NESO

Pomona FD 910G

19" "Trinitron®" Color Monitor

(KEY Control)

User's Manual

Federal Communications Commission (F.C.C.) 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:

- 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 devices technician for help.

Use only shielded cables or 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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Safety Precautions

Please read following instructions before use:

1. Please install the swivel base for this monitor before using it.
2. Avoid exposing the monitor to direct sunlight and ensure the area around the monitor is free from moisture. Never allow any liquid to get inside the monitor.
3. Do not place any objects on the case.
4. Never place the monitor near a heat source such as a radiator.
5. To prevent overheating, the openings for ventilation on the top, rear, bottom and side of the monitor should be kept free of any obstructions.
6. Do not open the case of the monitor, as doing so may expose you to dangerously high voltage levels. Never attempt to perform repairs on the monitor yourself, but refer all servicing to qualified personnel.
7. Disconnect the monitor from the power outlet when the monitor is not in use for extended periods of time.
8. Continuous use of the monitor over long periods of time may result in permanent damage to the CRT's screen elements. To increase the life of the CRT, make sure to turn off the power or reduce its brightness when the monitor is not in use.
9. The monitor is equipped with a three-wire grounding-type plug. For safety, this device should only be used with a grounding-type power outlet. If your outlet is not of this type, contact your electrician for replacement. ***Never use a 3-to-2 prong adapter.***

Due to the safety requirements of different areas, please select a suitable power cord according to the following rules, in addition to the electric rating:

A. Northern America Area: Please select a UL listed and CSA certified power cord.
B. Germany: Please select VDE certified power cord.
C. Nordic countries: Please select a power cord certified by SEMKO, NEMKO, DEMKO or FIMKO
D. The other areas: Please select a power cord suitable to the local power system and power outlet.

Usually when this product is sold, a suitable power cord is provided by the manufacturer. However, this product is sometimes resold or transported to another area with a different power system and safety requirements.   Please pay attention to the selection of a suitable power cord.

The plug on the power cord is intended to serve as the disconnect device, the socket-outlet shall be installed near the equipment and shall be easily accessible.

10. This monitor is designed with a universal power supply that is suitable for 100 – 240 VAC and 50 – 60Hz frequency.

Thank you for your purchase of a NESO FD 910G color monitor. Your NESO FD 910G package includes:

- ■ NESO FD 910G color monitor
- ■ Swivel base
- ■ Power cord
- ■ Monitor Installation Disk
- ■ This user's manual

Please contact your local distributor if any of these items are missing.


Important!
1. You may wish to save the original box and packing materials for future use in shipping the monitor.
2. This monitor may, due to the effects of magnetic materials located nearby or of the Earth's magnetic field, show localized color discrepancies. It is recommended that the monitor be positioned so that the screen faces east, and that any items that emit electromagnetic fields (such as stereos) not be placed near the monitor.

Quick Installation Guide

1. Install swivel base

Align the swivel base with the slots on the bottom of the monitor and insert the swivel base into the slots. Push the swivel base firmly toward the front of the monitor until the latches click into the locked position.

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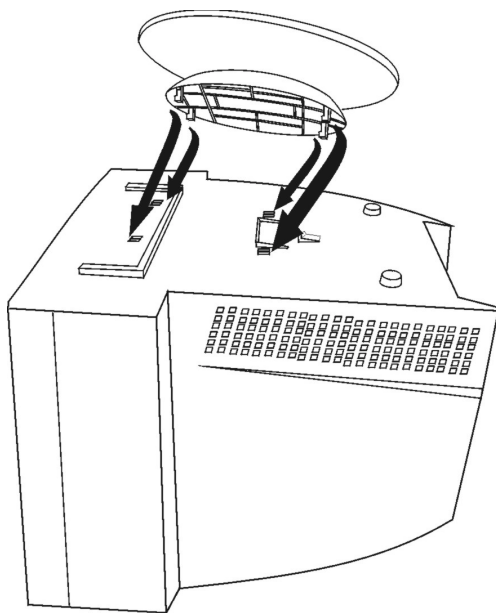
2. **Connect the signal cable**

   Make sure both the monitor and your computer are turned OFF. Connect the monitor to the computer using the attached signal cable (❷ in the diagram below).

