

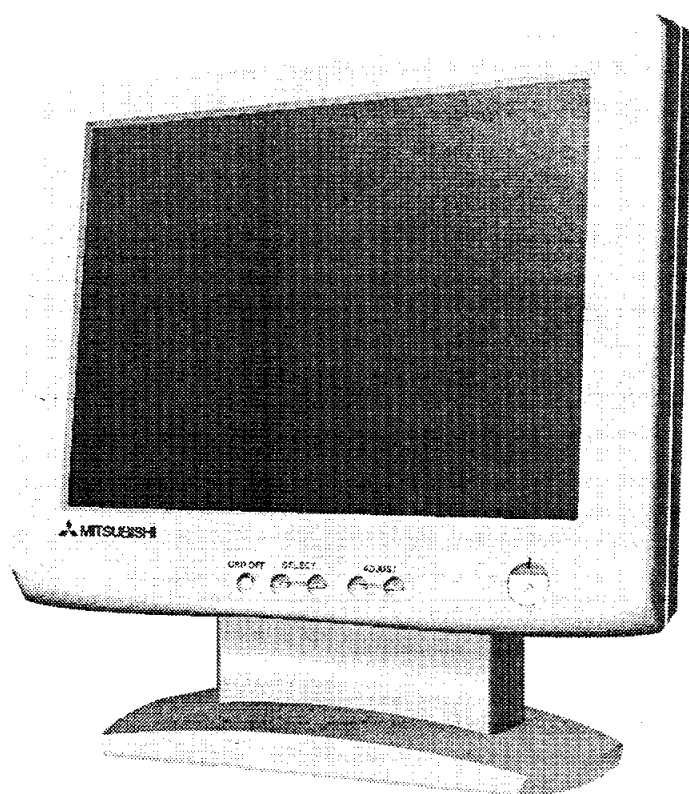


AUTO-SCANNING WITH DIGITAL CONTROL

LCD COLOR DISPLAY MONITOR

LXA530W / LSA810W

USER'S GUIDE



For future reference, record the serial number of your display monitor in the space below:

SERIAL No.

The serial number is located on the rear cover of the monitor.

CAUTION

Do not remove the monitor cabinet as this can expose you to very high voltages and other hazards.

WARNING!

This product is not designed for use in life support devices and Mitsubishi Electric Corporation makes no representations to the contrary. Life support devices are those devices which are used to measure, diagnose, or evaluate the tissue, systems or functions of the human body; or other devices employed to support or sustain life or good health.

ANMERKUNG:

Dieser Monitor erfüllt die Anforderungen der deutschen Ergonomie-Norm ZH1/618/10.80 bei Verwendung der beiden folgenden Timing:

LXA530W:

Auflösung	Videoeingang	fH(kHz)	fv(Hz)	Interlace/Non-Interlace
1024x768	Analog RGB, 0.7Vs-s	48.4	60	Non-Interlaced

LSA810W:

Auflösung	Videoeingang	fH(kHz)	fv(Hz)	Interlace/Non-Interlace
1280x1024	Analog RGB, 0.7Vs-s	80	75	Non-Interlaced

Zur Trennung vom Netz ist der Netzstecker aus der Steckdose zu ziehen, welche sich in der Nähe des Gerätes befinden muß und leicht zugänglich sein soll.

Das Gerät stellt sich automatisch auf die zutreffende Nennspannung ein.

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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:

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- 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.

NO USER SERVICEABLE PARTS INSIDE. DO NOT ATTEMPT TO MODIFY THIS EQUIPMENT. IF MODIFIED, YOUR AUTHORITY TO OPERATE THIS EQUIPMENT MIGHT BE VOIDED BY FCC.

Declaration of Conformity - United States only

Product Name: 15 in. (38cm) Color Display Monitor
Type: LXA530W
Brand Name: MITSUBISHI

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

For questions regarding this declaration, contact:

Mitsubishi Electronics America, Inc.
5665 Plaza Drive, P.O. Box 6007,
Cypress, California 90630-0007

or, call 714-220-2500

To identify this product, refer to the model number found on the product.

Declaration of Conformity - United States only

Product Name: 18.1 in. (46cm) Color Display Monitor
Type: LSA810W
Brand Name: MITSUBISHI

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

For questions regarding this declaration, contact:

Mitsubishi Electronics America, Inc.
5665 Plaza Drive, P.O. Box 6007,
Cypress, California 90630-0007

or, call 714-220-2500

To identify this product, refer to the model number found on the product.

MANUFACTURER DECLARATION FOR CE-MARKING:

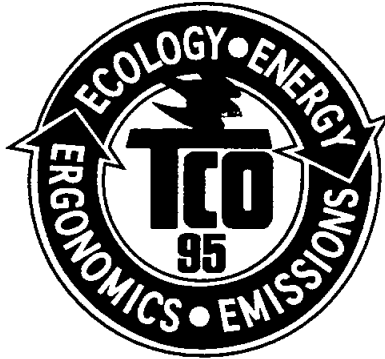
We, Mitsubishi Electric Corp., declare under our sole responsibility, that this product is in conformity with the following standards:

EN60950
EN55022 Class B
EN50082-1

following the provisions of:

73/23/EEC Low Voltage Directive
89/336/EEC EMC Directive

As an ENERGY STAR Partner, Mitsubishi Electric Corporation has determined that this product meets the ENERGY STAR guidelines for energy efficiency.



Congratulations! You have just purchased a TCO '95 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 to the further development of environmentally-adapted electronic 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 electronic equipment are concerned is that environmentally harmful substances are used both in the products and during their manufacture. Since it has not been possible so far for the majority of electronic 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 both a working and natural environment viewpoints. Since all types 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. Electronic equipment in offices consumes an enormous amount of energy, since it is often routinely left running continuously.

What does labelling involve?

This product meets the requirements for the TCO '95 scheme, which provides for international environmental labelling of personal computers. The labelling scheme was developed as a joint effort by the TCO (The Swedish Confederation of 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 among other things restrictions on the presence and use of heavy metals, brominated and chlorinated flame retardants, CFCs (freons), and chlorinated solvents. 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, along with physical and visual ergonomics and good usability.

In and after the middle of this page, 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

E-mail (Internet): development@tco.se

Current information regarding TCO'95 approved and labelled products may also be obtained via the Internet, using the address:

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

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Environmental Requirements

Brominated flame retardants are present in printed circuit boards, cabling, casings and housings, and are added to delay the spread of fire. Up to 30% of the plastic in a computer casing can consist of flame-retardant substances. These are related to another group of environmental toxins, PCB, and are suspected of giving rise to similar harm, including reproductive damage in fish-eating birds and mammals. Flame retardants have been found in human blood and researchers fear that they can disturb foetus development.

Bio-accumulative* TCO'95 demands require that plastic components weighing more than 25 grammes must not contain flame retardants with organically bound chlorine or bromine.

Lead

can be found in picture tubes, display screen, solder and capacitors. Lead damages the nervous system and in higher doses, causes lead poisoning.

The relevant bio-accumulative* TCO'95 requirement permits the inclusion of lead, as no replacement has yet been developed.

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.

The relevant bio-accumulative *TCO'95 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

Is sometimes found in batteries, relays and switches. Mercury damages the nervous system and is toxic in high doses. The relevant bio-accumulative*TCO'95 requirement states that batteries may not contain more than 25 ppm (part per million) of mercury.

demands require that no mercury is present in any of the electrical or electronic components concerned with the display unit.

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

The relevant TCO'95 requirement: Neither CFCs nor HCFCs may be used during manufacture of the product or its packaging.

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

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Note : This manual is designed for use with LXA530W/LSA810W color LCD monitor.

Congratulations on your purchase of the LXA530W/LSA810W high resolution color LCD monitor. Mitsubishi designed this monitor to provide you with years of reliable trouble-free operation. Once again, thank you for selecting our product and welcome to Mitsubishi!

This guide tells you how to connect, adjust and care for your LXA530W/LSA810W monitor. This guide also provides technical specifications and instructions for troubleshooting any basic problems you may experience with your monitor.

