

ENGLISH

Acer P211

Color Monitor

21"(53.34cm) CRT Size

20"(51cm) Max. Viewable Area

User's Manual

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Fill in here!!

For the convenience of service, write following related information of your monitor in the space below. The serial number is on the back of the product.

Monitor Information

Product Name: _____

Serial Number: _____

Date of Purchase: _____

Dealer Information

Dealer: _____

Telephone: _____

Number: _____

Address: _____



Safety Instructions !

- The AC plug isolates this equipment from the AC supply.
- Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
- Slots and openings in the cabinet and the back or bottom are provided for ventilation. They must not be blocked or covered. This product should never be placed near or over a radiator or heat register, or in a built-in installation unless proper ventilation is provided.
- This product should be operated from the type of power indicated on the marking label. If you are not sure of the type of power available, consult your dealer or local power company.
- This product should be operated with a 3-wire grounding-type plug, a plug having a third (grounding) pin. This plug will only fit into a grounding-type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to make the necessary outlet changes.
- Never push objects of any kind, or spill liquid of any kind into this product.
- Do not attempt to service this product yourself, as opening or removing covers may expose you to dangerous voltages or other risks. If any above mentioned misuse or other accident (dropping, mis-operations) occurs, contact qualified service personnel for servicing.
- Use only the proper type of power supply cord set (provided in your PC box) for this unit. It should be a detachable type: UL listed/CSA certified, type SVT/SJT, VDE approved or its equivalent.
- The power supply cord serves as a power disconnect device for pluggable equipment. The socket outlet shall be installed near the equipment and shall be easily accessible.



Congratulations! You have just purchased a TCO'99 approved and labelled product! Your choice has provided you with a product developed for professional use. Your purchase has also contributed to reducing the burden on the environment and also, to the further development of environmentally adapted electronics products.

Why do we have environmentally labelled computers?

In many countries, environmental labelling has become an established method for encouraging the adaptation of goods and services to the environment. The main problem, as far as computers and other electronics equipment are concerned, is that environmentally harmful substances are used both in the products and during the manufacturing. Since it has not been possible for the majority of electronics equipment to be recycled in a satisfactory way, most of these potentially damaging substances sooner or later enter Nature.

There are also other characteristics of a computer, such as energy consumption levels, that are important from the viewpoints of both the work (internal) and natural (external) environments. Since all methods of conventional electricity generation have a negative effect on the environment (acidic and climate-influencing emissions, radioactive waste, etc.), it is vital to conserve energy. Electronics equipment in offices consume an enormous amount of energy since they are often left running continuously.



What does labelling involve?

This product meets the requirements for the TCO'99 scheme which provides for international and environmental labelling of personal computers. The labelling scheme was developed as a joint effort by the TCO (The Swedish Confederation of Professional Employees), Naturskyddsforeningen (The Swedish Society for Nature Conservation) and NUTEK (The National Board for Industrial and Technical Development in Sweden).

The requirements cover a wide range of issues: environment, ergonomics, usability, emission of electrical and magnetic fields, energy consumption and electrical and fire safety.

The environmental demands concern restrictions on the presence and use of heavy metals, brominated and chlorinated flame retardants, CFCs (freons) and chlorinated solvents, among other things. The product must be prepared for recycling and the manufacturer is obliged to have an environmental plan which must be adhered to in each country where the company implements its operational policy.

The energy requirements include a demand that the computer and/or display, after a certain period of inactivity, shall reduce its power consumption to a lower level in one or more stages. The length of time to reactivate the computer shall be reasonable for the user.

Labelled products must meet strict environmental demands, for example, in respect of the reduction of electric and magnetic fields, physical and visual ergonomics and good usability.

On the back page of this folder, you will find a brief summary of the environmental requirements met by this product. The complete environmental criteria document may be ordered from:

TCO Development Unit

S-114 94 Stockholm

Sweden

Fax: +46 8 782 92 07

Email (Internet): development@tco.se



Current information regarding TCO'99 approved and labelled products may also be obtained via the Internet, using the address:

<http://www.tco-info.com/>

TCO'99 is a co-operative project between



Environmental Requirements

Brominated flame retardants

Brominated flame retardants are present in printed circuit boards, cables, wires, casings and housings. In turn, they delay the spread of fire. Up to thirty percent of the plastic in a computer casing can consist of flame retardant substances. These are related to another group of environmental toxins, PCBs, which are suspected to give rise to similar harm, including reproductive damage in fish-eating birds and mammals, due to the bio-accumulative* processes. Flame retardants have been found in human blood and researchers fear that disturbances in foetus development may occur.

