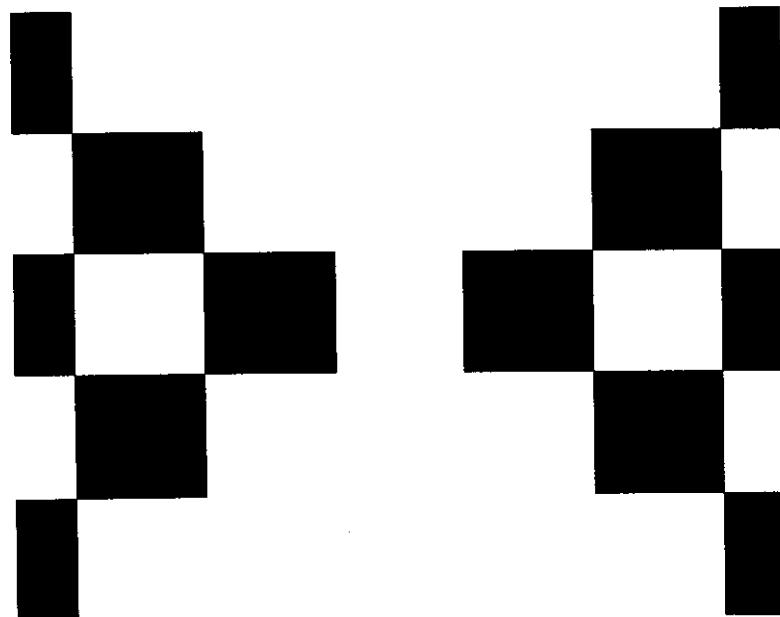


OWNER'S MANUAL

SUPER VGA
COLOR DISPLAY MONITOR

DM-5948S



FCC ID : IUPDM-5948S

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:

Use only 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.

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FUNCTION

1. Indicators:

- a. Power LED shows power on/off and power saving status.
- b. Stereo LED is lit when the TV program now receiving is in stereo.
- c. Sap LED is lit when the program is broadcasted in Sub-audio.(2nd language)

	Power LED	Stereo LED	SAP LED
Normal on	Green	Stereo On (Red)	Main Audio Off
Stand by	Amber	Mono Off	Sub Audio On(Yellow)
Suspend/Active off	Red		
Main power off	Off		

2. Power Switch: On/off the power of the monitor. If a converter is attached, it also switches on/off the power of the converter. Note that if a converter is attached, this unit is used as a TV set. It won't power on when power switch is pressed. You have to press the power key once to power on the TV. When no converter is attached, it switches on automatically, as a conventional monitor does.

3. Panel Keys: There are 8 panel keys

- a. Power key: Serves similar function as the power switch. When you switch off the power through this key, the monitor goes into power saving active off state. You may power on the monitor by pressing the key again or through the power key of the remote.
- b. Degauss key: Press this key to degauss the CRT screen for exactly 4 seconds.
- c. Menu key: This key evokes the OSD menu. There are menus and sub-menus. You may leave any menu/sub-menu via pressing the key. So it's the key to evoke menu or leave the menu/Sub-menu. The OSD menu will disappear if you do not press any key in the recent 12 seconds. But you may leave the OSD menu at any time by pressing this key.
- d. VOL+/VOL-: These two keys serve several purposes.
 - When OSD menu/sub-menu is not evoked, these keys are Volume Up/Down Key. You adjust volume magnitude via the 2 keys.
 - Enter key: In menu/sub-menu, the VOL+/VOL- keys become the enter, select, or execute key. You will enter sub-menu, execute a function or enable/disable a function via either of the two keys.
 - +/- key: When magnitude bar appears for functional adjustment, VOL+/VOL- keys are now +/- keys. They are used to change the magnitude of a certain function.
- e. SEL+/SEL-: Up/Down keys to select an item in the main menu or sub-menu. When you are adjusting a function with the magnitude bar, you can also select other items to adjust by pressing the up/down keys. You don't have to go back to previous menu via the MENU key.

FUNCTION

f. VGA 1/VGA 2: Select VGA 1 or VGA 2 pair as inputs. The VGA input and audio input of the rear are called VGA 1 and AUDIO 1. The VGA input and audio input at the front panel are called VGA 2 and AUDIO 2. Press this key will toggle VGA 1 input to VGA 2 input and vice versa. Note: that for the remote. They are in pair. This key does not respond in TV/AV mode. You have to go to PC mode first to switch the VGA1/VGA2 pair. This is because in TV/AV mode, the VGA1/ GAV2 key serves as TV/CATV key. Refer to the user manual of 1871 converter for details.