1.1 Features

The LXA530W is a 38cm/15", LSA810W is a 46cm/18.1", intelligent, microprocessor-based LCD monitors compatible with most analog RGB (Red, Green, Blue) display standards, including PS/V®, PS/2®, Apple® Macintosh® Centris, Quadra, Macintosh II family, and Power Macintosh signals. It provides crisp text and vivid color graphics with VGA, SVGA, XGA (non-interlaced), and most Macintosh compatible color video cards.

- The monitor's wide auto-scanning compatibility range makes it possible to upgrade video cards or software without purchasing a new monitor.
- Digitally controlled auto-scanning is done using an internal microprocessor; for horizontal scan frequencies between 31.0kHz and 60.5kHz for LXA530W, between 31.0kHz and 80.5kHz for LSA810W, and vertical scan frequencies between 30.0Hz and 85Hz for both monitors. The microprocessor-based intelligence allows the monitors to operate in each frequency mode with the precision of a fixed frequency monitor.
- The monitors contain resident memory for pre-programmed screen display standards and is also capable of storing additional user adjustment parameters.
- The LXA530W is capable of producing a maximum horizontal resolution of 1024 dots and a maximum vertical resolution of 768 lines typically, the LSA810W is capable of producing a maximum horizontal resolution of 1280 dots and a maximum vertical resolution of 1024 lines typically. The displays are well suited for Windows environments.
- The monitors have power management function accorded to VESA-DPMS-standard. To save energy, the monitor must be connected to a computer system compliant with the VESA DPMS-standard. (Refer to your computer and/or video card instructions for proper operation.)
- For use in a variety of applications, the monitors comply with UL 1950, CSA C22.2 No.950 and EN60950 for safety, FCC Class-B, VCCI Class-B and EN55022 Class-B for EMI, MPR-II, ISO 9241-3, ISO9241-7 and ISO 9241-8 for ergonomics. The monitor also complies with TCO'95 guideline for environmental safe use.
- Digital Chassis design for lighter, more compact enclosure and increased screen performance.
- The monitors comply with Video Electronics Standards Association (VESA™) DDC1/2B(EDID) specification. If your computer provides DDC1/2B(EDID) function, setup will be done automatically.
- Two display modes, Text mode and Graphic mode, provides a suitable screen image for working purpose.
- Auto Adjustment function provides adjustment-free when changing the signal timing.

NOTE

The LXA530W and LSA810W don't allow any form of "Sync-On-Green" signal.

1.2 Internal Preset Memory Capability

To minimize adjustment needs, the factory has preset popular display standards into the monitor, as shown in Table 1. If any of these display standards are detected, the picture size and centering are automatically adjusted. All of the factory presets may be overwritten by adjusting the user controls. The monitor is capable of automatically storing up to 7 additional display standards. The new display information must differ from any of the existing display standards by at least 0.8kHz for the horizontal scan frequency or 1Hz for the vertical scan frequency or the sync signal polarities must be different.

Table 1. Memory Buffer Factory Presets

Resolution	Fh (kHz)	Fv (Hz)	Polarity	
			H	V
640 x 480 N.I.	35.0	66.7	-	-
832 x 624 N.I.	49.7	74.6	-	-
※1152 x 870 N.I.	68.7	75.0	-	-
640 x 400 N.I.	24.8	56.4	-	-
640 x 350 N.I.	31.4	70.0	+	-
640 x 480 N.I.	31.5	59.9	-	-
640 x 480 N.I.	37.5	75.0	-	-
640 x 480 N.I.	43.3	85.0	-	-
720 x 400 N.I.	31.5	70.0	-	+
800 x 600 N.I.	37.9	60.3	+	+
800 x 600 N.I.	48.1	72.2	+	+
800 x 600 N.I.	46.9	75.0	+	+
800 x 600 N.I.	53.7	85.0	+	+
1024 x 768 N.I.	48.4	60.0	-	-
1024 x 768 N.I.	56.5	70.1	-	-
1024 x 768 N.I.	58.1	72.1	-	-
1024 x 768 N.I.	60.2	75.0	+	+
※1024 x 768 N.I.	68.7	85.0	+	+
※1280 x 1024 N.I.	64.0	60.0	-	-
※1280 x 1024 N.I.	80.0	75.0	+	+

※ : Available with only LSA810W and not available with LXA530W.

1.3 Power Management Function

The monitor has a power management function which reduces the power consumption of the monitor when not in use.

When the horizontal sync signal and/or vertical sync signal is off, after about 10 seconds the monitor is switched to a power saving mode which reduces the monitor power consumption to less than 3W. When the monitor is in power saving mode, the screen is off and the power indicator will illuminate at amber. After the signals are restored, picture will be displayed within about 3 seconds.

1.4 DDC

The monitor includes the DDC1 and DDC2B feature. DDC (Display Data Channel) is a communication channel over which the monitor automatically informs the computer about its capabilities (e.g. each supported resolution with its corresponding timing).

DDC is routed through previously unused pins of the 15-pin VGA connector.

The system will perform "Plug and Play" feature if both, monitor and computer, implement the DDC protocol.

1.5 Display Mode Selection ("DISPLAY MODE" P19)

The following two display modes are available. You can select either mode suitable to your work, on the OSD ( P19).

Text Mode

The contrast is emphasized than the accuracy of the color appearance in this mode. This mode is suitable for such works that the accuracy of the displayed colors is not so important, e.g. document making, calculation, database making, etc.

Graphic Mode

The accuracy of the color tone is emphasized in this mode. This mode is suitable for such works that the accuracy of the displayed colors is important, e.g. photograph processing, making of illustration, etc.

NOTE

- When you receive the monitor, "DISPLAY MODE" is set to "GRAPHIC" mode.
- Before selecting "Graphic Mode", perform "AUTO SETUP". If not, the displayed screen may become too bright.
- Before using "Color Matching", set the "COLOR" to "STANDARD", "DISPLAY MODE" to "GRAPHIC". ( P19)

1.6 Auto Adjustment Function ("AUTO ADJUST" P19)

This function is to adjust "CLOCK PHASE" automatically and periodically (once per 30 min.) against changes of the signal condition or ambient temperature and to adjust "CLOCK PHASE", "HORIZONTAL POSITION" and "VERTICAL POSITION" automatically when power on and changing the signal timing.

NOTE

- When you receive the monitor, "AUTO ADJUST" is set to "ON".
- When using the monitor with some computers, "AUTO ADJUST" may function negatively. In that case, set "AUTO ADJUST" to "OFF".
- When "AUTO ADJUST" is set to "ON", you may feel the screen stopping when using mouse or displaying an animation. However, it is not a fault condition and is caused by the "AUTO ADJUST" worked.

1.7 Screen Auto Expand Function ("FULL SCREEN" P19)

This function is to expand the screen automatically. By a smoothing function, you can get a clear screen when the screen is expanded by this function. This function is available in case that a signal of 832 dots by 624 lines or lower is inputted to Model LXA530W, and a signal of 1024 dots by 768 lines or lower is inputted to Model LSA810W.

NOTE

- With some resolution, even if it meets the condition above, the screen is not expanded fully to the screen area.
- With some signal type inputted, the screen is not expanded vertically or horizontally.
- With some resolution, the image may be slightly blurred.

1.8 Location Considerations

When setting up and using the monitor, keep the following in mind:

- For optimum viewing, avoid placing the monitor against a bright background or where sunlight or other light sources may reflect on the display area of the monitor; place the monitor just below eye level.
- Avoid covering the slots or openings of the monitor. Allow adequate ventilation around the monitor so the heat from the monitor can properly dissipate. Avoid putting the monitor into any enclosure that does not have adequate ventilation.
- Avoid exposing the monitor to rain, excessive moisture, or dust, as this can cause a fire or shock hazard.
- Avoid placing the monitor, or any other heavy object, on the power cord. Damage to the power cord can cause a fire or electrical shock.
- When transporting the monitor, handle it with care.
- Avoid giving any shock or scratch to the screen, as the screen is fragile.