TCO'99 demand requires that plastic components weighing more than 25 grams must not contain organically bound chlorine and bromine.

Cadmium**

Cadmium is present in rechargeable batteries and in the colour-generating layers of certain computer displays. Cadmium damages the nervous system and is toxic in high doses.

TCO'99 requirement states that batteries may not contain more than 25 ppm (parts per million) of cadmium. The colour-generating layers of display screens must not contain any cadmium.

Mercury**

Mercury is sometimes found in batteries, relays and switches. Mercury dam-

ages the nervous system and is toxic in high doses.

TCO'99 requirement states that batteries may not contain more than 25 ppm (parts per million) of mercury. It also demands that no mercury is present in any of the electrical or electronics components concerned with the display unit.

CFCs (freons)

CFCs (freons) are sometimes used for washing printed circuit boards and in the manufacturing of expanded foam for packaging. CFCs break down ozone and thereby damage the ozone layer in the stratosphere, causing increased reception on Earth of ultraviolet light with consequent increased risks of skin cancer (malignant melanoma).

The relevant TCO'99 requirement: Neither CFCs nor HCFCs may be used during the manufacturing of the product or its packaging.

Lead**

Lead can be found in picture tubes, display screens, solders and capacitors. Lead damages the nervous system and in higher doses, causes lead poisoning. TCO'99 requirement permits the inclusion of lead since no replacement has yet been developed.

** Bio-accumulative is defined as substances which accumulate within living organisms*

*** Lead, Cadmium and Mercury are heavy metals which are Bio-accumulative.*

FCC Class B Radio Frequency Interference Statement

Note:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of 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:

- 1 Reorient or relocate the receiving antenna.
- 2 Increase the separation between the equipment and receiver.
- 3 Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- 4 Consult the dealer or an experienced radio/television technician for help.

Notice:

The changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Caution:

- 1 If you find some parts of the monitor display discolored due to magnetic fields generated by electrical facilities or appliances, turn off the monitor for at least 15 minutes. The degaussing circuit of the monitor will eliminate the discoloration.
- 2 Do not remove the monitor from its swivel base while the power is on to prevent discoloration. If discoloration occurs, follow the above-mentioned procedure for adjustment.
- 3 Shielded power cord and interface cable, if any, must be used in order to comply with the emission limits of FCC Class B digital device.

CE Declaration

CE Declaration

This monitor complies with 72/23/EEC and 89/336/EEC modified by 92/31/ECC. These directives refer to EMC.

Canadian Department of Communications Regulatory Statement

This digital apparatus does not exceed Class B limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.



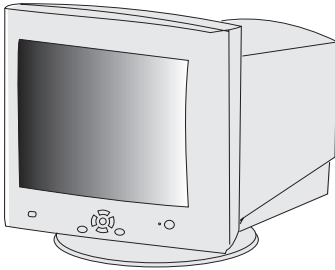
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Chapter 1

Unpacking the Package

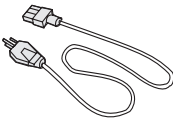
Check following items. If they are missing or damaged, consult your place of purchase immediately.



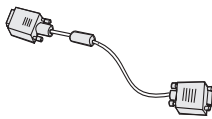
Acer P211 color monitor



User's manual



Power cord



15-pin D-SUB
signal cable



Macintosh adapter
(Optional)



Locate the model name and the serial number labeled on the back of your monitor. Write down the related information of your monitor and dealer in the space on page iii for future reference.

Features

Super-fine Dot Pitch	With 0.25mm super-fine dot pitch and anti-static coating, Acer P211 color monitors offer strikingly sharp and high resolution image up to 1920 x 1440.
Wide Range AutoScan	Horizontal frequency ranges from 30KHz to 115 KHz to support 1600 x 1200 @ 85Hz resolution. Flicker-Free design for vertical frequency of up to 160Hz.
<i>i key</i> (Fuzzy Auto calibrating)	Pressing the <i>i key</i> , the monitor will automatically adjust display's size and position to the optimum. No re-configuration or adjustment is needed when a user changes display mode.
Low radiation	Acer P211 is not only in compliance with MPRII, but also meets strictest low radiation regulations of "MPRII" and "TCO'99".
Users and Environment	Acer P211 is produced by the ISO 14001 certified manufacturer, and in compliance with the global environmental labelling scheme -TCO'99 which covers not only standards regarding emissions, energy efficiency, electrical and fire safety, but also ergonomic qualities, and ecological concerns.
Plug'n Play Compatibility	Supporting VESA DDC 2B™ standards, Acer P211 is compatible with Plug'n Play feature of Windows® 95 / 98 / 2000.

