

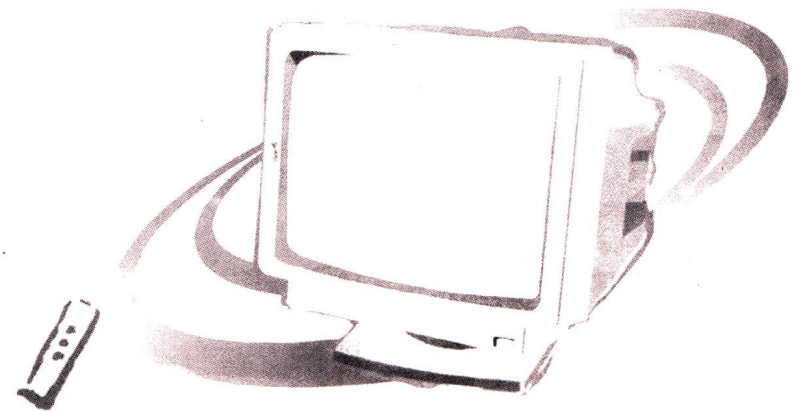
14" SVGA / EVGA COLOR MONITOR



14" COLOR Monitor

C1438 - 8 / 9

C1448 - 8 / 8A / 9



14" SVGA / EVGA COLOR MONITOR



360 - 815000 - 22

CONTENTS

Page

Introduction	1
Safety Precautions	2
Package	2
Before Use	3
Part Names And Functions	5
Specifications	6
Federal Communications Commission	7
Before Calling For Service	9
Power Management	9

Introduction

Congratulations! You are now the owner of our Color Monitor. To ensure proper operation, please carefully read this manual. After you've read this manual, keep it in a safe place for future reference.

This SVGA / EVGA AutoScan Color Display is a monitor designed for use with IBM PS/2 PCs (Personal Computers) and compatibles which can utilize the Video Graphics Array (VGA) standard. Typical examples are IBM compatible PC, PC /AT, 386, 386sx, 486, 486sx, Pentium, and Personal System 2 (PS/2).

IMPORTANT

1. Model C1448-8 / 8A / 9

This model is AutoScan non-interlaced color monitor capable of displaying VGA, SVGA (VESA/60, VESA/72) AND EVGA (VESA/60) video modes, it also can display a maximum resolution of 1024x768 (non-interlaced) pixels at a 60 Hz image refresh rate. Only horizontal frequencies of 31.5 KHz, 35.2 KHz, 35.5KHz, 37.8KHz, 48.1KHz, 48.3KHz are supported.

2. Model C1438-8 / 9

This model is AutoScan interlaced color monitor. Only horizontal frequencies of 31.5KHz, 35.2KHz, 35.5KHz, 37.8KHz are supported.

3. Model C1448-8A

This model also has a built-in power management system that allow the monitor to automatically reduce its power consumption when not in use. This unique ability to reduce power consumption functions ONLY when used with VESA DPMS (Display Power Management Signaling) compatible PC's or video controllers. In power saving mode, the power consumption of the monitor will be reduced to less than 30 Watts. This model complies with the new Energy Star Computers Program initiated by the EPA.



IBM IBM PC/XT, PC/AT, PS/2 (Personal System/2), VGA (Video Graphics Array) are registered trade marks of International Business Machines Corporation.

Pentium is registered trade marks of Intel.

VESA means Video Electronics Standard Association.

Safety Precautions

- * Disconnect the monitor from the mains supply if the monitor is not to be used for an extended period of time.
- * Do not attempt to remove the back cover, as you will be exposed to a shock hazard. The back cover should only be removed by qualified service personal.
- * Do not place objects on top of the monitor cabinet, which could fall into vents or which could cover them and prevent proper cooling of the monitor's electronics.
- * Do not expose the monitor to rain or excessive moisture to avoid the risk of shock or permanent damage to the set.
- * Do not use alcohol or ammonia based liquid to clean the monitor. If necessary, clean with a slightly damp cloth. Disconnect the monitor from the mains supply before cleaning.
- * Consult a service technician if the monitor does not operate normally when the operating instructions are followed.