1.9 Cleaning Your Monitor

When clean the monitor, please follow these guidelines:

- Always unplug the monitor before cleaning.
- Wipe the screen and cabinet front and sides with a soft cloth.
- If the screen requires more than dusting, apply a household window cleaner to a soft cloth to clean the monitor screen.

CAUTION

Do not use benzene, thinner or any volatile substances to clean the unit as the finish may be permanently marked. Never leave the monitor in contact with rubber or vinyl for an extended time period.

1.10 Unpacking

After you unpack the box you should have all of the items indicated in Figure 1. Save the box and packing materials in case you ship or transport the monitor. Complete and mail in warranty cards.

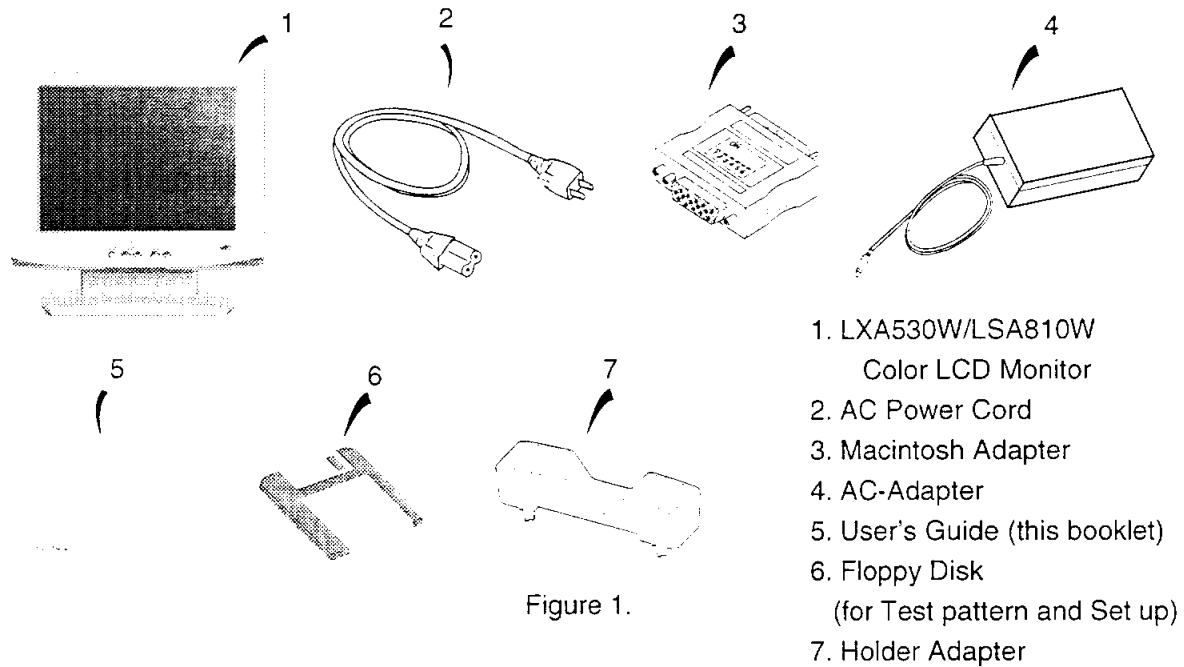


Figure 1.

1.11 Tilt Base

The monitor comes with a tilt base. This enables you to position the monitor to the best angle for maximum viewing comfort.

Screen Position Adjustment

Adjust the tilt of the monitor by placing your hands at opposite sides of the case, as shown in Figure 2. You can adjust the monitor as shown below.

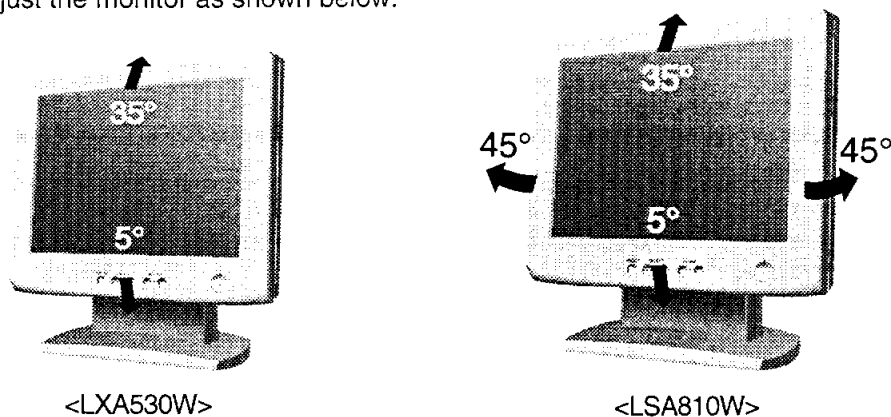


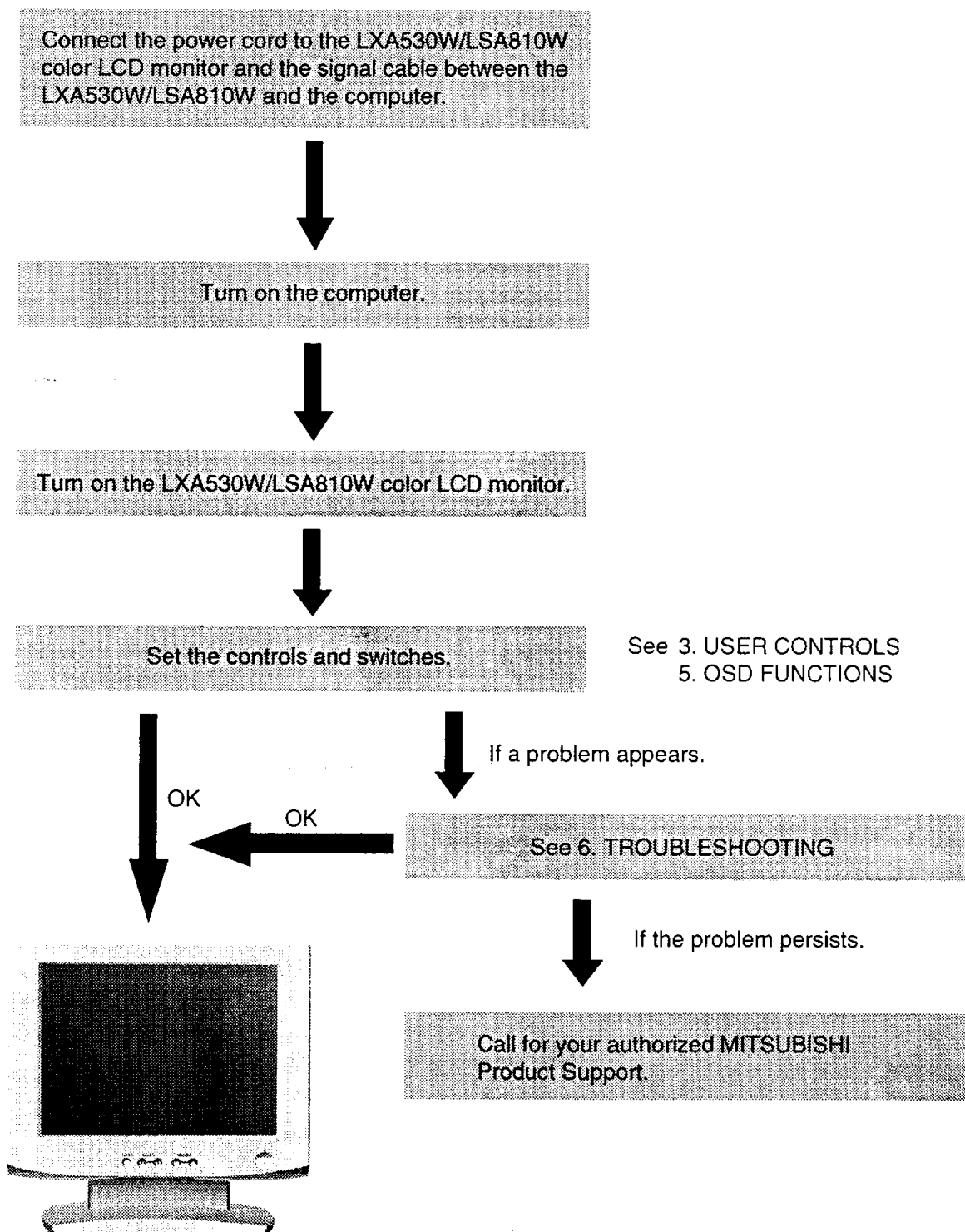
Figure 2.