Power Management

The Power management of this monitor complies with these VESA power saving modes:

Mode	Power Consumption	Horizontal Syne	Vertical Sync	LED
On	< 150W Max.	On	On	Green
Stand-by	< 5 W	Off	On	Amber
Suspend	< 5 W	On	Off	Amber
Off	< 5 W	Off	Off	Amber

Factory Preset Timings

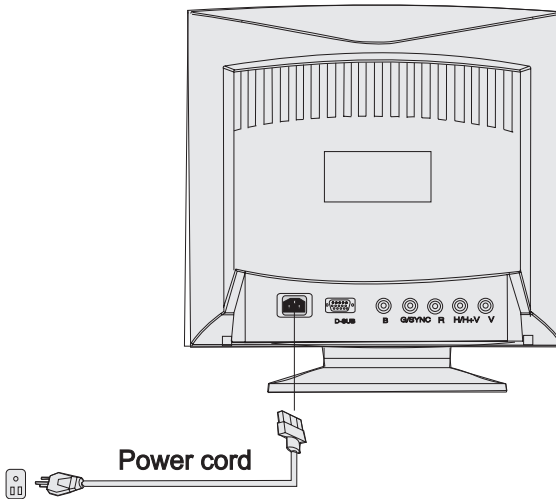
Resolution	Vertical Frequency (Hz)	Horizontal Frequency (KHz)
640 × 400	70	31.47
640 × 480	60	31.47
800 × 600	75	46.88
1024 × 768	75	60.02
1024 × 768	85	68.68
1280 × 1024	75	79.98
1280 × 1024	85	91.15
1600 × 1200	75	93.75
1600 × 1200	85	106.00
1920 × 1440	75	112.50

**** All above timings are non-Interlace timings.**

Chapter 2

Installing the Monitor

This monitor is equipped with an autosensing universal compatible power supply for voltage ranges 100-120/200-240V AC, 50~60Hz. Please confirm the line voltage designation at the rear panel of the monitor before connecting the machine.



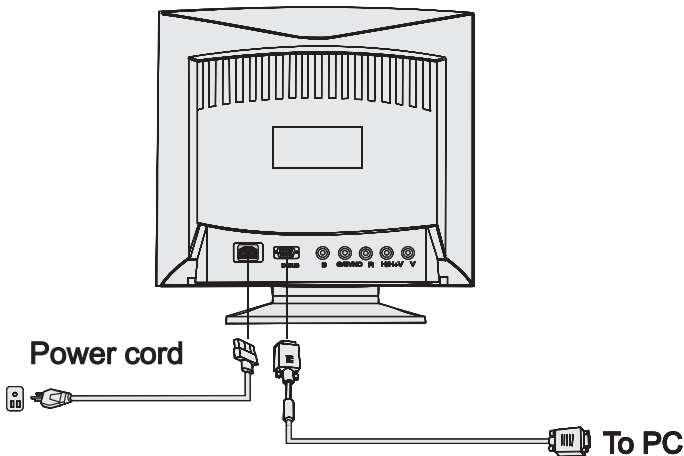
- 1) Make sure that the system power is turned off.
- 2) Please refer to the instructions below to connect the signal cable through D-SUB or BNC.
- 3) Connect the power cord to the monitor and attach it to power source.
- 4) Turn on the computer and the monitor.

Connecting the Signal Cable

Your Acer P211 provides both D-SUB and BNC signal connectors. The D-SUB or BNC signals can automatically be detected by its microprocessor.



Connecting through D-SUB signal connector

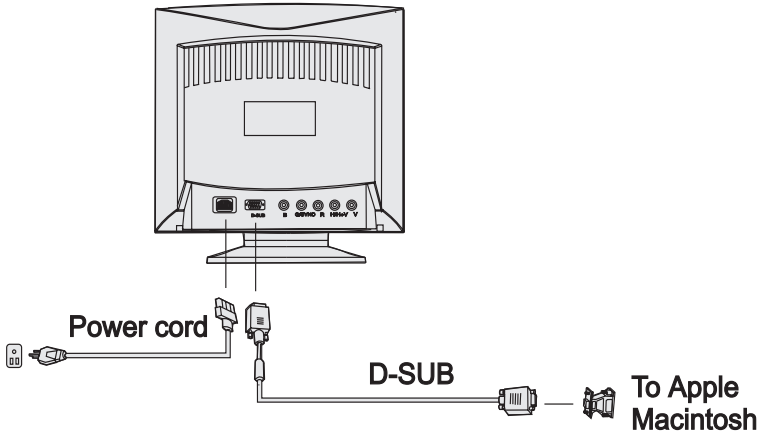


- 1) Make sure that the system power is turned off.
- 2) Connect the computer end of the D-SUB cable to the 15-pin output connector on the video board of your computer.
- 3) Connect the monitor end of the D-SUB cable to the D-SUB receptacle on the back of the monitor.