3. **Connect the power cord**

   Connect the power cord to a properly grounded AC outlet, then insert the other end into the AC IN jack on the monitor (❶ in the diagram below).

4. **Turn on the computer and monitor**

   Be sure to first power up the computer, before turning on the monitor.

   NOTE: If you are using Windows 98, you may see a message asking you to install certain software.

5. **Install the monitor's driver software**

   Please refer to the readme.txt file contained in the Monitor Installation Disk.

6. **Configure the monitor's display mode (resolution and refresh rate)**

   Example: 1024 x 768 @ 85 Hz

   Right-click on the Windows desktop to bring up the pop-up menu, then select Properties>Settings>Desktop Area. Set the resolution in the dialog box that appears. For instructions on setting refresh rates, please refer to the documentation provided with your graphics card.

7. **Adjust the screen image using the monitor's On-Screen Display (OSD) controls**

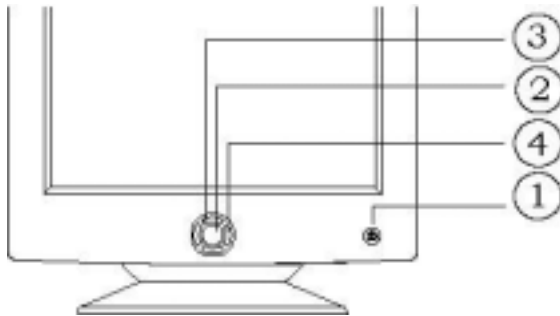   See the Operation section of this manual for information on using the OSD controls.
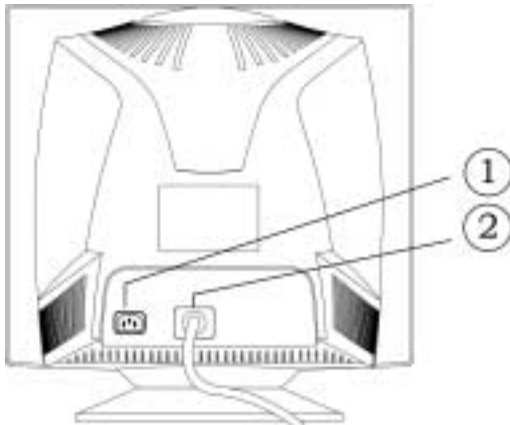
   ❶   AC IN
   ❷   Attached Signal Cable

Operation

This section explains how to fine-tune your monitor's screen image to suit your personal preferences, or to adapt it for different applications or lighting conditions.

Front Panel Buttons

❶ Power On/Off button with LED indicator

❷ OSD (On-Screen Display) button — brings up the OSD control menu

❸ Up and Down buttons — selects sub-menus within the OSD controls

❹ Left and Right buttons — increases or decreases selected values when using the OSD controls

When the monitor in on, press the Up/Down (❸ in the diagram above) or Left/Right (❹ in the diagram above) buttons. This will bring up on the screen of your monitor the BRIGHTNESS/CONTRAST menu shown below.


☼ Shows the brightness level of screen image

◑ Shows the contrast level of screen image

Press the Left and Right buttons to adjust contrast.
Press the Up and Down buttons to adjust brightness.

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On-Screen Display (OSD) Main Menu

Your FD 910G color monitor provides nine main control parameters that you can adjust according to preference. To access the main menu of the OSD controls, press the OSD button (❷ in the diagram above). On the screen of the monitor, the menu shown below will appear.
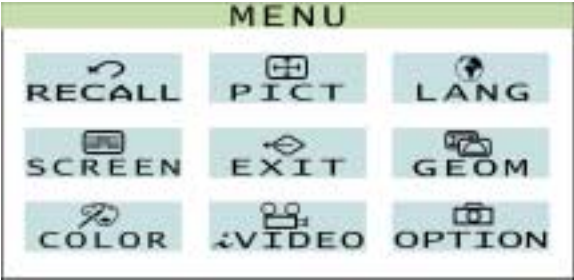
The following is a description of the different choices shown in the main OSD control menu.