CAUTION

Keep your fingers away from the pivot area of the tilt base.

1.12 Quick Operation Chart

To summarize the steps in connecting your computer and adapter with LXA530W/LSA810W color LCD monitor and setting the necessary controls and switches, refer to the chart below.



2

CONNECTING THE MONITOR

On the back of the monitor are two plug-in connections: one for the DC power connector and DB9-15P connector for video.

2.1 AC Power Connection

Remove the cable cover. (See. Figure 3.) The DC jack from the AC Adapter is connected into the DC power connector on the back of the monitor. One end of the AC power cord is connected into the AC Adapter, and another end of the AC power cord is plugged into a AC outlet. (See Figure 4.) The monitor's auto-sensing AC Adapter can automatically follow the AC input.

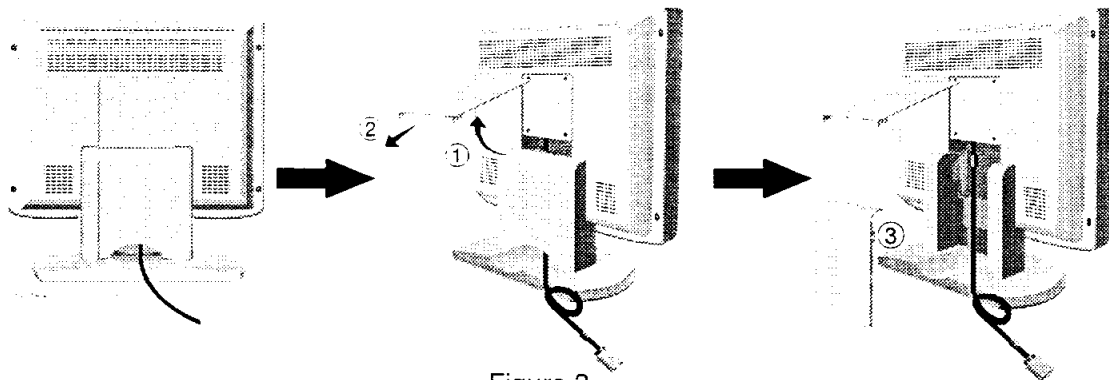


Figure 3.

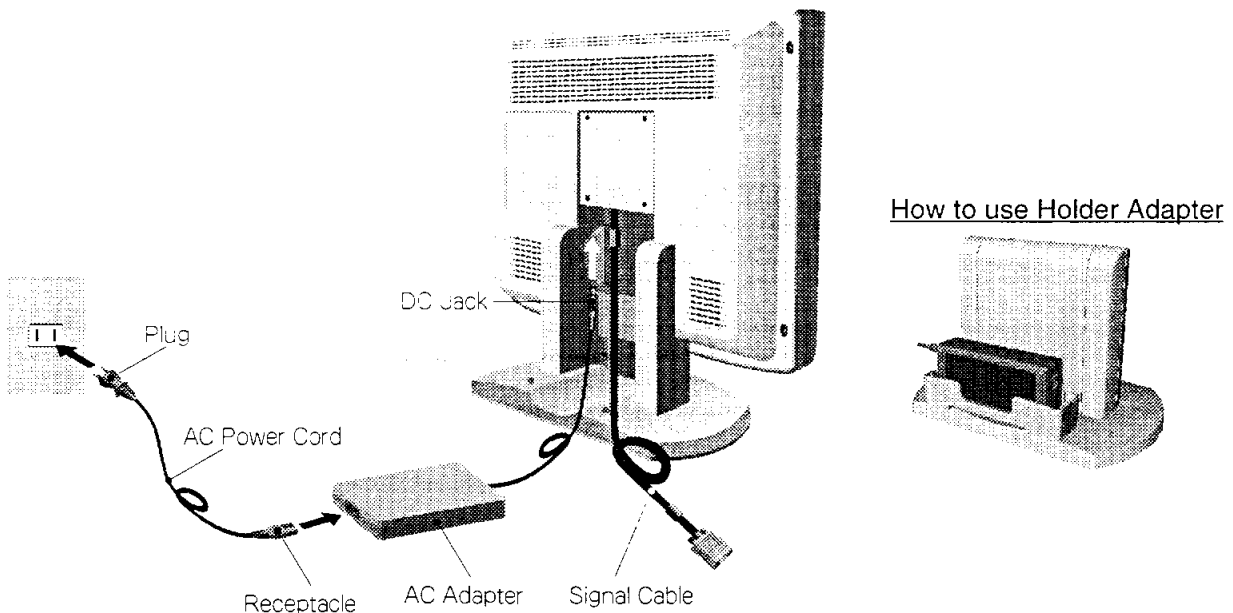


Figure 4.

CAUTION

The socket-outlet shall be installed near the equipment and shall be easily accessible. During servicing, disconnect the plug from the socket-outlet.

Do not use this AC Adapter to other equipments, as this can cause a fire.

Même si le moniteur est mis hors tension il reste toujours alimenté. La prise secteur devrait ainsi être facilement accessible en cas d'urgence.

2.2 Signal Cable Connection

The attached video signal cable provides a DB9-15P connector for the VGA compatible analog RGB outputs on your computer. The RGB signal may be derived from an IBM® PS/2, or compatible Apple Macintosh built-in video. Most third party color cards can also be interfaced using the included Macintosh adapter.

2.2.1 Connecting to Any IBM VGA Compatible System

Figure 5 shows the signal cable connection to the Video Graphics Array (VGA) port in an IBM Personal System/2® Model 50, 60, 70 and 80, or any VGA compatible system.

1. Power off, the monitor and the computer.
2. Connect the one end of the signal cable to the 15-pin connector on the VGA controller card.
3. Power on the computer, then the monitor.
4. After using the system, power off the monitor, then the computer.

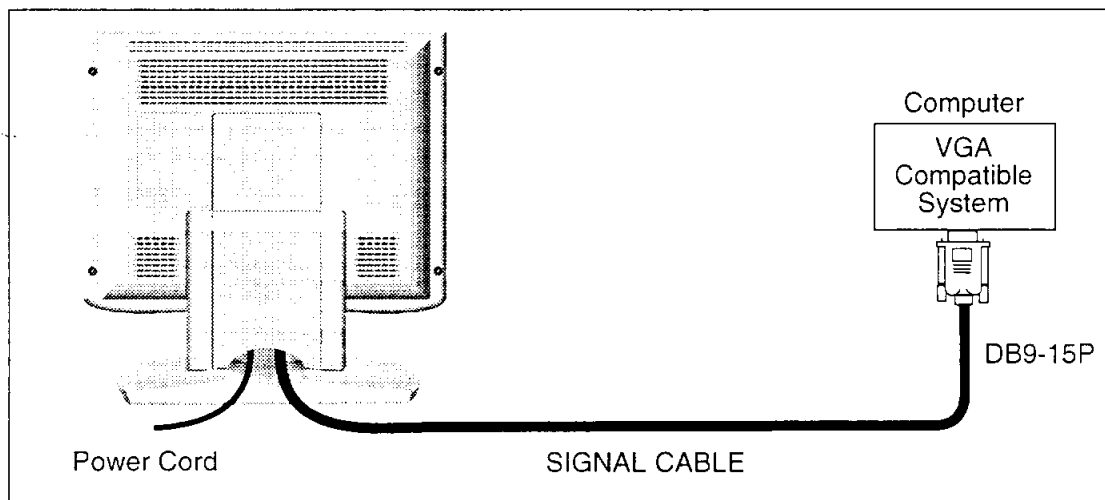


Figure 5.

