

Bescheinigung des Herstellers / Importeurs

Hiermit wird bescheinigt, daß β der / die / das

in Übereinstimmung mit den Bestimmungen der

(Amtsblattverfügung)

funk-entstört ist.

Der Deutschen Bundespost wurde das Inverkehrbringen dieses Gerätes angezeigt und die Berechtigung zur Überprüfung der Serie auf Einhaltung der Bestimmungen eingeräumt.

Die ergonomischen Anforderungen an Bildschirmgeräte im Bürobereich nach
Zh 1/618 Werden in Verbindung mit der

Videokarte:

Hersteller

Tvp

Genua Systems Corporation

6400A

erfüllt. Aus ergonomischen Gründen wird empfohlen, die Grundfarben Blau und Rot nicht auf dunklem Untergrund zu verwenden (schlechte Lesbarkeit und erhöhte Augenbelastung bei zu geringem Zeichenkontrast waren die Folge).

Weiterhin muß β sichergestellt werden, daß β die minimale Bildwiederhol-
frequenz
von

70 Hz bei Positivdarstellung

und 60 Hz bei Negativdarstellung

nicht unterschritten wird (storendes Bildschirmflimmern konnte die Folge sein).

FCC ID: H7917A-795

Wichtige Sicherheitshinweise

- Vor dem Anschluß des Gerätes an die Stromversorgung sollten die Installationshinweise sorgfältig durchgelesen werden.
- Der Netzstecker des Gerätes sollte möglichst an eine Steckdose in der Nähe des Gerätes angeschlossen werden, damit er bei Bedarf einfach abgezogen werden kann.
- Zur Vermeidung von Feuer und elektrischem Schlag sollte das Gerät niemals Regen oder Feuchtigkeit ausgesetzt werden.
- Niemals das Gehäuse entfernen, da im Innern des Gerätes gefährliche elektrische Spannungen vorhanden sind. Den Kundendienst mit der Wartung des Gerätes beauftragen.
- Der arbeitsplatzbezogene Schalldruckpegel nach DIN 45 635 Teil 1000 beträgt 70dB(A) oder weniger."
- Durch die Belüftungsoffnungen dürfen niemals Gegenstände oder Flüssigkeiten in das Gerät gelangen.
- Die Steckdose muß nahe dem Gerät und leicht zugänglich sein.
- Statement if power cord is not supplied with the equipment:
(Zum Netzanschluß dieses Gerätes ist eine geprüfte Leitung zu verwenden. Für einen Nennstrom bis 6A und einem Gerätegewicht größer 3kg ist eine Leitung nicht leichter als HO5VV-F 3G 0.75mm einzusetzen)

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 encourage 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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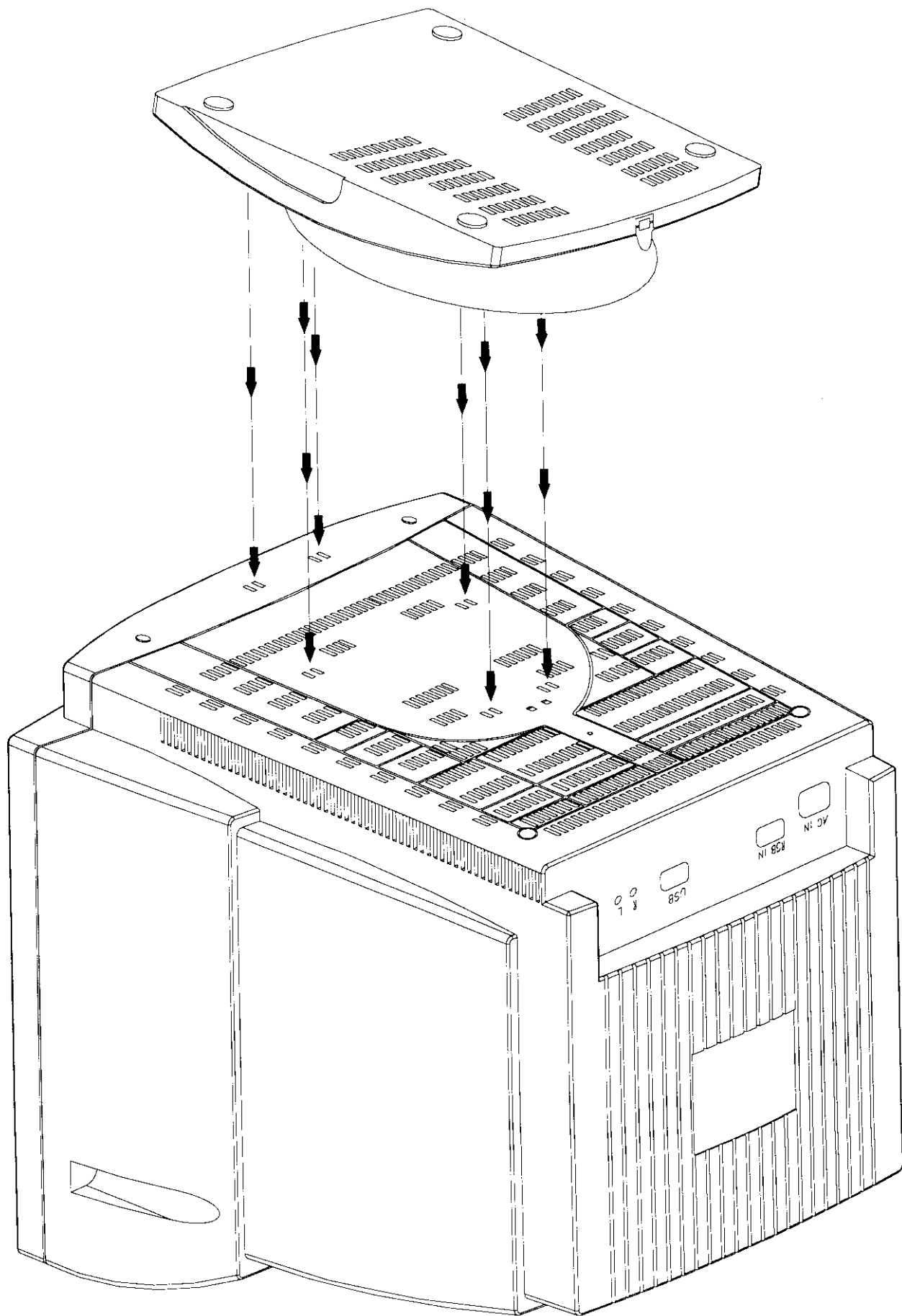
INTRODUCTION

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, 8514/A, XGA, 1024x768, 1280x1024 and 1600x1200.