Package

After unpacking, check to make sure the following items are included:

1. The monitor
2. Tilt / Swivel base
3. Operation Manual

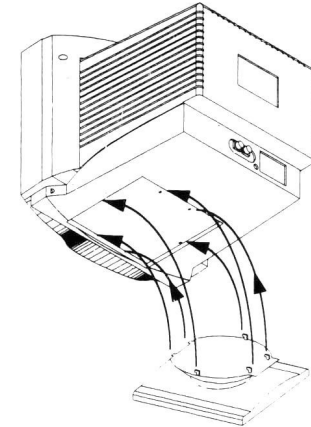
Before Use

Install the tilt / swivel base

- * Place the monitor upside-down with the screen facing you.
- * Hold the base upside-down.
- * Insert the two base tabs into two slots on the monitor
- * Push the base down and forward until it is locked.



Tips: For using conveniently, please install two rubber pad when using the monitor without swivel base.

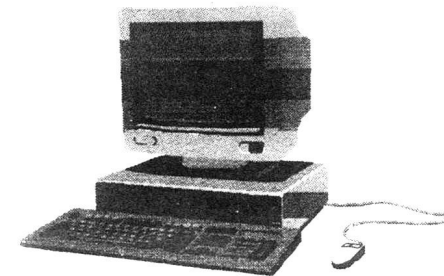


Computer connection

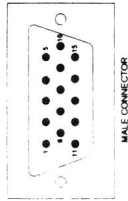


Notice: Shut down the power of the computer before connecting the monitor.

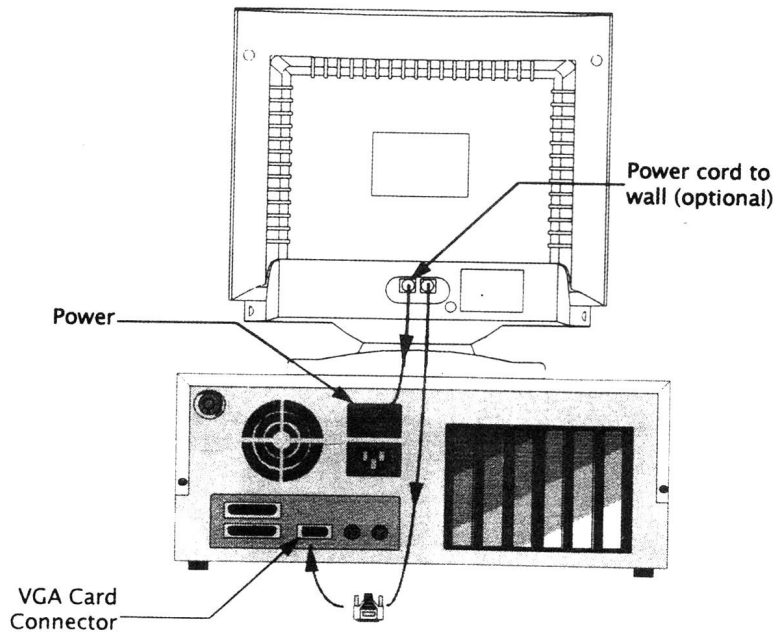
- Connect the monitor power.
- Connect the monitor signal cable.



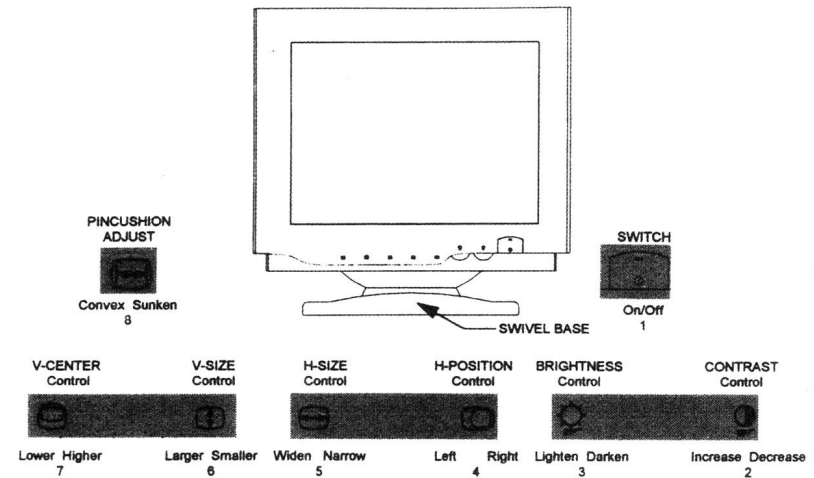
Signal Cable Description:



PIN NO.	DESCRIPTION
1	RED
2	GREEN
3	BLUE
4	NC
5	GROUND
6	RED GROUND
7	GREEN GROUND
8	BLUE GROUND
9	NC
10	LOGIC GROUND
11	LOGIC GROUND
12	NC
13	HOR-SYNC
14	VER-SYNC
15	NC



Part names And Functions



ITEM	DESCRIPTION
① POWER Switch	Apply power to the display by pushing the power switch. Pushing the switch again to turn off. The power switch is push-push type.
② CONTRAST Control	CONTRAST Control adjusts the white level of the image and sets the contrast between the light and dark portions of the image. Initially set the CONTRAST Control to its maximum clockwise position.
③ BRIGHTNESS Control	BRIGHTNESS Control adjusts the image black level and sets the overall picture brightness. Make setting to the click position.
④ H-POSITION Control	H-POSITION Control adjusts the proper horizontal position of the display. Turn H-POSITION Control clockwise to reposition display to the right; turn it counter-clockwise to reposition to the left. Make setting to the click position (center) for presetting.
⑤ H-SIZE Control	H-SIZE Control adjusts proper horizontal width for adequate display.
⑥ V-SIZE Control	V-SIZE Control adjusts the proper vertical size of the display. Turn V-SIZE Control clockwise for larger display; turn it counter-clockwise for smaller display. Make setting to the click position (center) for presetting.
⑦ V-CENTER Control	V-CENTER Control adjusts the proper vertical height of the display. Turn V-CENTER Control clockwise for lower display; turn it counter-clockwise for higher display. Make setting to click position (center) for presetting.
⑧ PINCUSHION Adjust	PINCUSHION Control adjusts the east-west distortion of the image, let display picture line straight.

Specifications

1. General Information

Model		C1438-8/9	C1448-8/8A/9
CRT	SIZE (VIEWABLE)	14" (13.5")	14" (13.5")
	TYPE	14" CONVENTIONAL	14" CONVENTIONAL
	DOT PITCH	0.28mm/0.39mm	0.28mm/0.39mm
	FACE PLACE	NON-GLARE/GLARE	NON-GLARE/GLARE
VIDEO	INPUT SIGNAL	ANALOGUE	ANALOGUE
	AMP BANDWIDTH	45MHz	65MHz
HORIZONTAL	FREQUENCY	30-38KHz	30-48KHz
	RESOLUTION	MAX 1024 DOTS	MAX 1024 DOTS
VERTICAL	FREQUENCY	50-90Hz	50-90Hz
	RESOLUTION	MAX 768LINES (I)	MAX 768LINES (NI)
DATA	MISCONVERGENCE	LESS THAN 0.3mm (CENTER) LESS THAN 0.5mm (CORNERS)	LESS THAN 0.3mm (CENTER) LESS THAN 0.5mm (CORNERS)
	LINEARITY	MAX 10%	MAX 10%
	AREA	240mmX185mm	240mmX185mm
DISPLAY	AREA	240mmX185mm	240mmX185mm
CONTROL	EXTERNAL	BRIGHTNESS, CONTRAST, V-SIZE, H-SIZE, V-POSITION, H-POSITION, PINCUSHION	BRIGHTNESS, CONTRAST, V-SIZE, H-SIZE, V-POSITION, H-POSITION, PINCUSHION
POWER	INPUT VOLTAGE	100-240V AC (AUTO VOLTAGE) 60/50Hz	100-240V AC (AUTO VOLTAGE) 60/50Hz
	CONSUMPTION	MAX 70WATTS	MAX 70WATTS
	EPA (POWER MANAGEMENT)		ON, OFF, SUSPEND, STAND BY (Model C1448-8A Only)
ACCESSORY	VIDEO CONNECTOR	15PIN D-SUB CONNECTOR	15PIN D-SUB CONNECTOR
	POWER CORD	6 FEET AC POWER CORD	6 FEET AC POWER CORD
REGULATIONS	SAFETY	UL, CUL, TUV/GS, CE, DHHS, FCC.	UL, CUL, TUV/GS, CE, DHHS, FCC, MPR-II (OPTION)