2.2.2 Connecting to An Apple Macintosh Computer.

Figure 6 shows the signal cable and Macintosh Adapter to the video port in an Apple Macintosh.

1. Power off, both the monitor and the computer.
2. Set the DIP switches of Macintosh Adapter according to the setting chart.
(See 8.1 Macintosh Adapter settings)
3. Connect the 15-pin (DB-15P) end of the Macintosh Adapter to the straight 15-pin connector on the Macintosh video port on the computer or on the video board.
4. Connect the sub-miniature 15-pin (DB9-15P) end of the Macintosh Adapter to the signal cable.
5. Power on the Macintosh, then the monitor.
6. After using the system, power off the monitor, then the Macintosh.

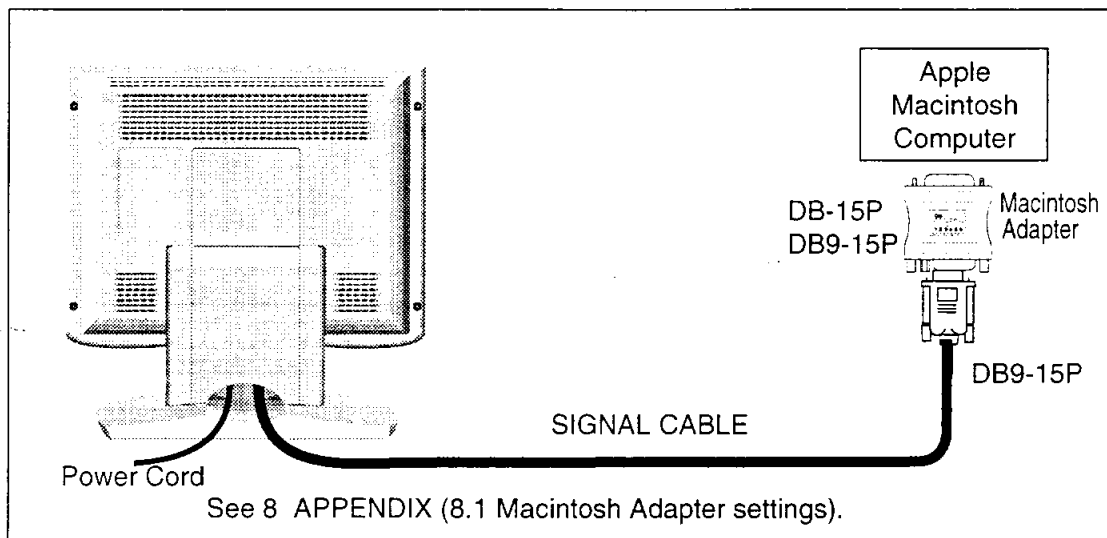


Figure 6.

2.3 Installation of Display Information for Windows®95.

1. Start the Windows®95.
2. Insert the included Floppy Disk.
3. Click on the Start menu and settings to open the Control panel.
4. Double click on "Display".
5. Click on the Settings tab of the Display Properties window.
6. Click on the Settings tab (or Change Display Type...) of the Display Properties window.
7. Click on the "Change....." at the right of the Monitor Type window.
8. Click on "Have Disk..." below the model section in the Select Device window.(screen shot)
9. Click on "OK" of the Installation From Disk window.
10. Click on "Show compatible devices" from the Select Device window.
Confirm your model of "Mitsubishi LXA530W" or "Mitsubishi LSA810W". Click on "OK".
11. Click on "Renew", "Close" (or "OK") in the Change Display Type(or "Change.....") window.
12. Click on "OK" in the Display Properties window.

2.4 Installation of Display Information for Windows®98.

1. Power on the monitor, then the computer.
2. "Hardware Wizard" window will open automatically.
3. Insert the included floppy disk into the computer.
4. Click on "NEXT>" or press "Enter" key until finish the recognition of the monitor.
5. Click on "Finish" to close the "Hardware Wizard" window.

USER CONTROLS

3.1 Control Names

See Figure 7 and 8 for the location of the user controls and indicator.

Each control is identified by number and is described in Clause 3.2 individually.

FRONT

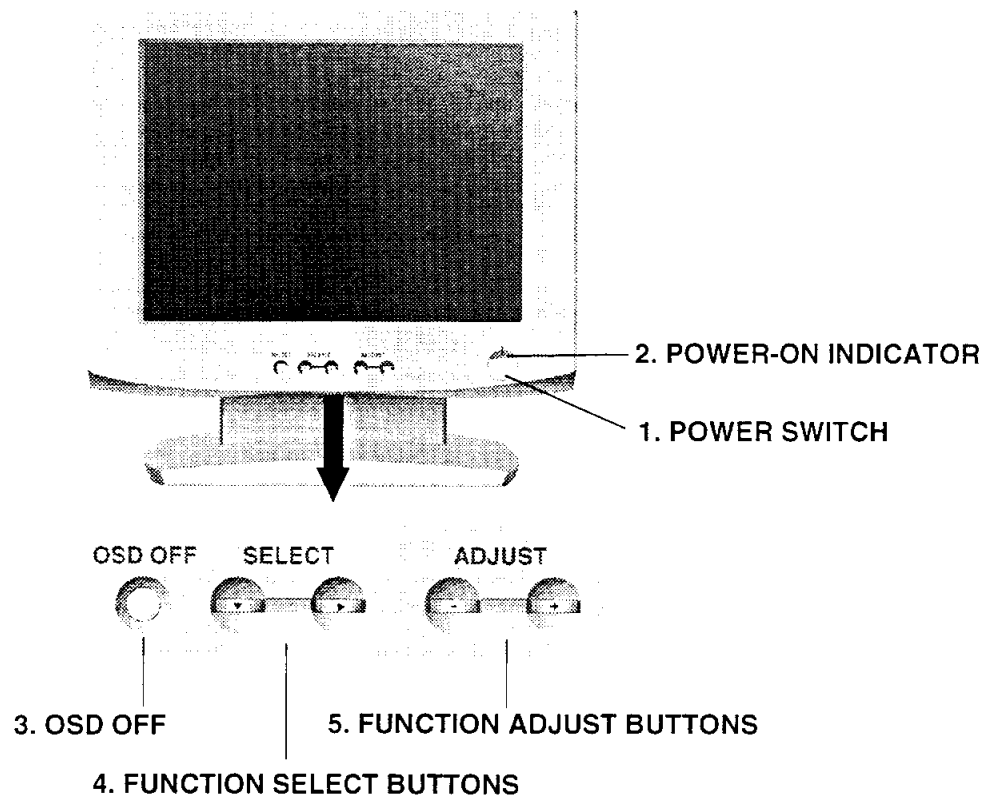


Figure 7.