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.

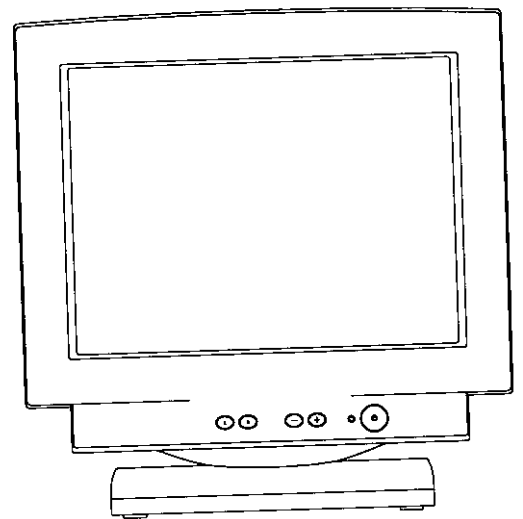
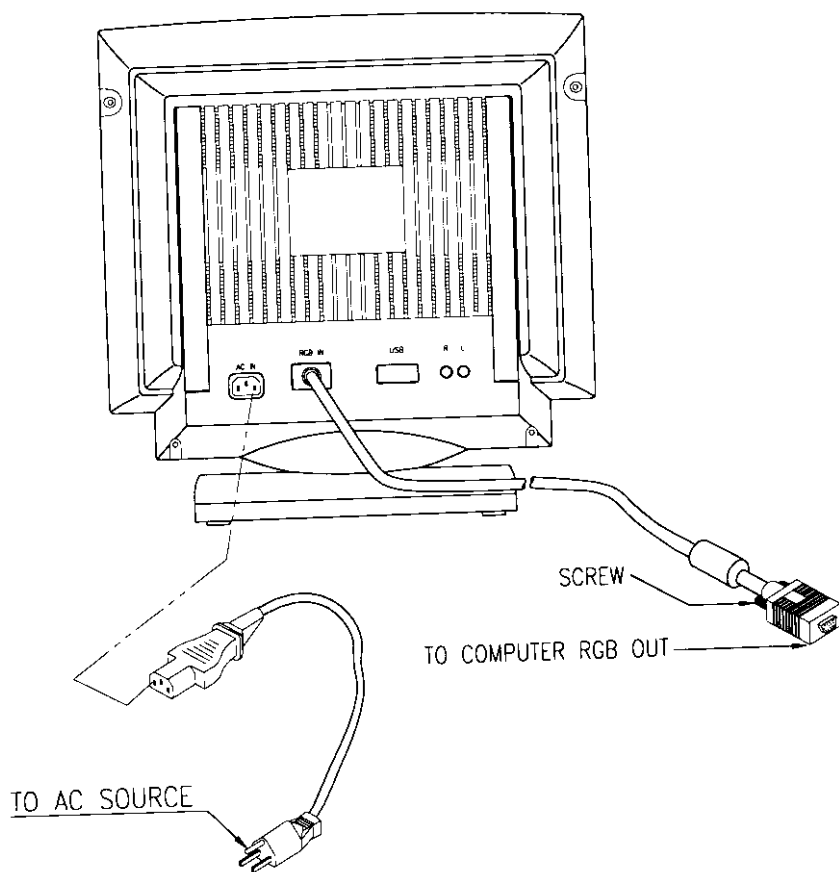


INSTALLATION INSTRUCTIONS

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.

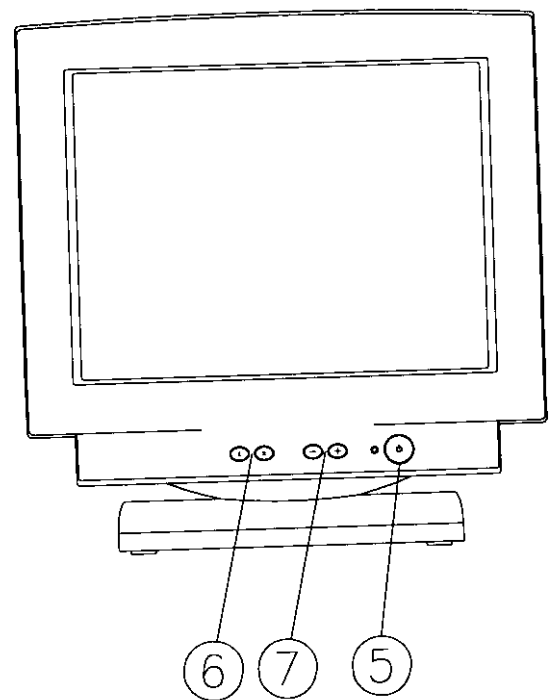
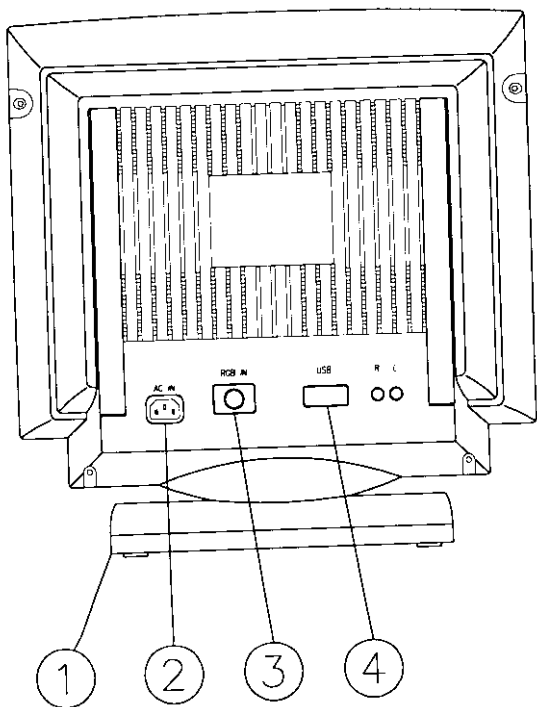


USING THE RIGHT POWER CORD FOR 230VAC

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 250V. 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. AC INPUT CONNECTOR (Appliance coupler)

Connect to AC outlet with supplied power cord.