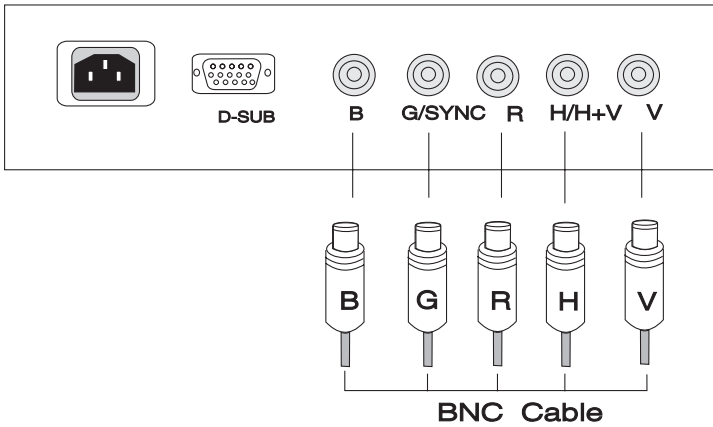
Connecting to An Apple

If you connect the monitor to an Apple Macintosh through a D-Sub cable, you need to add the Macintosh adapter to connect the video signal port of your computer and the monitor signal cable. Before connecting the adapter please refer to the user's guide of the adapter to set the switches of the adapter.



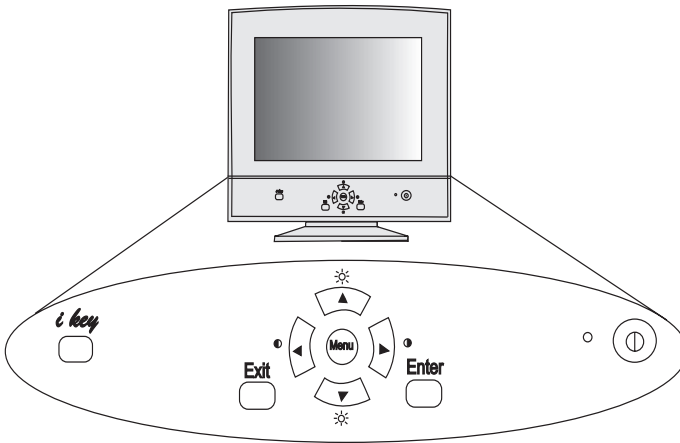


Connecting through BNC Signal Connector



- 1) Make sure that the system power is turned off.
- 2) Connect the computer end of the BNC cable to the output connector on the video board of your computer.
- 3) Connect the monitor end of the BNC cable to the BNC receptacle on the back of the monitor.

Chapter 3 A Look at the Control Panel



- **Menu key** : enters or changes Main menus. There are three main menus.
- **Enter key** : enters sub-menus or selects items.
- **Exit key** : goes back to main menu (auto save), or leaves OSD.
- **▲ & ▼ key** : scrolls the light coloured bar up or down and represents HOT KEY for brightness adjustment.
- **◀ & ▶ key** : scrolls the light coloured bar left or right and represents HOT KEY for contrast adjustment.
- **i key** : is used for Fuzzy Automatic calibration adjustment.

Making Adjustments

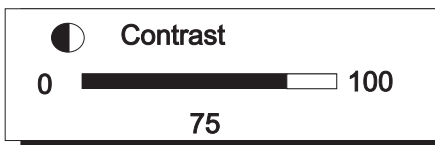
i key (Fuzzy Auto Calibration)

Just push the *i key*, then the monitor will automatically adjust display's size and position to the optimum. No re-configuration or adjustment is needed when a user changes display mode.

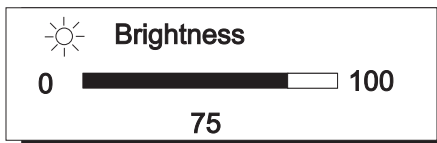
The *i key* function is different from "Reset" function. "Reset" function for display's geometry, size and position only works under the factory preset timings (please see page 3). The *i key* function will work under "ANY" display timings which Acer P211 can support.

Hot Keys

Press ◀ or ▶ key to adjust contrast directly.



Press ▲ or ▼ key to adjust brightness directly.