RECALL

   GEOM RECALL (Geometry Recall)

Restores all Geometry settings (except rotation) to factory preset values.

   CONV RECALL (Convergence Recall)

Restores all Convergence settings to factory preset values.

   LAND RECALL (Landing Recall)

Restores all Landing setting to factory preset values

PICT (Picture)

▭◫ H-POSITION (Horizontal Position)

Adjusts the position of the screen image left or right.

▭ H-SIZE (Horizontal Size)

Adjusts the width of the screen image.

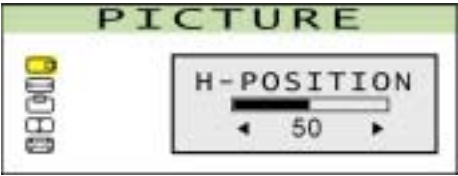▭ V-POSITION (Vertical Position)

Adjusts the position of the screen image up or down.

▭ V-SIZE (Vertical Size)

Adjusts the height of the screen image.

▭ ZOOM

Magnifies or shrinks the screen image.

LANG (Language)

Allows users to choose from among seven languages for displaying text in the OSD controls—English, French, Italian, German, Spanish, Japanese and Simplified Chinese.

SCREEN
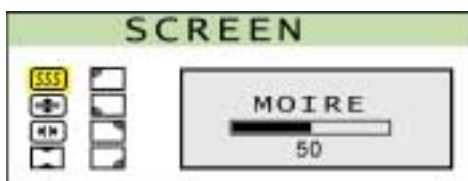
▭ MOIRE

Reduces the distortion effects of wavy lines or ripples oriented vertically in the screen image.

Caution:
1. **If moiré reduction is overdone, picture quality, i.e. focus and vertical line stability will both be affected.**
2. **Proper adjustment is recommended for not affecting picture performance.**

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⊞ V-CONV (Vertical Convergence)

Adjusts the vertical convergence of the screen image.

⊞ H-CONV (Horizontal Convergence)

Adjusts the horizontal convergence of the screen image.

▱ N-S LANDING (North South Landing)

Adjust the color purity of the entire screen image.

▱ T-L LANDING (Top Left Landing)

Adjust color purity in the top left corner of the screen image.

▱ B-L LANDING (Bottom Left Landing)

Adjust color purity in the bottom left corner of the screen image.

▱ T-R LANDING (Top Right Landing)

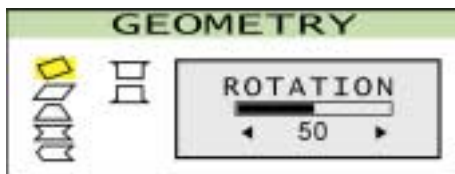Adjust color purity in the top right corner of the screen image.

▱ B-R LANDING (Bottom Right Landing)

Adjust color purity in the bottom right corner of the screen image.

EXIT

Exits the On-Screen Display controls.

GEOM (Geometry)

▱ ROTATION

Rotates the entire screen image clockwise or counter-clockwise.

▱ PARALLEL

Slants the left and right edges of the screen image to the left or right.

⌐△   TRAPEZOID

Adjusts the orientation of the left and right edges of the screen image relative to each other.

∑⟨   PINCUSHION

Straightens the left and right edges of the screen image.

⟨⟨   PIN BALANCE

Curves the left and right edges of the screen image to the right or left.

☐   TOP CORNER

Moves the top corners of the screen image inward or outward.

☐   BOT CORNER (Bottom Corner)

Moves the bottom corners of the screen image inward or outward.