3. 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.)

4. USB CONNECTOR (OPTION)

Connect to USB Function board with connector wire.

5. 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.

6. SELECT BUTTON

Push "1 OR 2" button to display OSD menu and select Main function then push ∇ / $\triangle$ (OR 1 OR 2) button to select Sub-function for adjusted.

7. ADJUST BUTTON

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

OSD MANUAL

--BASIC

- CONTRAST
- BRIGHTNESS
- H-SIZE
- H-POSITION
- V-SIZE
- V-POSITION
- RECALL
- ESC

--GEOMETRY

- PINCUSHION
- TRAPEZOID
- PIN-BALANCE
- PARALLEL
- ROTATION
- MOIRE
- DEGAUSS
- RECALL
- ESC

--COLOR

- 9300 / 6500 / 5500

--STATUS

--OSD FUNCTION

-  -POSITION
-  -POSITION
-  -3
- ESC

--LANGUAGE

(ENGLISH / FRENCH /GERMAN / SPANISH / ITALIAN)

--EXIT

NOTE:

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

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	
STANDBY/ SUSPEND	AMBER	<15W
OFF	AMBER	<8W

This 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 DDC 1/2B.

ESTABLISHED TIMINGS: AS PRESET TIMING CHARTS.

SPECIFICATIONS

MODEL		DA-795 BA
CRT	SIZE	17 INCH DIAGONAL (16" VIEWABLE)
	DEFLECTION ANGLE	90 DEGREES
	PHOSPHOR PITCH	0.25MM
	SCREEN	DOT TYPE NON-GLARE
GRAPHICS STANDARDS COMPATIBILITY		NON-INTERLACED 1600x1200, 1280x1024, 1024x768 XGA, SUPER VGA, VGA.
RESOLUTION (MAX)		1600x1200 NON-INTERLACED
VIDEO BANDWIDTH (DOT RATE)		150MHZ
SYNCHRONI- ZATION	HORIZONTAL	30~95KHZ
	VERTICAL	50~160HZ
INPUT	VIDEO	RGB ANALOG 0.7VP-P/75 OHMS POSITIVE
SIGNAL	SYNC	TTL SEPARATE / COMPOSITE(+/-)
DISPLAY COLORS		UNLIMITED
DISPLAY AREA (H x V)		300mmx225mm (RECOMMENDED) THE DISPLAY AREA DEPENDS ON ACTUAL SIGNAL TIMINGS
POWER SOURCE		90-264 VAC
POWER CONSUMPTION		130W
INPUT CONNECTOR		15 PIN MINI D-SUB
DIMENSION		425mm (D) x 423mm (w) x 385mm(H)
WEIGHT		17KG (37.4LBS)
OSD USER CONTROLS		POWER SWITCH, BRIGHTNESS, CONTRAST, H.POSITION, H.SIZE V.POSITION, V.SIZE, PINCUSHION, PARALLEL, ROTATION, TRAPEZOID PIN-BALANCE, COLOR TEMPR, G, B, D-SUB V-MOIRE, STATUS, RECALL, LANGUAGE, EXIT
OPERATING TEMPERATURE		0 DEGREE C TO 40 DEGREES C
OPERATING HUMIDITY		10% TO 80%
NORDIC STANDARD		MPR II
PLUG & PLAY		DDC 1/2 B
POWER MANAGEMENT		VESA (NUTEK)
POWER FACTOR CORRECTION		NO

SPECIFICATIONS

MODEL		DA-795 BAP
CRT	SIZE	17 INCH DIAGONAL (16" VIEWABLE)
	DEFLECTION ANGLE	90 DEGREES
	PHOSPHOR PITCH	0.25MM
	SCREEN	DOT TYPE NON-GLARE
GRAPHICS STANDARDS COMPATIBILITY		NON-INTERLACED 1600x1200, 1280x1024, 1024x768 XGA, SUPER VGA, VGA.
RESOLUTION (MAX)		1600x1200 NON-INTERLACED
VIDEO BANDWIDTH (DOT RATE)		150MHZ
SYNCHRONI- ZATION	HORIZONTAL	30~95KHZ
	VERTICAL	50~160HZ
INPUT	VIDEO	RGB ANALOG 0.7VP-P/75 OHMS POSITIVE
SIGNAL	SYNC	TTL SEPARATE / COMPOSITE(+/-)
DISPLAY COLORS		UNLIMITED
DISPLAY AREA (H x V)		300mmx225mm (RECOMMENDED) THE DISPLAY AREA DEPENDS ON ACTUAL SIGNAL TIMINGS
POWER SOURCE		90-264 VAC
POWER CONSUMPTION		130W
INPUT CONNECTOR		15 PIN MINI D-SUB
DIMENSION		425mm (D) x 423mm (w) x 385mm(H)
WEIGHT		17KG (37.4LBS)
OSD USER CONTROLS		POWER SWITCH, BRIGHTNESS, CONTRAST, H.POSITION, H.SIZE V.POSITION, V.SIZE, PINCUSHION, PARALLEL, ROTATION, TRAPEZOID PIN-BALANCE, COLOR TEMP, R, G, B, D-SUB V-MOIRE, STATUS, RECALL, LANGUAGE, EXIT
OPERATING TEMPERATURE		0 DEGREE C TO 40 DEGREES C
OPERATING HUMIDITY		10% TO 80%
NORDIC STANDARD		MPR II
PLUG & PLAY		DDC 1/2 B
POWER MANAGEMENT		VESA (NUTEK)
POWER FACTOR CORRECTION		YES