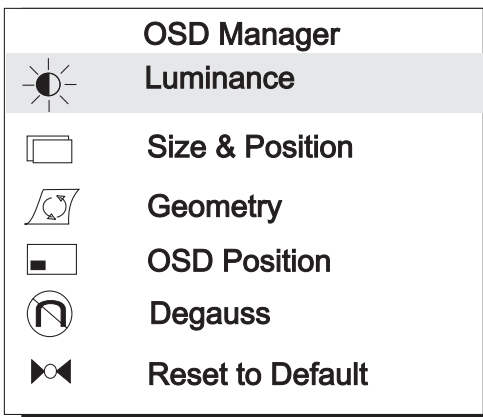


OSD Operation

- 1) Press **Menu** key to enter or change Main menus (there are three main menus)
- 2) Press **▲** or **▼** keys to scroll light coloured bar to desired items.
- 3) Press **Enter** key to enter sub-menus.
- 4) Press **◀**, **▶** (**▲**, **▼**) key to do the adjustments. If the sub-menu contains multiple items. Press **▲** or **▼** keys to scroll light coloured bar to desired items. Then press **◀** or **▶** key to adjust as required.
- 5) Press **Exit** key to save and return to main menus.
- 6) Press **Exit** key to save and leave OSD

 **Reset to the factory default settings, please see General Settings Reset and Color Temperature Reset.**

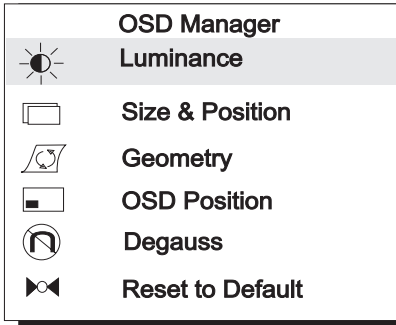
Main Menu 1 Display Control





This main menu includes six items. Scroll the light coloured bar to desired items and press **Enter** to sub-menus.

Luminance

Contrast and Brightness adjustments

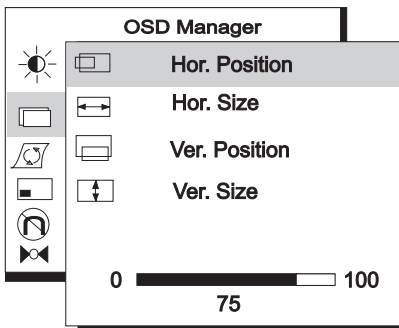



 **Contrast** adjusts the difference between the light and dark areas.


 **Brightness** adjusts the brightness of the display.

Size & Position


Display size and position adjustment



 **Hor. Position** adjusts the horizontal position of the display.

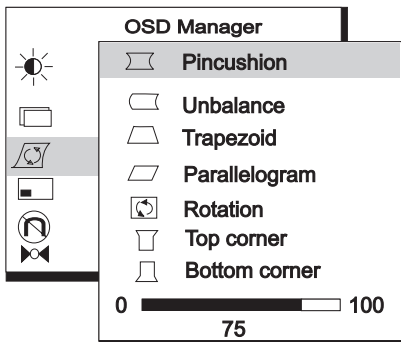
 **Hor. Size** adjusts the width of the display.

 **Ver. Position** adjusts the vertical position of the display.


 **Ver. Size** adjusts the vertical height of the display.

Geometry

Advanced geometry adjustments



 **Pincushion** controls the straightness of the vertical edges of the display.

 **Unbalance** adjusts balance when the sides of display are bowed towards left or right

 **Trapezoid** makes the vertical edges of the display parallel.

 **Parallelogram** corrects image leaning left or right.

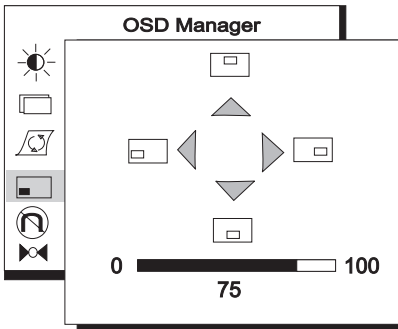
 **Rotation** corrects screen tilt.





 **Top Corner** adjusts the edges on the top corners of the screen image.

 **Bottom Corner** adjusts the edges on the bottom corners of the screen image.

OSD Position

OSD position adjustments



-  adjusts the OSD menu position up.
-  adjusts the OSD menu position down.
-  adjusts the OSD menu position left.
-  adjusts the OSD menu position right.

Degauss

Manual Degauss. To eliminate color shading or impurity induced by magnetism, press **Enter** to active Degauss function.