REAR

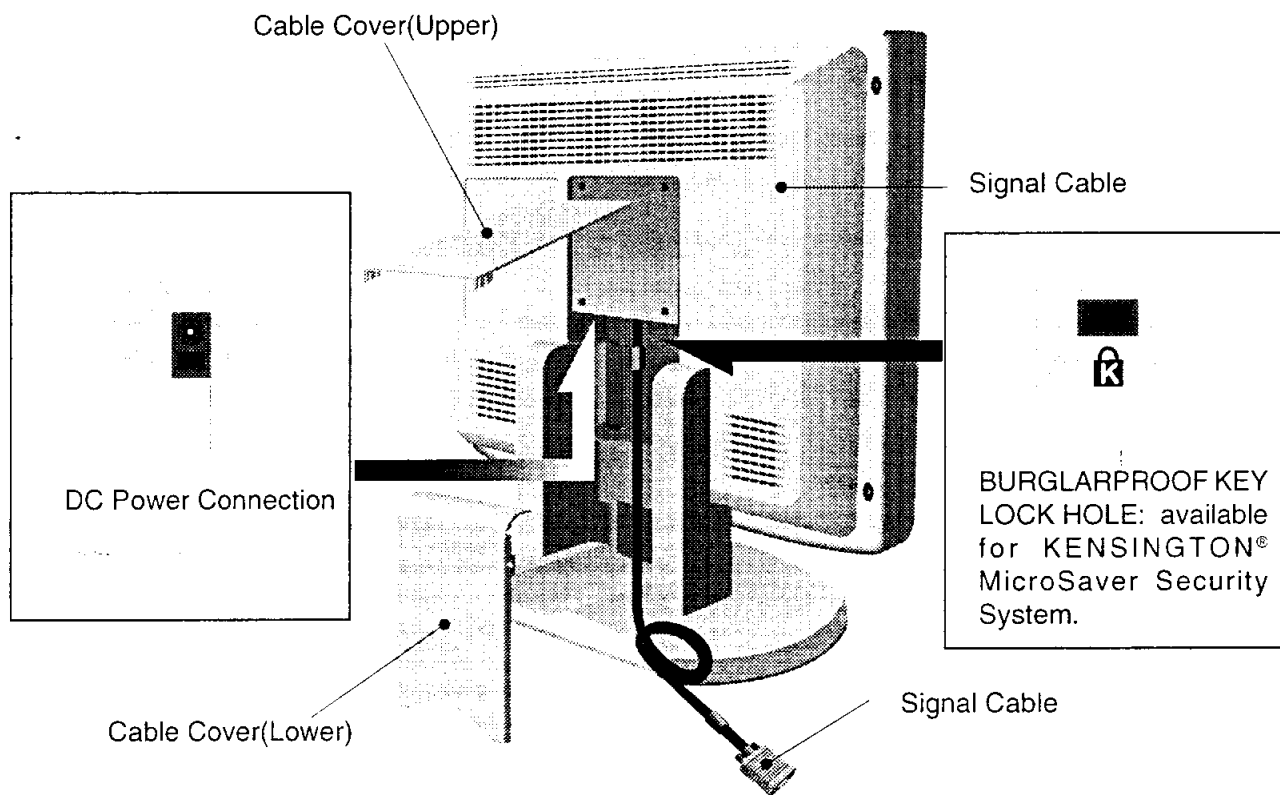


Figure 8.

3.2 Function

1. **POWER SWITCH:** A push-on push-off switch for DC power.
2. **POWER-ON INDICATOR:** This indicator illuminates when DC power is on.
3. **OSD OFF:** Push when make the OSD screen disappeared immediately.
4. **FUNCTION SELECT BUTTONS:** Push the select buttons to choose one of the functions that is superimposed on the display screen.
5. **FUNCTION ADJUST BUTTONS:** Push the adjust buttons to adjust the image on the screen that is selected via the function select buttons.

4

AUTO SETUP FUNCTION

Two methods, "AUTO SETUP" and "OSD Adjustment" are available for adjusting the screen. (For the "OSD Adjustment", see 5. OSD (On Screen Display) FUNCTIONS.) Conduct the "AUTO SETUP" first. And then, do the "OSD Adjustment" if necessary.

The "AUTO SETUP" is to adjust "CONTRAST", "HORIZONTAL POSITION", "VERTICAL POSITION", "CLOCK", "CLOCK-PHASE" and "BLACK LEVEL" automatically.

NOTE

- "AUTO SETUP" function may not work well with some computer. In the case, do the "OSD Adjustment".
- In case that LSA810W is used with an interlace signal of resolution 1280 dots by 1024 lines, one line in the top or bottom of the screen is lost. This condition can not be corrected by any adjustment.

Do the "AUTO SETUP" according to the following procedure:

1. Turn on the computer and monitor.

NOTE

If you don't recognize the icon on the screen, adjust "CLOCK" until you can, with using the "OSD Function". (See page 18.)

If you don't see the icon because of the screen shifted to vertical or horizontal direction, adjust "VERTICAL POSITION" or "HORIZONTAL POSITION" until you can, with using the "OSD Function". (See page 18.)

2. Select "AUTO SETUP" at the OSD menu. (See page 18.)

NOTE

In case that the screen area has a black back ground like "MS-DOS PROMPT", the "AUTO SETUP" may not work well.

3. Press "+" button. Then, the "AUTO SETUP" start.
During the "AUTO SETUP", "AUTO SETUP" is displayed on the screen and when it finishes, "AUTO SETUP" disappear from the screen. Until finish the "AUTO SETUP", it takes approx. 10 secs.

NOTE

In case that the monitors are used with an interlace signal, one line in the top or bottom of the screen is lost as a result of the "AUTO SETUP". In the case, adjust the "VERTICAL POSITION" by the "OSD Adjustment".

In case that the "AUTO SETUP" finished unsuccessfully, you may try the "AUTO SETUP" with using the test pattern prepared in the included floppy disk.

The following test patterns are included in the floppy disk:

- "testptn.exe" for "Windows" computer
- "test-mac" for "Macintosh" computer

To quit the test pattern, press the button of mouse or any key of keyboard.

NOTE

1. Read "readme_e.txt" of floppy disk before use.
2. Macintosh user need to have "PC Exchange" on "Control Panel" to execute the test pattern.

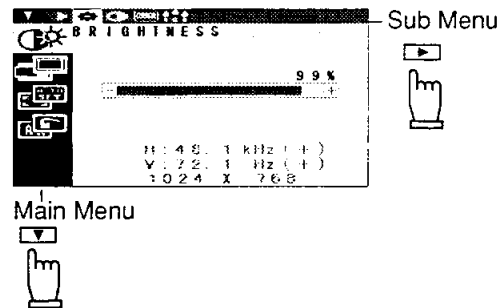
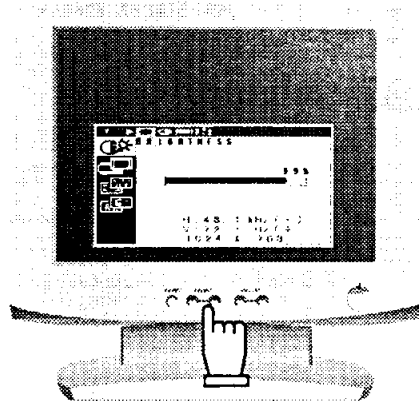
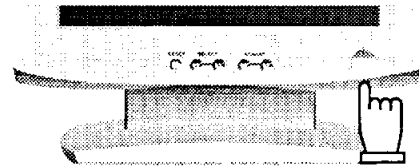
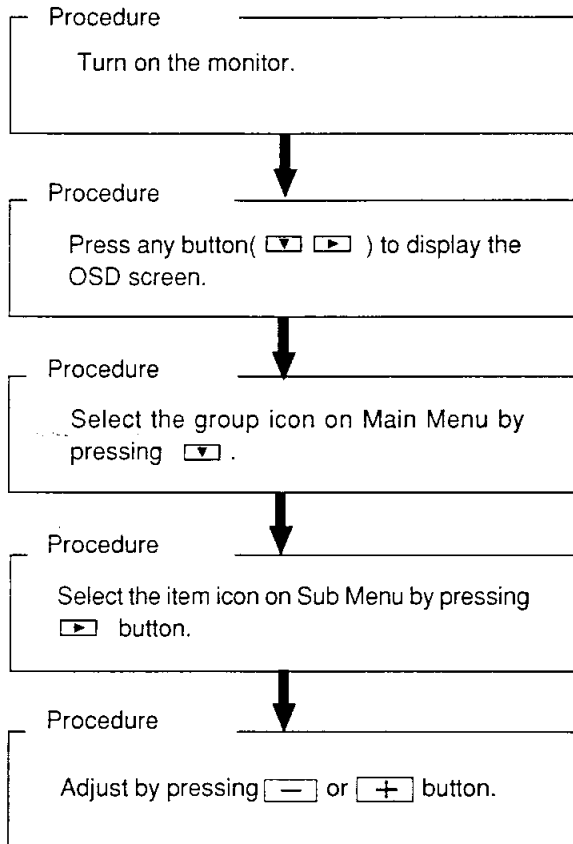
5

OSD(On Screen Display) FUNCTIONS

How to Adjust the Screen

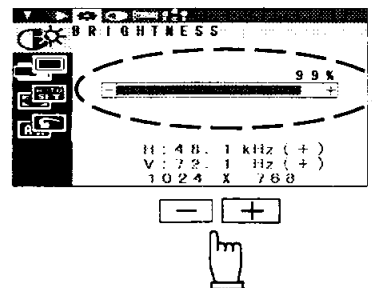
The monitor has an OSD (On Screen Display) function.