SPECIFICATIONS

MODEL		DA-795 UA
CRT	SIZE	17 INCH DIAGONAL (16" VIEWABLE)
	DEFLECTION ANGLE	90 DEGREES
	PHOSPHOR PITCH	0.25MM
	SCREEN	DOT TYPE NON-GLARE
GRAPHICS STANDARDS COMPATIBILITY		NON-INTERLACED 1600x1200, 1280x1024, 1024x768 XGA, SUPER VGA, VGA.
RESOLUTION (MAX)		1600x1200 NON-INTERLACED
VIDEO BANDWIDTH (DOT RATE)		150MHZ
SYNCHRONI- ZATION	HORIZONTAL	30~95KHZ
	VERTICAL	50~160HZ
INPUT	VIDEO	RGB ANALOG 0.7VP-P/75 OHMS POSITIVE
SIGNAL	SYNC	TTL SEPARATE / COMPOSITE(+/-)
DISPLAY COLORS		UNLIMITED
DISPLAY AREA (H x V)		300mmx225mm (RECOMMENDED) THE DISPLAY AREA DEPENDS ON ACTUAL SIGNAL TIMINGS
POWER SOURCE		90-264 VAC
POWER CONSUMPTION		130W
INPUT CONNECTOR		15 PIN MINI D-SUB
DIMENSION		425mm (D) x 423mm (W) x 385mm(H)
WEIGHT		17KG (37.4LBS)
OSD USER CONTROLS		POWER SWITCH, BRIGHTNESS, CONTRAST, H.POSITION, H SIZE V.POSITION, V.SIZE, PINCUSHION, PARALLEL, ROTATION, TRAPEZOID PIN-BALANCE, COLOR TEMP, R, G, B, D-SUB V-MOIRE, STATUS, RECALL, LANGUAGE, EXIT
OPERATING TEMPERATURE		0 DEGREE C TO 40 DEGREES C
OPERATING HUMIDITY		10% TO 80%
NORDIC STANDARD		MPR II
PLUG & PLAY		DDC 1/2 B, USB
POWER MANAGEMENT		VESA (NUTEK)
POWER FACTOR CORRECTION		NO

SPECIFICATIONS

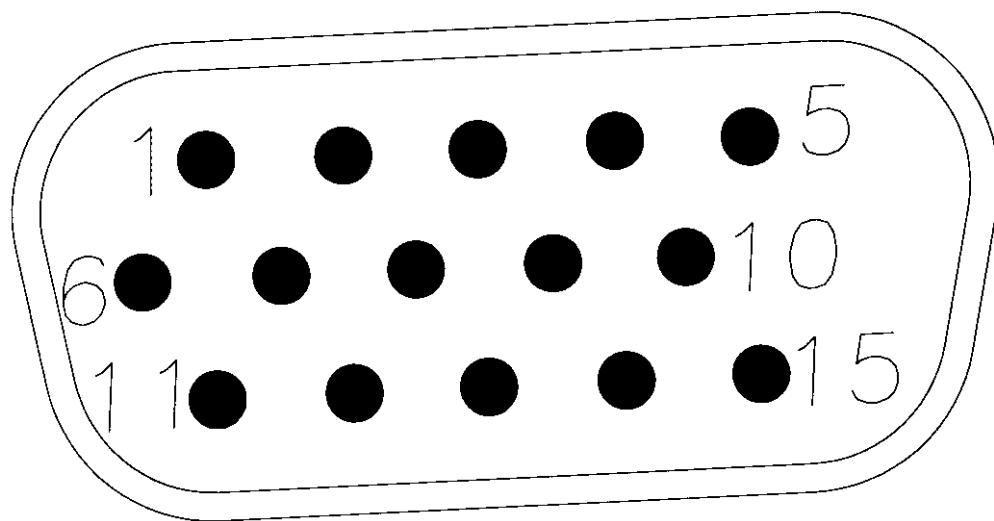
MODEL		DA-795 UAP
CRT	SIZE	17 INCH DIAGONAL (16" VIEWABLE)
	DEFLECTION ANGLE	90 DEGREES
	PHOSPHOR PITCH	0.25MM
	SCREEN	DOT TYPE NON-GLARE
GRAPHICS STANDARDS COMPATIBILITY		NON-INTERLACED 1600x1200, 1280x1024, 1024x768 XGA, SUPER VGA, VGA.
RESOLUTION (MAX)		1600x1200 NON-INTERLACED
VIDEO BANDWIDTH (DOT RATE)		150MHZ
SYNCHRONIZATION	HORIZONTAL	30~95KHZ
	VERTICAL	50~160HZ
INPUT	VIDEO	RGB ANALOG 0.7VP-P/75 OHMS POSITIVE
SIGNAL	SYNC	TTL SEPARATE / COMPOSITE(+/-)
DISPLAY COLORS		UNLIMITED
DISPLAY AREA (H x V)		300mmx225mm (RECOMMENDED) THE DISPLAY AREA DEPENDS ON ACTUAL SIGNAL TIMINGS
POWER SOURCE		90-264 VAC
POWER CONSUMPTION		130W
INPUT CONNECTOR		15 PIN MINI D-SUB
DIMENSION		425mm (D) x 423mm (w) x 385mm(H)
WEIGHT		17KG (37.4LBS)
OSD USER CONTROLS		POWER SWITCH, BRIGHTNESS, CONTRAST, H.POSITION, H.SIZE V.POSITION, V.SIZE, PINCUSHION, PARALLEL, ROTATION, TRAPEZOID PIN-BALANCE, COLOR TEMP, R, G, B, D-SUB V-MOIRE, STATUS, RECALL, LANGUAGE, EXIT
OPERATING TEMPERATURE		0 DEGREE C TO 40 DEGREES C
OPERATING HUMIDITY		10% TO 80%
NORDIC STANDARD		MPR II
PLUG & PLAY		DDC 1/2 B, USB
POWER MANAGEMENT		VESA (NUTEK)
POWER FACTOR CORRECTION		YES