2. Resolution

Model	Resolution	Horizontal Frequency (KHz)	Vertical Frequency (Hz)	Remark
1	VGA 640x350	31.5	70	Non-Interlaced
2	VGA 640x400	31.5	70	Non-Interlaced
3	VGA 640x480	31.5	60	Non-Interlaced
4	XGA 1024x768	35.2	87	Interlaced
5	VESA/56 800x600	35.2	56	Non-Interlaced
6	VESA/60 640x480	37.8	60	Non-Interlaced
7	VESA/60 800x600	48.3	60	Non-Interlaced
8	VESA/72 640x480	37.8	72	Non-Interlaced
9	VESA/72 800x600	48.1	72	Non-Interlaced
10	VESA/B4 640x350	37.8	84	Non-Interlaced
11	VESA/B4 640x400	37.8	84	Non-Interlaced
12	IBM 1024X768	48.5	60	Non-Interlaced



Notice: Model C1438-x without mode 7,9.
Design and specifications are subject to change without notice.

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 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.

FCC Caution: To assure continued compliance, use only the provided shielded signal cable when connecting to computer. Also, any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

Use only RF shielded cable that was supplied with the monitor when connecting this monitor to a computer device.

THIS CLASS B DIGITAL APPARATUS MEETS ALL REQUIREMENTS OF THE CANADIAN INTERFERENCE-CAUSING EQUIPMENT REGULATIONS.

Commission Federale de la Communication (FCC)

Cet équipement a été testé et déclaré conforme aux limites des appareils numériques de class B, aux termes de l' article 15 des règles de la FCC. Ces limites sont conçues de façon à fournir une protection raisonnable contre les interférences nuisibles dans le cadre d'une installation résidentielle. Cet appareil produit, utilise et peut émettre des hyperfréquences qui, si l'appareil n'est pas installé et utilisé selon les consignes données, peuvent causer des interférences nuisibles aux communications radio. Cependant, rien ne peut garantir l'absence d'interférences dans le cadre d'une installation particulière. Si cet appareil est la cause d'interférences nuisibles pour la réception des signaux de radio ou de télé vision, ce qui peut être décelé en fermant l'équipement, puis en le remettant en fonction, l'utilisateur pourrait essayer de corriger la situation en prenant les mesures suivantes:

- Ré orienter ou dé placer l'antenne de réception.
- Augmenter la distance entre l'équipement et le récepteur.
- Brancher l'équipement sur un autre circuit que celui utilisé par le récepteur.
- Demander l'aide du marchand ou d'un technicien chevronné en radio/ télé vision.

ATTENTION: Toutes modifications n'ayant pas reçu l'approbation des services compétents en matière de conformité est susceptible d'interdire à l'utilisateur l'usage du présent équipement.

N'utiliser que des câbles RF armés pour les connexions avec des ordinateurs ou périphériques.

CE APPAREIL NUMERIQUE DE LA CLASSE B RESPECTE TOUTES LES EXIGENCES DU REGLEMENT SUR LE MATERIEL BROUILLEUR DU CANADA.

Sicherheitshinweise

1. Die Stechdose muß sich in der Nähe des Gerätes befinden und leicht zugänglich sein.
2. Zum Reinigen den Stecker aus der Steckdose ziehen. Beim Reinigen keine Flüssigreiniger oder sprays verwenden, sondern ein angefeuchtetes Tuch.
3. Das gerät nicht in NaBräume oder in der Nähe von Wasser benutzen, wie z.B. Badezimmer, Schwimmbad, Spülbecken usw.. Das Eindringen von Wasser kann zur Zerstörung des Gerätes führen.
4. Das gerät nicht auf einer unstabilen Unterlage, wie z.B. Rollwagen, Gestell usw., aufstellen. Es könnte herunterfallen und Verletzungen oder Beschädigungen von Mensch und Gerät verursachen.
5. Die Belüftungsöffnungen nicht blockieren oder auf falscher Oberfläche, wie Bett, Sofa usw., stellen. Durch die Blockierung kann es zur Zerstörung des Gerätes durch Überhitzung kommen.
6. Versuchen Sie niemals dieses Gerät selbst zu warten, da beim Öffnen oder Abnehmen des Gehäuses die Gefahr eines elektrischen Schlages besteht.