The following procedure shows how to adjust the screen with using the OSD function.



NOTE

If you don't press any button for about 30 seconds, the OSD screen will disappear. Or pressing "OSD OFF" button, the OSD screen will disappear quickly.



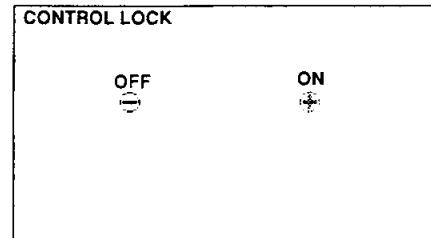
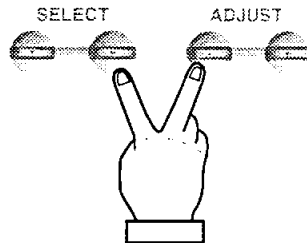
5.1 Adjustment Items

Press "ALL RESET" to restore to the factory preset level.					
Press and buttons together, to restore to the factory preset level.					
Set data by each timing.					
Set data does not change by the changing of the signal timing.					
Group Icon	Item Icon	Item	Press the Minus Button: 	Press the Plus Button: 	
		BRIGHTNESS	To decrease the brightness.	To increase the brightness.	☐
		CONTRAST	To decrease the contrast.	To increase the contrast.	☐
		BLACK LEVEL	To be deep of black color.	To be light of black color.	☐
		COLOR	STANDARD: To set the color to the factory standard.	CUSTOM: Adjustable to favorite color.	☐
		COLOR TEMPERATURE	To decrease the color temperature. NOTE Available to adjust when "CUSTOM" selected on "COLOR". "STANDARD" selected on "COLOR" doesn't indicate the icon.	To increase the color temperature.	☐
		CLOCK	To narrow the width of the image on the screen to the left.	To expand the width of the image on the screen to the right.	☐
		CLOCK-PHASE	To change the snow noise of the image.		☐
		HORIZONTAL POSITION	To move the image to the left.	To move the image to the right.	☐
		VERTICAL POSITION	To move the image down.	To move the image up.	☐
		V-RESOLUTION	To narrow the height of the image on the screen.	To expand the height of the image on the screen.	☐
		H-RESOLUTION	To narrow the width of the image on the screen.	To expand the width of the image on the screen.	☐
		AUTO SETUP	—————	Do Auto Setup.	☐
		AUTO ADJUST	To select the AUTO ADJUST off.	To select the AUTO ADJUST on.	☐
		DISPLAY MODE	Display by TEXT mode.	Display by GRAPHIC mode.	☐
		FULL SCREEN	To be off the Full Screen Mode.	To be on the Full Screen mode.	☐
		ALL RESET	—————	To restore to the factory preset mode.	☐
		OSD POSITION	To move the OSD position for 5 places.		☐
		POWER-SAVE	To select the constant power mode.	To select the power save mode.	☐
		LANGUAGE	To choose the language used on OSD. ENG...English, DEU...Germany, ESP...Spanish FRA...French, ITA...Italian, JPN...Japanese		☐

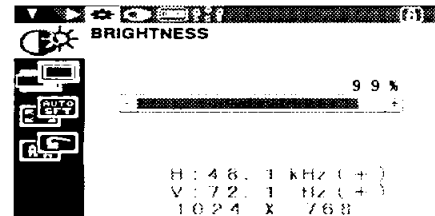
5.2 CONTROL LOCK Mode Operation

CONTROL LOCK

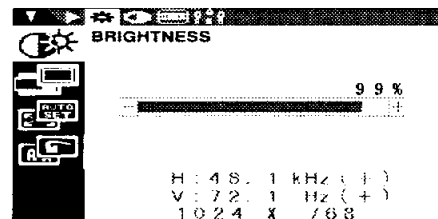
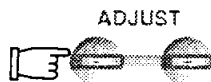
1. Press the right of select button and minus of adjust button together, the "CONTROL LOCK" screen appears.



2. Press the plus button to lock on the OSD. During the Locked condition, "Key mark " is indicated on the upper-right of the OSD screen and "BRIGHTNESS" is only adjustable.



3. Press the minus button to lock off the OSD, and if you press any select or adjust button, Key mark  is disappeared from the OSD screen. You can operate OSD, again.

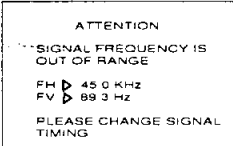
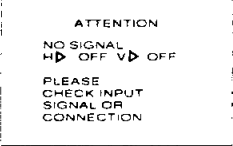


6

TROUBLESHOOTING

Before calling your Authorized Product Support, please check that the items below are properly connected or set.

In case of using a non-standard signal, please check the signal timing of your computer with the specification outlined in 7. SPECIFICATION.

PROBLEM		ITEMS TO CHECK	LOCATION
No picture	LED On (Green)	Contrast and brightness controls.	Front (Adjust to the maximum brightness or push the reset button)
	LED Off	- Power switch. - AC power cord disconnected.	- Front - Rear
	LED On (Amber)	- Signal cable disconnected. - Computer power switch. - Power management function is active.	- Rear - Computer
The following message appeared. 		Input signal frequency range is disagreement.	Check the specification of graphics adapter and monitor
The following message appeared. 		- Signal cable disconnected. - Computer power switch. - Power management function is active.	- Rear - Computer
Illegible image, abnormal position of screen, or too small or too large of a display size		- Adjust, RESOLUTION, CLOCK, CLOCK-PHASE, H-POSITION, and V-POSITION with non-standard signals. - Monitor may not be able to get full-screen image depend on signal. In this case, please select other resolution, or other vertical refresh timing. - Make sure you wait a few seconds after adjusting the size of the image before changing or disconnecting the signal or powering OFF the monitor.	- Front (OSD) - Front (OSD)
Can not read the packed floppy disc. (for macintosh user)		PC Exchange is installed or not.	Computer