SPECIFICATIONS

MODEL		DA-795 UAT
CRT	SIZE	17 INCH DIAGONAL (16" VIEWABLE)
	DEFLECTION ANGLE	90 DEGREES
	PHOSPHOR PITCH	0.25MM
	SCREEN	DOT TYPE NON-GLARE
GRAPHICS STANDARDS COMPATIBILITY		NON-INTERLACED 1600x1200, 1280x1024, 1024x768 XGA, SUPER VGA, VGA.
RESOLUTION (MAX)		1600x1200 NON-INTERLACED
VIDEO BANDWIDTH (DOT RATE)		150MHZ
SYNCHRONI- ZATION	HORIZONTAL	30~95KHZ
	VERTICAL	50~160HZ
INPUT	VIDEO	RGB ANALOG 0.7VP-P/75 OHMS POSITIVE
SIGNAL	SYNC	TTL SEPARATE / COMPOSITE(+/-)
DISPLAY COLORS		UNLIMITED
DISPLAY AREA (H x V)		300mmx225mm (RECOMMENDED) THE DISPLAY AREA DEPENDS ON ACTUAL SIGNAL TIMINGS
POWER SOURCE		90-264 VAC
POWER CONSUMPTION		130W
INPUT CONNECTOR		15 PIN MINI D-SUB
DIMENSION		425mm (D) x 423mm (W) x 385mm(H)
WEIGHT		17KG (37.4LBS)
OSD USER CONTROLS		POWER SWITCH, BRIGHTNESS, CONTRAST, H.POSITION, H.SIZE V.POSITION, V.SIZE, PINCUSHION, PARALLEL, ROTATION, TRAPEZOID PIN-BALANCE, COLOR TEMP, R, G, B, D-SUB V-MOIRE, STATUS, RECALL, LANGUAGE, EXIT
OPERATING TEMPERATURE		0 DEGREE C TO 40 DEGREES C
OPERATING HUMIDITY		10% TO 80%
NORDIC STANDARD		TC095
PLUG & PLAY		DDC 1/2 B, USB
POWER MANAGEMENT		VESA (NUTEK)
POWER FACTOR CORRECTION		YES

SPECIFICATIONS

MODEL		DA-795 KAT
CRT	SIZE	17 INCH DIAGONAL (16" VIEWABLE)
	DEFLECTION ANGLE	90 DEGREES
	PHOSPHOR PITCH	0.25MM
	SCREEN	DOT TYPE NON-GLARE
GRAPHICS STANDARDS COMPATIBILITY		NON-INTERLACED 1600x1200, 1280x1024, 1024x768 XGA, SUPER VGA, VGA.
RESOLUTION (MAX)		1600x1200 NON-INTERLACED
VIDEO BANDWIDTH (DOT RATE)		150MHZ
SYNCHRONI- ZATION	HORIZONTAL	30~95KHZ
	VERTICAL	50~160HZ
INPUT	VIDEO	RGB ANALOG 0.7VP-P/75 OHMS POSITIVE
SIGNAL	SYNC	TTL SEPARATE / COMPOSITE(+/-)
DISPLAY COLORS		UNLIMITED
DISPLAY AREA (H x V)		300mmx225mm (RECOMMENDED) THE DISPLAY AREA DEPENDS ON ACTUAL SIGNAL TIMINGS
POWER SOURCE		90-264 VAC
POWER CONSUMPTION		130W
INPUT CONNECTOR		15 PIN MINI D-SUB
DIMENSION		425mm (D) x 423mm (w) x 385mm(H)
WEIGHT		17KG (37.4LBS)
OSD USER CONTROLS		POWER SWITCH, BRIGHTNESS, CONTRAST, H POSITION, H SIZE V POSITION, V SIZE, PINCUSHION, PARALLEL, ROTATION, TRAPEZOID PIN-BALANCE, COLOR TEMP, R, G, B, D-SUB V-MOIRE, STATUS, RECALL, LANGUAGE, EXIT
OPERATING TEMPERATURE		0 DEGREE C TO 40 DEGREES C
OPERATING HUMIDITY		10% TO 80%
NORDIC STANDARD		TCO95
PLUG & PLAY		DDC 1/2 B
POWER MANAGEMENT		VESA (NUTEK)
POWER FACTOR CORRECTION		YES



INPUT PIN ASSIGNMENT

PIN NO.	SIGNAL
1.	RED VIDEO
2.	GREEN VIDEO
3.	BLUE VIDEO
4.	GROUND
5.	NO CONNECTION
6.	RED VIDEO RETURN
7.	GREEN VIDEO RETURN
8.	BLUE VIDEO RETURN
9.	NO CONNECTION
10.	GROUND
11.	GROUND
12.	SDA
13.	HORIZONTAL SYNC (COMPOSITE SYNC)
14.	VERTICAL SYNC
15.	SLC

PRESET TIMING CHARTS (FOR DA – 795 BAP)

RESOLUTION.	HOR.FREQ.	VERT.FREQ.	SYNC POLARITY	
			HOR.	VERT
		70 HZ	-	+
640 x 400	31.47 KHZ			
		60 HZ	-	-
640 x 480	31.47 KHZ			
	37.5 KHZ	75 HZ	-	-
640 x 480				
	43.27 KHZ	85 HZ	-	-
640 x 480				
	46.875 KHZ	75 HZ	+	+
800 x 600				
	53.674 KHZ	85 HZ	+	+
800 x 600				
	37.897 KHZ	60.317 HZ	+	+
800 x 600				
	60.023 KHZ	75 HZ	+	+
1024 x 768				
	68.677 KHZ	85 HZ	+	+
1024 x 768				
	48.363 KHZ	60 HZ	-	-
1024 x 768				
	56.476 KHZ	70 HZ	-	-
1024 x 768				
	67.5 KHZ	75 HZ	+	+
1152 x 864				
	63.981 KHZ	60 HZ	+	+
1280 x 1024				
	79.976 KHZ	75.025 HZ	+	+
1280 x 1024				
	91.146 KHZ	85.024 HZ	+	+
1280 x 1024				
	75 KHZ	60 HZ	+	+
1600 x 1200				
	93.75 KHZ	75 HZ	+	+
1600 x 1200				
	87.5 KHZ	70 HZ	+	+
1600 x 1200				

PRESET TIMING CHARTS (FOR DA – 795 SA)

RESOLUTION.	HOR.FREQ.	VERT.FREQ.	SYNC POLARITY	
			HOR.	VERT
640 x 400	31.47 KHZ	70 HZ	-	+
640 x 480	31.47 KHZ	60 HZ	-	-
640 x 480	37.5 KHZ	75 HZ	-	-
640 x 480	43.27 KHZ	85 HZ	-	-
640 x 480	35.001 KHZ	67 HZ	+	-
800 x 600	46.875 KHZ	75 HZ	+	+
800 x 600	48.077 KHZ	72.188 HZ	+	+
800 x 600	53.674 KHZ	85 HZ	+	+
832 x 624	49.725 KHZ	74.550 HZ	-	-
1024 x 768	48.363 KHZ	60 HZ	-	-
1024 x 768	60.023 KHZ	75 HZ	+	+
1024 x 768	60.241 KHZ	74.927 HZ	-	-
1024 x 768	68.677 KHZ	85 HZ	+	+
1152 x 870	68.681 KHZ	75 HZ	-	-
1280 x 1024	79.976 KHZ	75.025 HZ	+	+
1280 x 1024	91.146 KHZ	85.024 HZ	+	+
1600 x 1200	93.75 KHZ	75 HZ	+	+
1600 x 1200	81.250 KHZ	65 HZ	+	+

General Description

Model No.:DA-795

Picture Tube

TSB 17" Flat Square Tube (FST), 90 degree deflection,
0.25mm dot pitch, micro Fitter, anti-glare, anti-static,
P22 phosphor, medium short persistence.