4. **Function Controls:** You may adjust the picture or audio parameters freely.

a. Picture:

- The adjustable functions are: Contrast, Brightness, Horizontal Size, Horizontal Position (Phase), Vertical Size, Vertical Position (Center), Pin-Cushion (EW), Trapezoid (Keystone), Bow (Pin-Balance), Parallelogram, Rotation (tilt), Moire Cancellation, Red Color, Green Color, Blue Color and Degauss.
- Recall will replace current settings with factory preset values. You can only recall factory settings when the PC mode is in one of the 11 predefined modes. See appendix B for preset modes. Color recall is used to call back the factory setting of R.G.B.
- Options: There are 2 options: moire ON/OFF, OSD background ON/OFF.
- These parameters are for PC mode only, and can't be reached in TV/AV mode. In TV/AV mode, you can adjust the TV parameters via the remote. See 1871 user manual for details.

b. Audio: Six parameters can be adjusted. Namely, Bass, Treble, Balance, Surround, Volume and 3D-Woof. 3D-Woof is optional, hence some models may not be equipped with 3D-Woof.

c. Options:

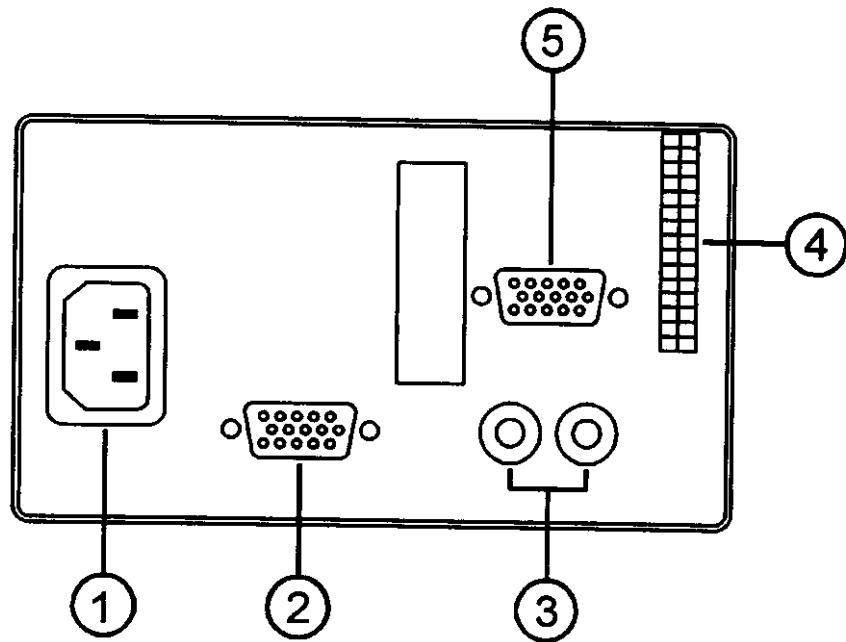
- Moire ON/OFF: For some modes, it is better to switch the moire off to get better video performance. So this option is provided.
- Background ON/OFF: Switch the OSD background ON or OFF to adapt to different software background of the PC.

5. **Remote:**

The remote has 38 keys. Only 8 keys are used for monitor control. The other 31 keys are for video converter control. The 8 keys are POWER; MUTE; VOL+; VOL-; SEL+; SEL-; MENU; VGA1/VGA2. These keys are specially marked. See appendix C for the remote layout and captions. Mute is for instant mute of the audio speaker. Please refer to [Panel keys] and [Function control for usage of the other keys]. Note that Mute will be automatically unlocked if you adjust any parameter related to audio. For instance, volume, bass, etc.

REAR CONNECTORS

1. Power input socket: Connect the power source to the monitor.
2. VGA signal out connector (Optional): Video signal connector, Output the signal to another monitor.
3. Audio In: Connects to the Audio output from PC.
4. Video converter I/O connector: It's for CHUN's video converter only. Be aware that wrong connection may probably damage the device.
5. Video Signal connector: Input the video signal to the Super VGA monitor.



ENERGY SAVING

The monitor is Energy Star compliant. It contains special hardware that provides energy-saving automatic Stand By and Shut OFF features. After a specified period of time, the monitor automatically power down until you move the mouse or use the keyboard.

Automatic Stand By and Shut OFF are set through a software program on your computer such as Window 95.