Reset to Default

Reset the monitor to the default factory settings including H/V position, H/V size, Pincushion, Unbalance, Trapezoid, Parallelogram, Rotation, Corner, H/V Convergence, H/V Moie and Moire. For preset timings, in order to reset to factory default values, press **Enter**. To reset color Temperature, please see page 15.

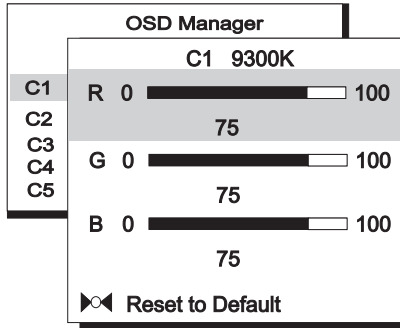
Main Menu 2 Color Control

OSD Manager Color Adjustment	
C1	9300K
C2	6500K
C3	5500K
C4	7100K
C5	11500K

This main menu is defined as color weight adjustment. C1 ~ C5 are color storage areas, which are factory preset but can also be modified by user. The preset information as follows :

Factory Default	Color Temperature
C1	9300K
C2	6500K
C3	5500K
C4	7100K
C5	11500K

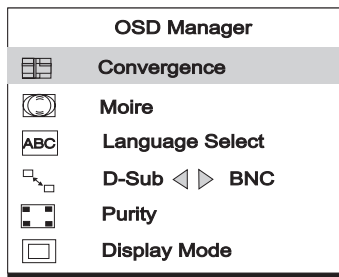
Scroll the light coloured bar to desired color temperature, then press **Exit** to save the setting and leave OSD. Press **Enter** key to sub-menus and adjust RGB color weight.



This sub-menu adjusts RGB (Red, Green, Blue) color weight. Press ▲ or ▼ keys to scroll light coloured bar to desired items then press ◀ or ▶ key to do the adjustments.

✎ To reset to factory default values, scroll light coloured bar to item "▶◀ Reset to Default".

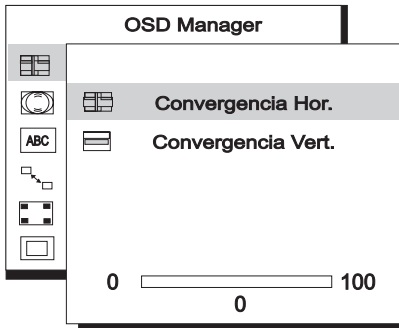
Main Menu 3 Advanced Display Control





This main menu includes six items, scroll light coloured bar to desired items. Press **Enter** key to enter sub-menus.

Convergence

Horizontal & Vertical Convergence adjustment




 **Hor. Convergence:** adjusts Horizontal Convergence

 **Ver. Convergence:** adjusts Vertical Convergence

Convergence is the monitor's ability to precisely illuminate specific phosphors and line them up properly in order to produce pure color. Displayed characters and images may appear fuzzy or have tinges of red, green, or blue if the electron beams do not converge correctly.

Acer P211 offers a convergence adjustment feature. To properly adjust convergence, it is best to have an image that makes it easy to see any convergence error: A black background with white letters or lines is recommended. When adjusting convergence, look at the adjustment across the whole screen. When adjusting horizontal convergence, look at the left and right edges of vertical lines or characters. When adjusting vertical convergence, look at the top and bottom edges of horizontal lines or characters. The monitor is properly adjusted when the effects of red and blue tinges are minimized.

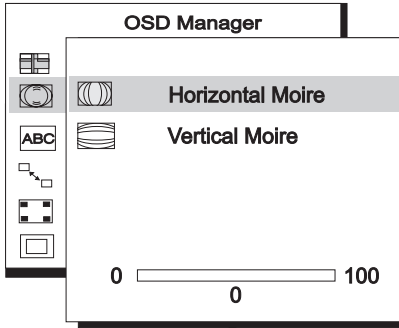
 ***The convergence adjustment adjusts the entire screen. It is not possible to limit adjustment to specific screen areas.***

 ***Factory default setting values : 0***



Moire

Horizontal & Vertical Moire adjustment



Horizontal Moire: adjusts horizontal Moire



Vertical Moire: adjusts vertical Moire

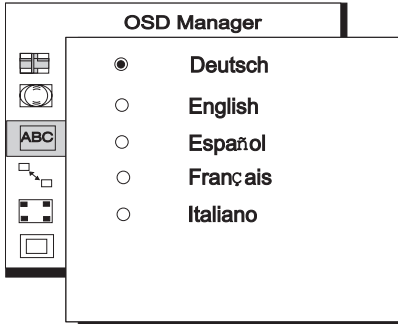
Moire refers to an interference pattern of dark wavy lines on the screen. It is an interference phenomenon caused by the relationship between the phosphor layout and the imaging signal. In fact, it is often considered an indication of good focus level.