Signal Input Interface

Video: RGB analog
Sync: H. V. Separate Sync
H. V. Composite Sync
(TTL Compatible)

Synchronization

Horizontal: 30 to 95KHz
Vertical: 50 to 160 Hz
Non-interlaced/interlaced

Maximum Resolution

1600X1200 @70
1280X1024 @85

Video Bandwidth

150 MHz (-3db) nominal

Nominal Display Size

300x225mm

Digital Control Menu

4 key On-screen display

Magic Plug & Play

Bi-directional data channel

Display Timings

See attachment

Power Input

90-264Vac, 50 or 60Hz

Engineering specifications

- (1) All measurements shall be made after 30 minutes warm-up.
- (2) All tests shall be performed under normal operating conditions of room temperature 25°C unless otherwise specified.
- (3) CRT shall face east.

1.0 Power input

1.1 Power supply

Switching type power supply.
Input voltage: 90-264Vac universal
Frequency: 47-63 Hz.

1.2 Power consumption 130W max.

1.3 Inrush current (Measurement shall be taken at room temperature 25°C)

- (1) For 110Vac input:
35A max. at cold start
- (2) For 220Vac input:
70A max. at cold start.

1.4 Input surge withstand capacity 1.5KV for 1.0 μ s without permanent damages.

1.5 Leak current

1.5mA max. -- for 110Vac
3.0mA max. -- for 220Vac

1.6 Electrostatic discharge

9KV (500PF + 100 Ω) without permanent failure.

2.0 Video interface and video output

2.1 Input signal connector 15 pin mini D-sub connector

pin number	pin function
1	Red video input
2	Green video input
3	Blue video input
4	Ground
5	No connection
6	Red video ground
7	Green video ground
8	Blue video ground
9	No connection
10	Ground
11	Ground
12	SDA
13	Horizontal sync (Composite sync)
14	Vertical sync
15	SCL

2.2 Signal input voltage

Video:	Analog 0.7Vp-p/75Ω
Sync:	TTL level

2.3 Video bandwidth 150MHz (-3db) nominal

2.4 Brightness

Full white picture	30fl. Min. (When contrast control at max. and brightness control at just extinguished.)
Window:	55fl. Min.
Background raster:	0.7 ± 0.5fl.

2.5 The test mode shall be 1024x768 at 75HZ.

All white brightness variation after power on.

Over 50% brightness after power on 60 sec.

2.6 Contrast control
Brightness control

Video gain control from 20% to 100%.
Background raster control by adjust G1 voltage.

3.0 Deflection

3.1 Synchronization

Horizontal: 30-95KHz
Vertical: 50-160 Hz.

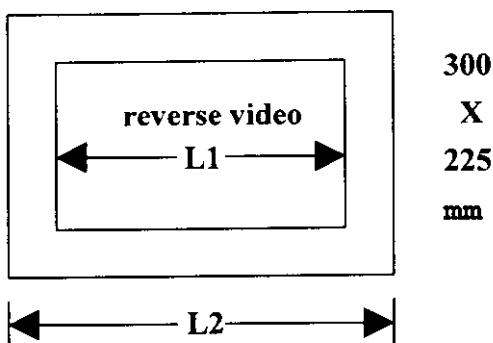
3.2 Retrace time

Horizontal: 2.3μs typical.
Vertical: 300μs typical.

3.3 High voltage

26KV typical (at cut-off)

3.4 Raster regulation (for all modes)



$$\frac{L2-L1}{L1} \leq 1\%$$

L1: Picture width at brightness with 5fl.

L2: Picture width at 50%. Brightness with 30fl.

The picture width should vary less than 1% when the reverse video is measured at the brightness which varies from 5fl. to 50%.

3.5 Picture size

300x225mm ± 5mm.

3.6 Size control range (for all modes)

Horizontal: (Nominal-20mm) to Full Scan.
Vertical: (Nominal-20mm) to Full Scan.

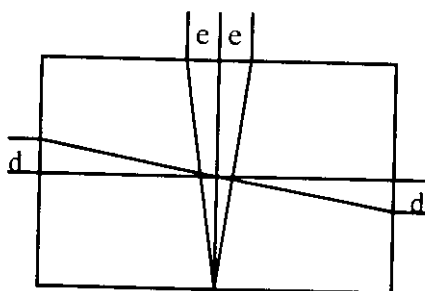
Position control range	Horizontal: 20mm min. Vertical: 20mm min.
3.7 Centering	Horizontal: 4.0mm max. Vertical: 4.0mm max.
3.8 Linearity (for all modes)	Horizontal: $\leq 10\%$ Vertical: $\leq 10\%$

Formula for linearity: $(\text{Max}-\text{Min}) / \bar{X} \times 100\%$

$\bar{X}$ = average

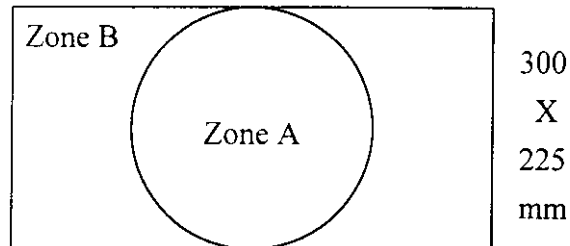
4.0 CRT display performance

4.1 Total geometry distortion	Sides 2.0mm Top/bottom 2.0mm
Pincushion distortion	Sides 1.0mm Top/bottom 2.0mm
Barrel distortion	Sides 1.0mm Top/bottom 2.0mm
S-curve	Sides 1.0mm
4.2 Tilt	$d \leq \pm 1.50\text{mm}$
Orthogonality	$e \leq 3.0\text{mm}$

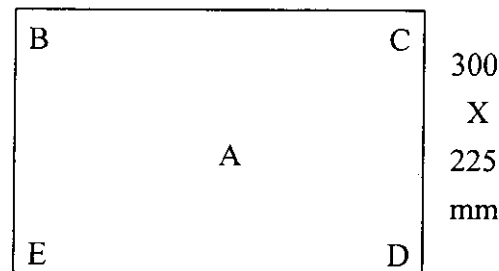


4.3 Misconvergence

Zone A: 0.3mm
Zone B: 0.4mm



4.4 Brightness uniformity



$$\frac{A = 30 \text{ fl}}{\frac{B (C,D, \text{or} E)}{A}} \geq 70\%$$

4.5 Purity

Won't be noticeable after manual degaussing regardless of what direction the CRT faces.

