIGNAL	VIDEO	RGB ANALOG 0.7VP-P/75 OHMS POSITIVE	
	SYNC	TTL SEPARATE/COMPOSITE (+/-)	
DISPLAY COLORS		UNLIMITED	
DISPLAY AREA (H x V)		266mm X 200mm(RECOMMENDED) THE DISPLAY AREA DEPENDS ON ACTUAL SIGNAL TIMINGS	
POWER SOURCE		90-264 VAC	
POWER CONSUMPTION		75W	
INPUT CONNECTOR		15 PIN MINI D-SUB	
DIMENSION		365mm (D) x 398mm (w) x 328mm(H)	
WEIGHT		14KG (30.8LBS)	
USER CONTROLS		POWER SWITCH, BRIGHTNESS, CONTRAST H. SIZE, H. CENTER, V. SIZE, V. CENTER AND PINCUSHION, TRAPEZOID, PARALLEL, TILT, DEGAUSS, COLOR TEMP, RESET, OSD OFF	
OPERATING TEMPERATURE		0 DEGREE C TO 40 DEGREES C	
OPERATING HUMIDITY		10% TO 80%	
NORDIC STANDARD		MPRII	
PLUG & PLAY		DDC 1/2 B	
POWER MANAGEMENT		VESA (NUTEK)	
USB		USB POWER HUB (DE-570 UA)	

SPECIFICATIONS

MODEL		DE-570 KA/KAT
CRT	SIZE	15 INCH DIAGONAL (13.8 VIEWABLE)
	DEFLECTION ANGLE	90 DEGREES
	PHOSPHOR PITCH	0.28mm
	SCREEN	DOT TYPE NON-GLARE
GRAPHICS STANDARDS COMPATIBILITY		NON-INTERLACED 1280 X 1024, NON-INTERLACED 1024 X 768, XGA, SUPER VGA, VAG.
RESOLUTION(MAX)		1280X1024 NON-INTERLACED
VIDEO BANDWIDTH (DOT RATE)		100MHz
SYNCHRONIZATION	HORIZONTAL	30~70KHz
	VERTICAL	50~120Hz
INPUT	VIDEO	RGB ANALOG 0.7VP-P/75 OHMS POSITIVE
SIGNAL	SYNC	TTL SEPARATE/COMPOSITE (+/-)
DISPLAY COLORS		UNLIMITED
DISPLAY AREA (H x V)		266mm X 200mm(RECOMMENDED) THE DISPLAY AREA DEPENDS ON ACTUAL SIGNAL TIMINGS
POWER SOURCE		90-264 VAC
POWER CONSUMPTION		75W
INPUT CONNECTOR		15 PIN MINI D-SUB
DIMENSION		365mm (D) x 398mm (w) x 328mm(H)
WEIGHT		14KG (30.8LBS)
USER CONTROLS		POWER SWITCH, BRIGHTNESS, CONTRAST, H. SIZE, H. CENTER, V. SIZE, V. CENTER AND PINCUSHION, TRAPEZOID, PARALLEL, TILT,DEGAUSS, COLOR TEMP, RESET, OSD OFF
OPERATING TEMPERATURE		0 DEGREE C TO 40 DEGREES C
OPERATING HUMIDITY		10% TO 80%
NORDIC STANDARD		TCO 92 / 95
PLUG & PLAY		DDC 1/2 B
POWER MANAGEMENT		VESA (NUTEK)

POWER MANAGEMENT

THIS MONITOR CAN SUPPORT VESA POWER MANAGEMENT SYSTEM, INDICATED BY THE LED ON THE FRONT PANEL:

STATE	LED COLOR	POWER CONSUMPTION
ON	GREEN	75W
STANDBY/ SUSPEND	AMBER	< 15W
ACTIVE OFF	AMBER	< 8W

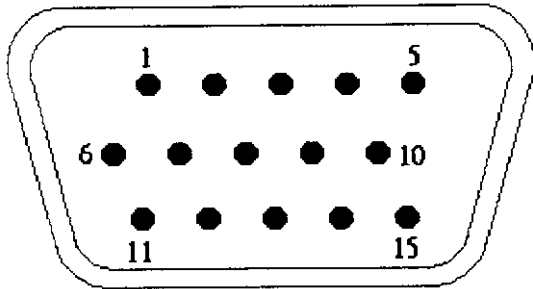
The monitor remains in the power-saving state until you press a key on the keyboard or move the mouse (if available).

DISPLAY DATA CHANNEL (DDC)

COMMUNICATION CHANNEL TYPE: VESA DDC1/2B.

ESTABLISHED TIMINGS: AS PRESET TIMING CHARTS.

INPUT PIN ASSIGNMENT



<u>PIN NO.</u>	<u>SIGNAL</u>
1.	RED VIDEO
2.	GREEN VIDEO
3.	BLUE VIDEO
4.	DIGITAL GROUND OR NO PIN
5.	SELF TEST
6.	RED VIDEO RETURN
7.	GREEN VIDEO RETURN
8.	BLUE VIDEO RETURN
9.	+5V OR NO PIN
10.	DIGITAL GROUND
11.	DIGITAL GROUND OR NO PIN
12.	SDA (DDC 1/2B DATA)
13.	HORIZONTAL SYNC
14.	VERTICAL SYNC
15.	SLC (DDC 2B CLOCK)

PRESET TIMING CHARTS

RESOLUTION	HOR.FREQ.	VERT. FREQ	SYNC.	
			POLARITY	
			HOR.	VERT.
640 X 400	31.47KHZ	70 HZ	—	†
640 X 480	31.47KHZ	60 HZ	—	—
640 X 480	37.5KHZ	75 HZ	—	—
800 X 600	48.09KHZ	72 HZ	†	†
800 X 600	46.875KHZ	75 HZ	†	†
800 X 600	53.674KHZ	85 HZ	†	†
1024 X 768	56.476KHZ	70 HZ	—	—
1024 X 768	60.023KHZ	75 HZ	†	†
1024 X 768	68.677KHZ	85 HZ	†	†
1280 X 1024	63.981KHZ	60 HZ	†	†