COLOR

Provides four color adjustment options: three preset color temperature settings, and User Adjust, which allows you to adjust color temperatures freely.

iVIDEO

The FD 910G monitor incorporates sophisticated iVIDEO technology, used to switch the display from Normal to Sharpness, Sapphire, Topaz and Ruby picture quality.   These automatic adjustments allow more comfortable viewing of both still images and video from media such as VCDs and DVDs.   The characteristics of the five setting are described as below:

Display Mode	Normal	Sharpness	Sapphire	Topaz	Ruby
Display Picture	User default	Sharper	Magnify, sharper & brighter	Magnify, sharper & brighter	Magnify, sharper & brighter
Color Temperature	User default	User default	9300K	6500K	5000K

Important! As both brightness and contrast values are increased when iVIDEO is activated, NESO does not recommend turning iVIDEO on when performing text-oriented work such as word processing.

OPTION

∩ DEGAUSS

The FD 910G monitor provides two ways to degauss the monitor. You can either set it to degauss automatically whenever it is turned on, or degauss manually by selecting the Degauss control from the OSD control menu.

Important! *Do not degauss repeatedly. Doing so may damage the monitor. Wait at least 20 minutes before selecting this control again.*

⊙⊓ KEYLOCK

When this function is activated, current settings in the OSD control menu are locked to prevent unintended changes.

Another way to lock the setting is by pressing ⟨ & ⟨⟩ keys on the front panel simultaneously for about 5 to 6 seconds. Repeat the same would unlock the setting.

Specifications

CRT Type	19" Sony FD Trinitron®
Viewable Image Size	18"
Aperture Grille Pitch	0.24mm
Maximum Resolution	1600 x 1200 @ 88Hz
Scanning Frequency	Horizontal: 30 – 110 KHz Vertical: 50 – 160 Hz
Display Colors	Unlimited
Display Area	353mm x 265mm
Input Signal	Video: Analog RGB (0.7Vp-p, 75 ohm) Sync: Separate TTL level, Composite TTL level
Compatibility	PC99, Windows® 95, 98, me, NT, 2000, Macintosh®
Power	AC 100-240V (universal); 50-60 Hz
Operating Conditions	Temperature: 10°C – 40°C (50°F – 104°F) Humidity: 10% - 80% (non-condensing)
Storage Conditions	Temperature: -20°C – 60°C (-4°F – 140°F) Humidity: 10% - 90%
Power Saving Mode	Operation: < 130 watts (max.) LED Indicator: Green Suspend: < 15 watts (max.) LED Indicator: Amber Active off: < 5 watts (max.) LED Indicator: Amber
Dimensions	469mm(W) x 476.5mm(H) x 470mm(D)
Weight	Net: 26.2KGs Gross: 28.2KGs

Energy Declaration

This monitor is equipped with a function for saving energy which supports the VESA Display Power Management Signaling (DPMS) standard.   This means that the monitor must be connected to a computer which also supports the VESA DPMS standard to fulfill the requirements of the NUTEK specification 803299/94/96.   The time settings for switching to a power saving mode are adjusted from the system unit by software.

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Preset Display Modes

Preset mode	Resolution		Frequency	
	H (pixels)	V (line)	H (KHz)	V (Hz)
1	640	480	31.5	60
2	640	480	43.3	85
3	720	400	31.5	70
4	800	600	46.9	75
5	800	600	53.7	85
6**	832	624	49.7	75
7	1024	768	60.0	75
8	1024	768	68.7	85
9	1152	864	67.5	75
10	1280	1024	80.0	75
11	1280	1024	91.1	85
12	1600	1200	107.0	85
13	1792	1344	106.3	75

** for Apple Macintosh

Pin Assignment

The pin assignment of the connectors is listed below for professional use only.   Please do not attempt to alter the connections yourself as this may seriously damage your monitor.