4.6 White balance

Full light output

9300 degree K	6500 degree K	5500 degree K
x=0.281 ± 10%	x=0.313 ± 10%	x=0.332±10%
y=0.311 ± 10%	y=0.329 ± 10%	y=0.348±10%

Background

x=0.281 ± 10%
y=0.311 ± 10%

4.7 Focus

When inspection focus in “惠” pattern at max. Contrast and 50% brightness light output, characters in any area must be clear. The test mode shall be 1024x768 at 75HZ.

4.8 Jitter & swim

There shall be no observable jitter when the screen is viewed from 45cm.

4.9 Morie On screen display control

5.0 Reliability, environment, & packing test

5.1 MTBF 50,000 hours Demo. (excluding CRT)

5.2 Ambience
Operating temperature: 0-40°C (32-104°F)
Storage temperature: -20-60°C (-4-140°F)
Humidity: 10-90%

5.3 Vibration test Delta standard
Drop test Delta reinforced standard

6.0 External controls & indicators

Front:
1. Power switch
2. Power LED
3. 4-key On-screen display control

On display control:

1.	Contrast	11.	Rotation
2.	Brightness	12.	V Moire
3.	H-Size	13.	9300/6500/5500/USER RGB-Gain, RGB-Cut off
4.	H-Position	14.	Language
5.	V-Size	15.	Recall
6.	V-Position	16.	OSD Function
7.	Pincushion	17.	DPMS Message
8.	Pin Balance	18.	Degauss
9.	Trapezoid	19.	EXIT
10.	Parallelogram	20.	

7.0 Regulatory Approvals

- 7.1 Safety
UL 1950
CSA C22.2 NO. 950-M89
EC, EN 60 950 (TUV GS)
- 7.2 EMI
FCC B
CE(EN50081+EN50082) for CE product
MPR II
- 7.3 X-ray
FDA DHHS 21 CFR Subchapter J

8.0 Power Management

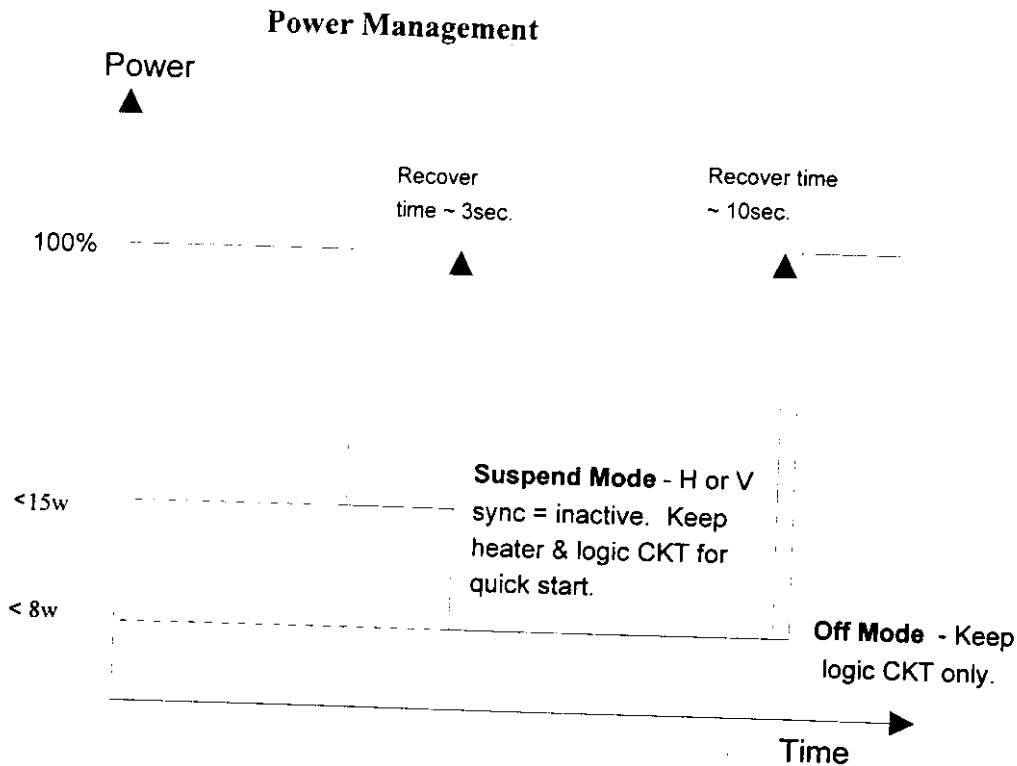
8.1 Definition of Modes

There are three modes of operation for the DA795. These are ON, SUSPEND, and OFF.

- ON-** Both Horizontal and Vertical syncs are present and the monitor is in normal operation.
- SUSPEND-** Horizontal or Vertical sync is inactive per VESA DPMS spec. and not operational. All parts of the monitor are disabled except for the CRT heater and the Detection Logic Circuit. With CRT heater 'hot', the monitor is able to perform a quick start when both Horizontal and Vertical signals are active again.
- OFF-** Both Horizontal and Vertical sync are inactive per VESA DPMS spec. and not operational and all parts of the monitor are disabled including the CRT heater. This is the lowest possible power state of the monitor that maintains automatic on when both Horizontal and Vertical signals are active again. Restart will take longer than the Suspend mode because the CRT heater has to warm-up again.

8.2 Power consumption

Mode	Power Consumption
On	130W max.
Suspend	15W max.
Off	8Wmax.



8.3 Indication

Normal- Power LED = green
Suspend-Power LED = yellow
Off- Power LED = yellow

8.4 Disabling Power Management function

When power on and no horizontal and vertical sync input, the power management function is disabled.