It is especially noticeable when using a light-gray or every-other-dot pattern. Moire cannot be eliminated. However, it can be reduced with the moire reduction feature.

Moire can be reduced by adjusting the iscreen moire reduction function. Prior to adjustment, set the screen to a full white pattern so that moire will be visible. After this adjustment, make changes to a different screen background in order to reduce moire even further.

If the picture is unstable when you adjust the moire reduction setting, over-adjustment has occurred. Please lower the moire reduction setting level. (Factory default setting value : 0).

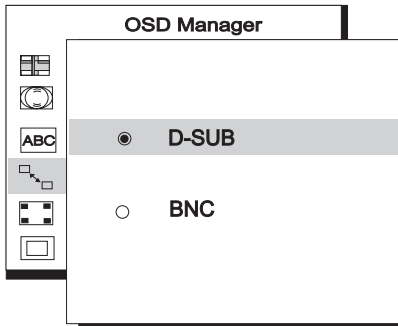
Language Select



The sub-menu is defined as language selection and there are five languages to choose from.

D-Sub ◀▶ BNC

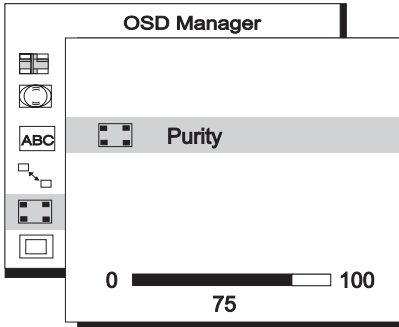
Input connector select.



There are two kinds of input connectors for Acer P211. One is a BNC connector, the other is a DB-15. The P211 is capable of automatically detecting the type of connector used (either BNC or DB-15). If the two connectors are connected simultaneously, the user can select the desired connector.

Purity

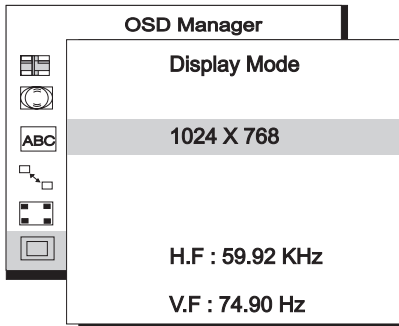
Colour purity adjustment



To adjust Purity, choose a full white picture and adjust to get a pure white picture at the corner of the screen image.

Display Mode

Current resolution, horizontal and vertical frequency status presentation.



Timing Setting

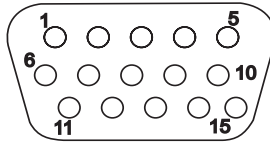
By making adjustments to your video card settings, you can set the timing and the refresh rate according to your preferences. The monitor will automatically save the settings. Your monitor can accept a vertical frequency ranging from 50 Hz to 160 Hz and an horizontal frequency from 30 KHz to 115 KHz. However, due to different video card and resolution settings, we recommend that you do not exceed the maximum refresh rate, 160 Hz for vertical frequency and 115KHz for horizontal frequency to avoid possible damage to your monitor.

Resolution	Recommended Maximum Vertical Refresh Rate(Hz)
640 × 480	160
800 × 600	160
1024 × 768	143
1280 × 1024	108
1600 × 1200	92
1920 × 1440	77

 ***To set the timing and the refresh rate, please see the user's guide of your video card.***

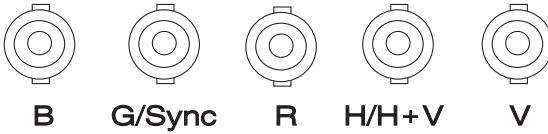
Pin Assignments

D-SUB Connectors



Pin No	Signal		
	Separate	Composite	Sync-on-green
1	Red	Red	Red
2	Green	Green	Green + SYNC
3	Blue	Blue	Blue
4	NC	NC	NC
5	GND	GND	GND
6	R-GND	R-GND	R-GND
7	G-GND	G-GND	G-GND
8	B-GND	B-GND	B-GND
9	PC5V(For DDC)	PC5V(For DDC)	PC5V(For DDC)
10	GND-SYNC	GND-SYNC	GND-SYNC
11	GND	GND	GND
12	DDC Data	DDC Data	DDC Data
13	H-SYNC	H/V-SYNC	Not Used
14	V-SYNC	Not Used	Not Used
15	DDC Clock	DDC Clock	DDC Clock