Pin No.	Assignment
1	Red video input
2	Green video input
3	Blue video input
4	Ground
5	Ground (DDC)
6	Red video ground
7	Green video ground
8	Blue video ground
9	DDC $^+$5V
10	Ground
11	Ground
12	SDA (DDC)
13	Horizontal sync./Composite sync.
14	Vertical sync.
15	SCL (DDC)

Troubleshooting

Before calling an authorized service center, please check that the items below are properly connected or set.

No power
- Make sure the power button is ON
- Make sure the power cord is firmly connected to the back of the monitor and to a power outlet.

Power on but no screen image
- Make sure the signal cable supplied with the monitor is tightly secured to the video output port on the back of the computer. If the other end of the signal cable is not attached permanently to the monitor, tightly secure it to the monitor.
- Adjust brightness and contrast.

Flicker
- There may not be enough power supplied. Connect the monitor to a different power outlet, or if you are using a surge protector, reduce the number of devices plugged in.
- Use the OSD (On Screen Display) controls to verify that the refresh rate (vertical frequency) is 75Hz or higher.
- Make sure the graphic card in your computer can use non-interlaced mode at the desired frequencies. To enable your graphics card to support higher refresh rates, try selecting a lower number of display colors or using lower resolutions.
- Remove from the area near the monitor any devices, such as radios, unshielded speakers, or AC power converters that emit magnetic fields.

Incorrect display of colors
- If any colors (red, green, or blue) are missing, check that the signal cable is firmly connected. Damaged pins in the cable connector may also result in a faulty connection.
- Select Degauss from OSD menu.

Entire screen image scrolls (rolls) vertically
- Make sure the video input signals from your computers graphics adapter are within the monitor's specified frequency range.
- Try the monitor with a different power source, graphics card, or computer system to locate the source of the problem.
- Make sure that the signal cable is securely connected.

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All NESO monitors are designed with FD Trinitron CRTs, which are sensitive to shocks and vibrations that may occur during transportation.   Following are some adjustments tips when below mentioned symptoms occur.

Symptom	Tip
Two horizontal lines are visible on the screen.	■ This is a normal characteristic of Trinitron CRT. ■ These damper wires are designed to dampen and prevent shock and vibration in the aperture grille. Furthermore, the design is such that they are located to correspond with the blind spot in the user's field of vision, avoiding any influence on normal use of the monitor.
Black fine vertical lines are visible on the screen. Shock and vibration may cause the aperture grille to misalign resulting in a few fine black vertical lines across the screen.	■ Degaussing the screen ■ Tap lightly (do not hit) the side of the monitor If above mentioned remedies do not work, please do the following: 1. Display full white window or wallpaper background over the area where the black lines appear. 2. Set Contrast and Brightness to the maximum, wait for a moment until the problem is corrected. You may try to tap lightly the side of the monitor to help expedite the alignment.

DDC Plug & Play

This monitor is equipped with Plug & Play capability (VESA DDC 1/2B).   To utilize this capability, your graphic card and hosting system have to be Plug & Play compatible as well. When properly plugged, the graphic card and hosting system will automatically identify, configure, and most importantly, optimize this monitor's capabilities.

Cleaning the Monitor

- Make sure that the monitor is turned off.
- Never spray or pour any liquid directly onto the screen or case.

To clean the screen:
1. Gently wipe the screen with a clean, soft, lint-free cloth to remove dust and other particulate matter.
2. If the screen surface still does not appear clean, apply a small amount of ammonia- and alcohol-free glass cleaner onto a clean, soft, lint-free cloth, then wipe the screen.

To clean the case:
1. Use a soft, dry cloth to wipe the surface of the case.
2. If the case still does not appear clean, apply a small amount of a mild ammonia- and alcohol-free, non-abrasive detergent onto a clean, soft, lint-free cloth, then wipe the surface.

DISCLAIMER:
NESO strongly discourages the use of any ammonia- or alcohol-based cleaners on the monitor's screen or case, as they may damage the screen and/or case of the monitor. NESO shall not be liable for any damage to the monitor resulting from use of any ammonia or alcohol-based cleaners.