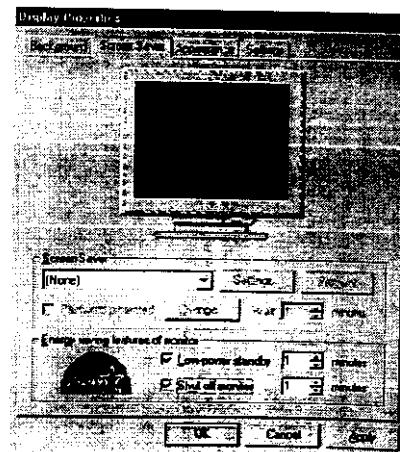
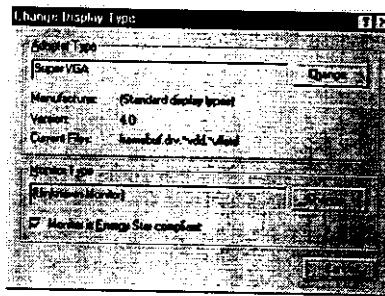
Power consumption being :

Power on	Stand by	Suspend	Off
220 W Max	35 W	8 W	8 W

EXAMPLE : To activate Automatic STAND BY and / or Automatic SHUT OFF in windows 95.

1. Select DISPLAY from the Control Panel and Click on the **SETTINGS** tab. Make sure standard VGA or SVGA display driver are selected, then check the "Monitor is Energy Star Compliant" box and click Close.
2. Click on the **SCREEN SAVER** tab and specify the number of minutes you want your computer to be idle before Window 95 activates Stand By or Shut OFF mode.

To set the energy-saving features in other operation systems, consult the software manual that came with your system. Energy consumption in Stand By mode is 35 Watts or less. In shut off mode, it is 8 Watts or less.



SIMPLE TROUBLE SHOOTING

1. LED not lid : check the connection of power cord.
2. No input signal: check the connection of signal cable.
3. Display color error: check the pin of the signal cable.
4. Degaussing problems: When operating the monitor, Users may find out that putting the monitor on different locations or switching it to different directions may render the screen's display colors abnormal. It is caused by the influence of earth's magnetic field. If you push the "DEGAUSS" key, the colors will become normal again.
5. If the display becomes abnormal due to electrostatic discharge or thunder shock, don't be panic. Switch off and then on the power switch once, the monitor will function normally.
6. Other Problems: Contact your distributor or service center.

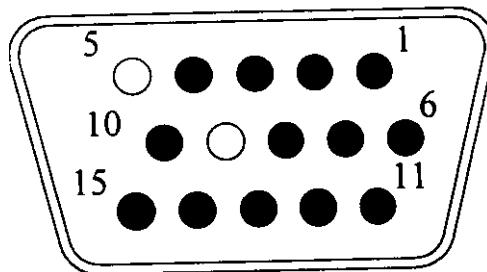
WARNING

1. Do not scratch or rub the tube surface with any kind of abrasives.
2. Do not use abrasive detergent and solvent like thinner.
3. Do not use any bleaching agents and chloric agents.
4. Do not stick any labels and stickers on the tube surface.
5. Must not injure or strip off any ground tapes.
6. Never move CRTs suddenly from cold atmosphere to warm and humid environments.
7. When stocking CRTs with BLACK ENHANCER coating, avoid condensation of water on tube surface.
8. Must not expose the screen to ultra-violet rays or direct sunlight.
9. When using vacuum carrier, absorbing the tube surface, should not be attached any harmful materials onto carries contact to the tube surface.

SPECIFICATIONS

CRT Size	29" Super flat square screen with 108 degree magnetic deflection, dynamic focus forming, 49% (for 0.74mm). 76.5% (for 0.6mm) transmission.
Dot Pitch (mm)	0.74 or 0.6
Max. Resolution	XGA ; 1024x768 (N/I)
Horizontal frequency	30 KHz to 52 KHz auto sync.
Vertical frequency	50 - 120 Hz
Bandwidth	65 MHz
Video input signal	Analog (0.7 Vp-p)
VGA input	15 PIN D-Sub
VGA out	Optional
Compatibility	VGA , SVGA , XGA , VESA , 8514A
Speaker & Amplifier	8W X 2
External control	Main power, Degauss, Brightness, Contrast, H-Size, V-size, H-pos., V-pos., Tilt, Volume, Pincushion
Connectors	VGA in , AC Power in, Audio in, VGA out (Option)
Power	110/220V autoswitchable;220 W (Max)
Display area (mm)	520 X 390
Dimension (mm)	710 (W) X 595 (H) X 509 (D)
Net weight (kg)	47
Operating environment	T 5 to 40°C H: 30 to 80 % RH
Storage environment	T -20 to +60 °C H: 10 to 90 % RH