When the Horizontal and Vertical signals are applied, the Power Management function is enabled.

This feature is included for Manufacturing and Servicing requirements.

Attachment: DA-795 Timing Chart

	1	2	3	4
Format	640x480 60Hz	640x400 70Hz	640x480 75Hz	800x600 60Hz
Pixel Frequency	25.175MHZ	31.5MHZ	31.50MHZ	40.00MHZ
Horizontal:				
Period	31.78 us	31.78 us	26.66 us	26.40us
Sync Polarity	(-)	(-)	(-)	(+)
Frequency	31.469KHz	31.47KHz	37.5KHz	37.897KHz
Sync Width	3.813us	3.813us	2.032us	3.20us
Front Porch	0.318us	0.636us	0.508us	1.00us
Back Porch	1.589us	1.907us	3.810us	2.20us
Active Time	25.422us	25.422us	20.317us	20.00us
Blank Time	5.720us	6.356us	6.349us	6.40us
Vertical:				
Period	16.683ms	14.27ms	13.333ms	16.579ms
Sync Polarity	(-)	(+)	(-)	(+)
Frequency	59.940 Hz	70 Hz	75 Hz	60.317Hz
Sync Width	0.064ms	0.064ms	0.080ms	0.106ms
Front Porch	0.064ms	0.381ms	0.027ms	0.026ms
Back Porch	0.794ms	1.112ms	0.427ms	0.607ms
Active Time	15.253ms	12.71ms	12.80ms	15.84ms
Blank Time	0.922ms	1.557ms	0.533ms	0.739ms

	5	6	7	8
Format	640x480 85Hz	800x600 75Hz	1024x768 60Hz	800x600 85Hz
Pixel Frequency	36.00MHZ	49.50MHZ	65.00MHZ	56.250MHZ
Horizontal:				
Period	23.11 us	21.33 us	20.677 us	18.631 us
Sync Polarity	(-)	(+)	(-)	(+)
Frequency	43.269 KHz	46.875 KHz	48.363 KHz	53.674KHz
Sync Width	1.556us	1.616us	2.092us	1.138us
Front Porch	1.556us	0.323us	0.369us	0.569us
Back Porch	2.222us	3.232us	2.462us	2.702us
Active Time	17.778us	16.162us	15.754us	14.222us
Blank Time	5.333us	5.172us	4.923us	4.409us
Vertical:				
Period	11.763ms	13.333ms	16.666ms	11.756ms
Sync Polarity	(-)	(+)	(-)	(+)
Frequency	85.008 Hz	75Hz	60.004 Hz	85.061 Hz
Sync Width	0.069ms	0.064ms	0.124ms	0.056ms
Front Porch	0.023ms	0.021ms	0.062ms	0.019ms
Back Porch	0.578ms	0.448ms	0.600ms	0.503ms
Active Time	11.093ms	12.800ms	15.880ms	11.179ms
Blank Time	0.670ms	0.533ms	0.786ms	0.578ms

	9	10	11	12	13
Format	1024x768 70Hz	1024x768 75Hz	1280x1024 60Hz	1152x864 75Hz	1024x768 85Hz
Pixel Frequency	75.00 MHz	78.750 MHz	108.00MHz	108.00MHz	94.50MHz
Horizontal:					
Period	17.71 us	16.66 us	15.63us	14.815 us	14.561 us
Sync Polarity	(-)	(+)	(+)	(+)	(+)
Frequency	56.476KHz	60.03KHz	63.891KHz	67.5KHz	68.677KHz
Sync Width	1.813us	1.219us	1.307us	1.185us	1.016us
Front Porch	0.320us	0.203us	0.444us	0.593us	0.508us
Back Porch	1.920us	2.235us	2.296us	2.370us	2.201us
Active Time	13.653us	13.000us	11.852us	10.667us	10.836us
Blank Time	4.053us	3.657us	4.047us	4.148us	3.725us
Vertical:					
Period	14.27ms	13.33ms	16.661ms	13.333ms	11.765ms
Sync Polarity	(-)	(+)	(+)	(+)	(+)
Frequency	70.069Hz	75.029Hz	60.00Hz	75Hz	84.997Hz
Sync Width	0.106ms	0.050ms	0.047ms	0.044ms	0.044ms
Front Porch	0.053ms	0.017ms	0.016ms	0.015ms	0.015ms
Back Porch	0.513ms	0.466ms	0.594ms	0.474ms	0.524ms
Active Time	13.599ms	12.795ms	16.005ms	12.800ms	11.183ms
Blank Time	0.673ms	0.533ms	0.657ms	0.533ms	0.582ms

	14	15	16	17	18
Format	1600x1200 60Hz	1280x1024 75Hz	1600x1200 70Hz	1280x1024 85Hz	1600x1200 75Hz
Pixel Frequency	162.00MHz	135.00MHz	189.00MHz	157.50MHz	202.50MHz
Horizontal:					
Period	13.333us	12.504 us	11.429 us	10.971us	10.667us
Sync Polarity	(+)	(+)	(+)	(+)	(+)
Frequency	75KHz	79.976KHz	87.5KHz	91.146KHz	93.750KHz
Sync Width	1.185us	1.067us	1.016us	1.016us	0.948us
Front Porch	0.395us	0.119us	0.339us	0.406us	0.316us
Back Porch	1.877us	1.837us	1.608us	1.422us	1.501us
Active Time	9.877us	9.481us	8.466us	8.127us	7.901us
Blank Time	3.457us	3.022us	2.963us	2.844us	2.765us
Vertical:					
Period	16.667ms	13.329ms	14.286ms	11.761ms	13.333ms
Sync Polarity	(+)	(+)	(+)	(+)	(+)
Frequency	60.0Hz	75.025Hz	70Hz	85Hz	75Hz
Sync Width	0.04ms	0.038ms	0.034ms	0.033ms	0.032ms
Front Porch	0.013ms	0.013ms	0.011ms	0.012ms	0.011ms
Back Porch	0.613ms	0.475ms	0.526ms	0.483ms	0.491ms
Active Time	16.00ms	12.804ms	13.714ms	11.235ms	12.800ms
Blank Time	0.666ms	0.525ms	0.571ms	0.527ms	0.533ms