7. Keine Gegenstände auf das Anschlußkabel stellen, damit es nicht durch scharfe Kanten zerstört werden kann.
8. Keinerlei Gegenstände durch die Öffnungen in das Gerät stecken, da es dadurch sonst zu Kurzschlüssen kommen kann.
9. Bei Störungen des Gerätes den Wartungsdienst verständigen.
10. Bei Reparaturen dürfen nur Originalersatzteile oder Bauteile mit gleichen Eigenschaften verwendet werden. Andere Bauteile können Feuer, elektrischen Schlag oder andere Gefahren verursachen.
11. Nach Beendigung von Wartungsarbeiten oder Reparaturen durch den Kundendienst sollte die Sicherheitsprüfung durchgeführt werden.
12. Bei längerem Stillstand des Gerätes, ist diese von der Versorgungsspannung zu trennen. Dies verhindert eine Beschädigung des Gerätes durch eine Überspannung in der Zuleitung.
13. Der arbeitsplatzbezogene Lärmschutzpegel nach DIN 45 635

Before Calling For Service

The following problems do not always denote a hardware failure. Therefore, please use the troubleshooting guide below before calling for repair service.

If you have followed the guide but none of the remedies worked, unplug the set and call for service.

<i>Problem</i>	<i>Possible Remedy</i>
No Picture	<ul style="list-style-type: none">• Check AC cord connection.• Check Video signal cable connection.• Adjust Brightness and Contrast controls.
Picture Distorted	<ul style="list-style-type: none">• Adjust Pincushion control.
Poor Synchronization	<ul style="list-style-type: none">• Check Input Signal Level• Check Picture Mode (We guaranteed best performance in standard mode listed in specifications.)

- Notice: Inlet of the monitor have to be pulled out of the power outlet for repair!

Power Management

<i>Mode</i>	<i>Switch LED</i>	<i>Power Used</i>
On	Green	< 70 Watts
Stand-by	Red	< 30 Watts
Suspend	Red	< 30 Watts
Off	Red	< 5 Watts

目录	页号
概述	1
安全注意事项	2
装箱内容	2
使用前须知	3
各部分名称及功能	5
规格	6
送修前的检查事项	7
电源管理	7

概述

本SVGA / EVGA 自动扫描彩色显示器, 是专门为使用IBM PS/2, PC 以及配置标准VGA 卡的兼容机而设计的, 主要包括IBM 兼容PC 机, PC/AT, 386, 486, Pentium 系列和PS/2 计算机。

重要提示:

1、C1448 - 8 / 8A / 9 型

为自动扫描逐行方式, 能显示VGA, SVGA (VESA/60, VESA / 72) 和 EVGA (VESA/60) 等视频模式, 图像最大分辨为 1024×768 象素(逐行扫描), 刷新速率为 60HZ。支持 31.5KHZ, 35.5KHZ, 37.8KHZ, 48.1KHZ 和 48.3KHZ 行频频率。

2、C1438 - 8 / 9 型

为自动扫描隔行方式, 仅支持 31.5KHZ, 35.2KHZ, 35.5KHZ, 37.8KHZ 行频频率。

3、C1448 - 8A 型

设有内置电源管理节电系统, 在显示器不使用时, 该系统能自动降低电源功能, 仅适用于装有VESA DPMS (Display Power Management Signaling) 的兼容机或视频控制器, 在节电状态下, 显示器功能将减至30W以下, 本型号机符合USEPA 创始的能源之星计算机计划 (Energy Star Computers Program) 之要求。



IBM IBM PC/XT, PC/AT, PS/2 (Personal System/2), VGA (Video Graphics Array) 为IBM 公司登记/注册商标。