VGA CONNECTOR ASSIGNMENT



1.	-----	Red
2.	-----	Green
3.	-----	Blue
4.	-----	Ground
5.	-----	No Connection
6.	-----	R-Ground
7.	-----	G-Ground
8.	-----	B-Ground
9.	-----	No Connection
10.	-----	Ground
11.	-----	Ground
12.	-----	SDA
13.	-----	H-sync
14.	-----	V-sync
15.	-----	SCL

APPENDIX A

OSD FUNCTION

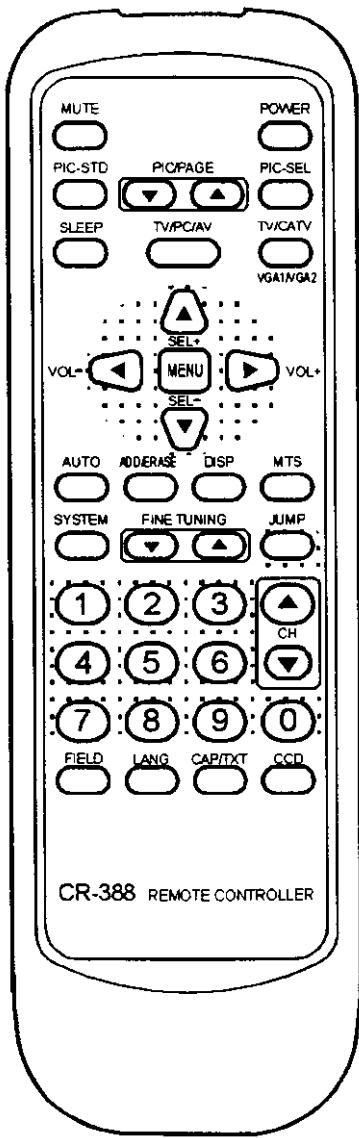
Screen-1	Screen-2	Screen-3
MAIN MENU PICTURE AUDIO OPTIONS Hf: 31.5KHz Vf: 60.0Hz	PICTURE ** CONTRAST ** BRIGHTNESS ** H-SIZE ** H-POSITION ** V-SIZE ** V-POSITION Hf: 31.5KHz Vf: 60.0Hz	PICTURE ** PINCUSHION ** TRAPEZOID ** BOW ** PARALLEL. ** ROTATION MOIRE Hf: 31.5KHz Vf: 60.0Hz
Screen-4	Screen-5	Screen-6
PICTURE ** R-DRIVE ** G-DRIVE ** B-DRIVE ** DEGAUNSS ** RECALL ** COLOR RECALL Hf: 31.5KHz Vf: 60.0Hz	AUDIO BASS TREBLE BALANCE ON SURROUND VOLUME ON 3D-WOOFER Hf: 31.5KHz Vf: 60.0Hz	OPTIONS MOIRE OFF BACKGROUND ON Hf: 31.5KHz Vf: 60.0Hz
Screen-7		
** CONTRAST ----- 50	** G-DRIVE ----- 100	** ROTATION ----- 100
** BRIGHTNESS ----- 50	** B-DRIVE ----- 100	** BASS ----- 50
** H-SIZE ----- 100	** PINCUSHION ----- 100	** TREBLE ----- 100
** H-POSITION ----- 50	** TRAPEZOID ----- 100	** BALANCE ----- -20
** V-SIZE ----- 100	** BOW ----- 50	** VOLUME ----- 30
** V-POSITION ----- 50	** PARALLEL. ----- 100	
** R-DRIVE ----- 100	** MOIRE ----- 100	
Screen-8		
MUTE		

APPENDIX B

Mode	Resolution	Hfreq (KHz)	Vfreq (Hz)	H polarity	V polarity	Remarks
1	640×480	31.469	59.941	—	—	VGA
2	720×400	31.469	70.087	—	+	VGA
3	640×350	31.469	70.087	+	—	VGA
4	800×600	35.156	56.250	+	+	VESA
5	640×480	35.000	66.667	+	High Impedance	MAC-II
6	1024×768	35.522	86.960	+	+	Interlaced,8514A
7	800×600	37.879	60.317	+	+	VESA
8	640×480	37.861	72.810	—	—	VESA
9	1024×768	48.363	60.004	—	—	VESA
10	800×600	48.077	72.188	+	+	VESA
11	832×624	49.727	74.553	+	+	APPLE

APPENDIX C

REMOTE CONTROLLER



731-1000-14903