BNC Connectors



Pin Assignment	Signal		
	separate	composite	sync-on-green
B	Blue	Blue	Blue
G/SYNC	Green	Green	Green + SYNC
R	Red	Red	Red
H/H+V	H-SYNC	H/V-SYNC	NC
V	V-SYNC	NC	NC

Chapter 4

Troubleshooting

Make sure that your monitor is properly installed. If you have encountered any trouble in using this product, for hardware installation problems, see **Chapter 2, Installing the Monitor**. If the problems persist, check this chapter for possible solutions. If you cannot find Acer P211 on the Windows 95/98/2000 monitor list, you would have to update the Windows 95/98/2000 setup information for Acer P211. You can download the update file from the AcerCM web site (<http://www.acercm.com.tw>)

§ If there is no picture on the screen, check:

- Power outlet type.
- Video sync signal. The video sync signal must be specified for the monitor.
- Power saving mode. Press any key & use the mouse to deactivate the mode.
- Signal cable connector pins. If pins are bent or missing, consult your dealer.

§ If the picture is scrolling or unstable, check:

- Signal connector pin assignments. Replace with a functional one if inoperative.
- Signal cable connector pins. If pins are bent or missing, consult your dealer.
- Graphics card. See if the settings are made properly.
- Scanning frequency. Change the settings of your graphics card to acceptable options
- Remove magnetic objects near the monitor.
- Over-adjusting moire reduction setting, please check the moire reduction setting level. See **Chapter 3, A Look at the Control Panel**.

§ If the characters look dark, the picture is too small, too large or not centered etc.

- Adjust related settings. See **Chapter 3, A Look at the Control Panel**.

§ If colors are impure.

- Check signal cable connector pins. If pins are bent or missing, consult your dealer
- Adjust the Purity setting. See **Chapter 3, A Look at the Control Panel**.

Maintenance

- ✘ Do not expose the monitor to direct sunlight or heat.
- ✘ Do not spill liquid on the monitor.
- ✘ Do not attempt to open the monitor. You may be hurt by electric shock. For service, call your dealer.
- ✘ Do not use your monitor when magnets or electronic products are operating nearby.
- ✘ Do not use harsh chemicals or strong cleaning solvents to clean the monitor screen. Wipe it with mild solution applied on clean and soft cloth.
- ✘ Do not place anything on your monitor. Bad ventilation may elevate temperature within the monitor.



Need More Help?

If your problems remain after checking this manual, please contact your place of purchase or e-mail us at: DPLservice@acercm.com.tw

Chapter 5 Specifications

Picture	
Size	21"(53.34cm) diagonal
Dot Pitch	0.25mm dot pitch
Surface/Transmission	AR,AS/semi-tinted
Maximum Viewable Size	20" (51 cm) diagonal
Video Input	15-pin, mini D-SUB Connector/BNC Connector
Bandwidth	290MHz
Display Area	390mm(H) × 295mm(V) (Preset) 408mm(H) × 306mm(V) (Full Scan)
Power Supply(Universal)	
Input voltage	100~120/200~240 VAC, 50~60 Hz (Universal compatible)
Power consumption	150 Watts max./165 Watts max.(With USB)
External Controls	Power switch, <i>ikey</i> auto-calibration, Contrast, Brightness, Horizontal Position, Horizontal Size, Vertical Position, Vertical Size, Pincushion, Unbalance, Trapezoid, Parallelogram, Rotation, Top Corner, Bottom Corner, Color Weight, Degaussing, Horizontal Convergence, Vertical Convergence, Horizontal Moire, Vertical Moire, BNC and DB-15 Selection, Reset, Language Select, Purity
Max. Resolution	1920 × 1440
Horizontal Frequency	30-115 KHz

Vertical Frequency	50-160 Hz
Dimensions (with stand)	508mm(W) x 515mm(H) x 512mm(D)
Weight	30Kg
Ambient Temperature	
Operating	+5 °C ~ +40 °C
Storage	-20 °C ~ +60 °C
Humidity	
Operating	20% ~ 90%
Storage	10% ~ 90%
X-Radiation	DHHS, PTB
Regulatory Compliance	FCC-B, UL, FTZ-B, CSA, BZT-B, CE, D.N.S.F, TÜV-GS/ Ergonomics,VCCI, ISO-9241-3, ISO-9241-8, CNS 13438, C-tick, MPR-II, TCO99