Pentium 为INTEL 公司登记注册商标。

VESA 为 Video Electronics Standard Association 的缩写。

安全注意事项

- * 本显示器长期不用时, 请把电源插头拔掉。
- * 请不要打开后盖, 小心触电, 后盖只能由专门维修人员打开。
- * 不要在显示器上放置物品, 以防掉进机内或堵塞通风口, 影响机内电子元件的散热。
- * 本显示器严禁淋雨, 受潮, 以免引起触电或机器损坏。
- * 本显示器不能用酒精和氨水清洗, 若确有需要, 请用湿海棉清洗, 并在清洗前关掉电源。
- * 按照操作步骤, 若显示器不能正常工作时, 请与维修人员联系。

装箱内容

打开纸箱后, 请检查是否有如下物品:

- 1、显示器
- 2、底座
- 3、说明书

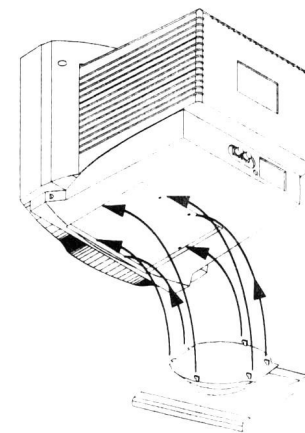
使用前须知

安装旋转基座

- * 将显示器荧光屏向内底朝上放置;
- * 将旋转基座底朝上向内插入固定槽内;
- * 向内用力推基座使之锁定。



提示: 当不安装旋转基座时, 请安装所提供的两个橡胶脚垫, 以方便使用。

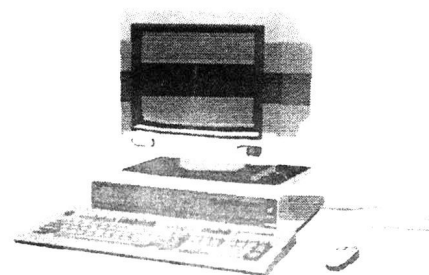


连接计算机

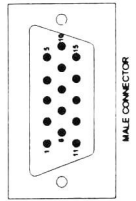


注意: 与计算机主机连接时, 请注意关闭主机和显示器的电源。

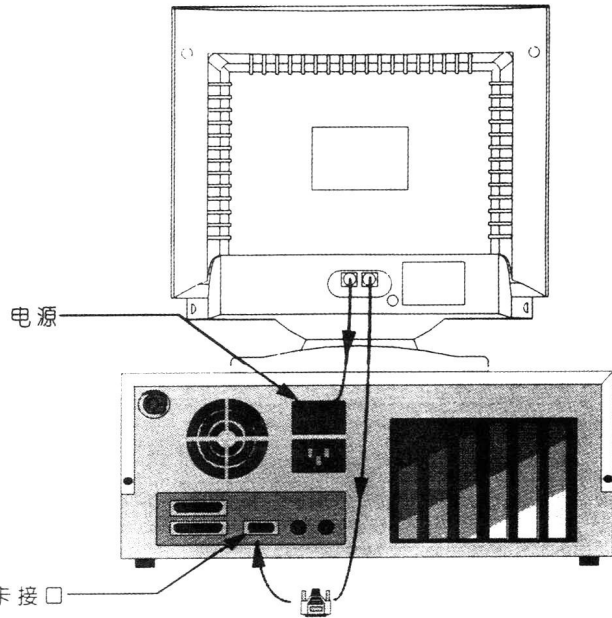
- * 将显示器电源与主机电源连接。
- * 将显示器信号线与主机的显示器接口连接。



信号线说明:



脚号	说明
1	视频输入(红)
2	视频输入(绿)
3	视频输入(蓝)
4	空
5	接地
6	视频接地(红)
7	视频接地(绿)
8	视频接地(蓝)
9	空
10	逻辑接地
11	逻辑接地
12	空
13	行同步
14	场同步
15	空



几何图形调整



电源开关



场中心调整



场幅调整



行幅调整



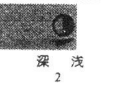
行位移调整



亮度调整



对比度调整



符号	说明
① 电源开关	按此按钮打开/关闭显示器。
② 对比度调整	调整图象对比度。
③ 亮度调整	调整图象亮度。
④ 水平位移调整	调整图象水平位置(左右)。
⑤ 行幅度调整	调整图象水平宽度。
⑥ 场幅度调整	调整图象垂直长度。
⑦ 场中心调整	调整图象高低位置(上下)。
⑧ 几何图形调整	调整图象边缘线凸凹度。


规格

1. 技术参数

Model		C1438-8/9	C1448-8/8A/9
CRT	SIZE (VIEWABLE)	14" (13.5")	14" (13.5")
	TYPE	14" CONVENTIONAL	14" CONVENTIONAL
	DOT PITCH	0.28mm/0.39mm	0.28mm/0.39mm
	FACE PLACE	NON-GLARE/GLARE	NON-GLARE/GLARE
VIDEO	INPUT SIGNAL	ANALOGUE	ANALOGUE
	AMP BANDWIDTH	45MHz	65MHz
HORIZONTAL	FREQUENCY	30-38KHz	30-48KHz
	RESOLUTION	MAX 1024 DOTS	MAX 1024 DOTS
VERTICAL	FREQUENCY	50-90Hz	50-90Hz
	RESOLUTION	MAX 768LINES (I)	MAX 768LINES (NI)
DATA	MISCONVERGENCE	LESS THAN 0.3mm (CENTER)	LESS THAN 0.3mm (CENTER)
		LESS THAN 0.5mm (CORNERS)	LESS THAN 0.5mm (CORNERS)
	LINEARITY	MAX 10%	MAX 10%
DISPLAY	AREA	240mmX185mm	240mmX185mm
CONTROL	EXTERNAL	BRIGHTNESS, CONTRAST, V-SIZE, H-SIZE, V-POSITION, H-POSITION, PINCUSHION	BRIGHTNESS, CONTRAST, V-SIZE, H-SIZE, V-POSITION, H-POSITION, PINCUSHION
POWER	INPUT VOLTAGE	100-240V AC (AUTO VOLTAGE) 60/50Hz	100-240V AC (AUTO VOLTAGE) 60/50Hz
	CONSUMPTION	MAX 70WATTS	MAX 70WATTS
	EPA (POWER MANAGEMENT)		ON OFF, SUSPEND, STAND BY (Model C1448-8A Only)
ACCESSORY	VIDEO CONNECTOR	15PIN D-SUB CONNECTOR	15PIN D-SUB CONNECTOR
	POWER CORD	6 FEET AC POWER CORD	6 FEET AC POWER CORD
REGULATIONS	SAFETY	UL, CUL, TUV/GS, CE, DHHS, FCC.	UL, CUL, TUV/GS, CE, DHHS, FCC, MPR-II (OPTION)

2. 图形模式


模式	分辨率	行频 (KHz)	场频 (Hz)	备注
1	VGA	640x350	31.5	逐行扫描
2	VGA	640x400	31.5	逐行扫描
3	VGA	640x480	31.5	逐行扫描
4	XGA	1024x768	35.2	隔行扫描
5	VESA/56	800x600	35.2	逐行扫描
6	VESA/60	640x480	37.8	逐行扫描
7	VESA/60	800x600	48.3	逐行扫描
8	VESA/72	640x480	37.8	逐行扫描
9	VESA/72	800x600	48.1	逐行扫描
10	VESA/84	640x350	37.8	逐行扫描
11	VESA/84	640x400	37.8	逐行扫描
12	IBM	1024x768	48.5	逐行扫描

 注意: 模式 7, 9 在 C1438-x 型显示器上不支持。设计和规格变更恕不另行通知。

送修前的检查事项

下列现象不一定是故障, 送修前请按下表检查并采取措施仍未见有效, 请送修。

问题	措施
无图象	<ul style="list-style-type: none"> 请检查电源线。 请检查信号线。 请调整亮度, 对比度旋钮。
图象边线不直	<ul style="list-style-type: none"> 请调整几何图形调整旋钮。
图形不正常	<ul style="list-style-type: none"> 请检查信号线。 请检查计算机是否工作在标准图形模式下 (我们保证在规格中注明的标准图形模式下有高品质的图象输出)。

 注意: 维修时务必请将显示器电源插头从插座中拔出!

电源管理

方式	电源开关LED	功率
开机	绿	< 70 瓦
准备	红	< 30 瓦
待机	红	< 30 瓦
关机	红	< 5 瓦