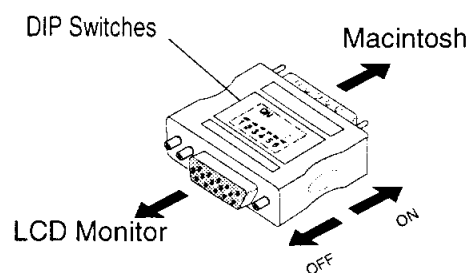
		LXA530W	LSA810W
LCD MODULE	LCD Panel	38cm/15" Color TFT Panel	46cm/18.1" Color TFT Panel
	Type	Active Matrix	
	Resolution	1024 dots x 768 lines	1280 dots x 1024 lines
	Pixel Pitch	0.297mm	0.2805mm
	Color Filter	R, G, B vertical stripe type	
	Face Finishing	Anti-glare, Hard Coated	
	Viewing Angle	±70°(Horizontal), +50°~ -70°(Vertical) ±70°(Horizontal), +70°~ -40°(Vertical)	
INPUT SIGNAL	Video	0.7Vp-p analog RGB	
	Sync	2.5 ~ 5.0Vp-p separated or composite sync (TTL Level)	
	Input Impedance	Video	75 Ω
		Sync	1k Ω
SCANNING FREQUENCY	Horizontal	31.0 - 60.5kHz	31.0 - 80.5kHz
	Vertical	30.0 - 85.0Hz	
DISPLAY SIZE	H x V	304.1mm x 228.1mm	359mm x 287.2mm
NUMBER OF COLOR		Approx. 16,19 Million Colors	
BRIGHTNESS(with standard full white video signal)		250 cd/m ² (Typ.)	180 cd/m ² (Typ.)
SIGNAL INPUT CONNECTOR		DB9-15P	
OPERATING ENVIRONMENT	Temperature	5 - 35°C	
	Humidity	10 - 90%RH (without condensation)	
POWER SOURCE	Display Monitor	DC 15V	
	AC-Adapter	AC100~240V±10% 50/60Hz 45W Max.	AC100~240V±10% 50/60Hz 55W Max.
REGULATIONS	Safety	UL1950 (UL), CSA C22.2 No.950 (C-UL) EN60950 (TÜV-GS), IEC950	
	EMC	FCC Class-B, DOC Class-B EN55022 Class-B, EN50082-1 VCCI Class-B	
	Other	CE-Marking, MPR-II ISO 9241-3, ISO 9241-7, ISO 9241-8(TÜV-ERGO) TCO '95 ZH1/618 (TÜV-GS) International ENERGY STAR Program	
CABINET		(W)15.4" x (H)14.7" x (D)6.3" (W)392mm x (H)374mm x (D)160mm	(W)18.1" x (H)18.9" x (D)8.7" (W)460mm x (H)481mm x (D)220mm
WEIGHT		5.6kg (12.3lbs.)※	9.0kg (19.8lbs.)※
TILT BASE		-5° ~ +35° Tilt Angle	-5° ~ +35° Tilt Angle ±45° Swivel Angle

※: Without AC Adapter and cables.

8.1 Macintosh Adapter settings

The Macintosh Adapter allows you to take advantage of the built in video capabilities of your Macintosh computer with the monitor.

- (1) Set dip switches of adapter, before connect to the computer.
- (2) Set dip switches according to the following chart.
By using the following chart, you can choose a main resolution, quickly.
If you wish to operate by other resolution, refer to next page; "Mac Adapter setting chart"



Apple Macintosh	LXA530W		LSA810W	
	Switch ON	Switch Setting	Switch ON	Switch Setting
Macintosh LC III, LC475, LC630	2,4		2,4	
Macintosh Quadra 700, 900			1,2,3,4	
Macintosh Quadra 610, 650, 800, 840AV, 950 Macintosh Centris 610, 650, 660AV	2,3			
Performa 6260, 6310, 6410, 6420 Power Macintosh 6100, 6100AV, 6200, 6300, 7100AV, 7200, 7300, 7500, 7600, 8100, 8100AV, 8500, 8600, 9500, 9600 Workgroup Server 7350, 8150, 9150, 9650	1,2,5		1,2,6	
Macintosh LC, LC II, Ilvi, Ilvx Power Macintosh 4400, G3	3,4		3,4	

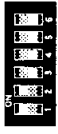
- (3) "Mac Adapter setting chart" shows all available modes for Macintosh systems and all possible combinations with the monitor.
However, we recommend you to use the monitor with a preset timing. (See 1.2 Internal Preset Memory Capability)
- (4) Please refer to instruction book of your computer about resolution setting.
Resolution may not be changed on some computers.

NOTE

1. Resolution does not change with the computer powered on when you set dip switches.
Be sure to power off the computer when you set dip switches.
2. Set dip switches by pointed article like pencils or ball point pen to touch end of switch groove.

<AD-A205 Mac Adapter Setting Chart for LXA530W>

- Set dip switch "ON" as shown below. (Example : "1,2")
- Do not use the resolution marked with "X", since it makes the monitor worked abnormally.



解像度 (RESOLUTION)		Apple Macintosh										Power Macintosh									
		Macintosh					Performa					Power Macintosh									
		Ilisi Ilci	Ilvi Ilvx	LC LCII	LCIII LC475	LC630	Quadra 700 900	Quadra 610 650 800 950	Quadra 840AV Centris 660AV	6260 6310	6410 6420	Workgroup Server 8150 9150	8100 VRAM Video Card (DB-15)	6200 6300	7200	4400	7300 7500 7600 8500 8600	9500	9600/233 Workgroup Server 9650	9600/300 9600/350	G3
640 x480@60Hz			3,4	3,4	3,4	3,4	3,4	3,4	3,4	1,2,5	1,2,5	3,4	3,4	1,2,5	3,4	3,4	3,4	3,4	3,4	3,4	3,4
640 x480@67Hz	X	X	X	1,2	1,2	1,2	1,2	1,2	1,2	1,2,5	1,2,5	1,2,5	1,2,5	1,2,5	1,2,5	3,4	1,2,5	1,2,5	1,2,5	1,2,5	3,4
640 x480@72Hz																3,4					3,4
640 x480@75Hz																3,4					3,4
640 x480@85Hz																					3,4
800 x600@60Hz						3,4															3,4
800 x600@72Hz						3,4				1,2,5	1,2,5						3,4	3,4	3,4	3,4	3,4
800 x600@75Hz									3,4	1,2,5	1,2,5		3,4	1,2,5	3,4	3,4	3,4	3,4	3,4	3,4	3,4
800 x600@85Hz																					3,4
832 x624@75Hz												1,2,5	1,2,5	1,2,5	1,2,5	3,4	1,2,5	1,2,5	1,2,5	1,2,5	3,4
1024 x768@60Hz				2,4		2,4	2,4	2,4	2,4	1,2,5	1,2,5		3,4		3,4	3,4	3,4	3,4	3,4	3,4	3,4
1024 x768@70Hz											1,2,5		3,4		3,4	3,4	3,4	3,4	3,4	3,4	3,4
1024 x768@72Hz													1,2,5		1,2,5	1,2,5	1,2,5	1,2,5	1,2,5	1,2,5	3,4
1024 x768@75Hz							2,3	2,3	2,3												X
1024 x768@85Hz																					X
1152 x870@75Hz						X	X	X	X				X		X	X	X	X	X	X	X
1280 x960@60Hz																					X
1280 x960@75Hz																X	X	X	X	X	X
1280 x960@85Hz																					X
1280 x1024@60Hz																X		X			X
1280 x1024@75Hz																X	X	X	X	X	X
1280 x1024@85Hz																					X
1600 x1200@60Hz																					X
1600 x1200@65Hz																					X
1600 x1200@67Hz																					X
1600 x1200@70Hz																					X
1600 x1200@75Hz																					X

<AD-A205 Mac Adapter Setting Chart for LSA810W>



- Set dip switch "ON" as shown below. (Example : "1,2")
- Do not use the resolution marked with "X", since it makes the monitor worked abnormally.

[illegible]

CP871C160A60



mitsubishi electric corporation

HEAD OFFICE: MITSUBISHI DENKI BLD, MARUNOUCHI, TOKYO 100-0005

TELEX J24532 CABLE MELCO TOKYO

ACHTUNG

Entfernen Sie nie die Rückwand dieses Gerätes, da Sie sich dadurch sehr hohen Spannungen und anderen Gefahren aussetzen können.

Warenzeichen

IBM, PC, PS/2, PS/V, Personal System/2, XGA sind eingetragene Warenzeichen der International Business Machines Corp.

Windows und Windows NT sind Warenzeichen oder eingetragene Warenzeichen der Microsoft Corporation in den Vereinigten Staaten.

Apple Macintosh, Quadra sind eingetragene Warenzeichen der Apple Computer, Inc.

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Anmerkung: Diese Bedienungsanleitung wurde für Farbmonitore der LXA530W/LSA810W erstellt.

1

EINLEITUNG

Wir gratulieren Ihnen zu dem Kauf des hochauflösenden Mitsubishi LCD Farbmonitors der LXA530W/LSA810W. Mitsubishi entwickelte diesen Monitor mit dem Ziel, Ihnen jahrelang eine zuverlässige, störungsfreie Benutzung zu ermöglichen. Wir danken Ihnen für die Auswahl unseres Produktes. Willkommen bei Mitsubishi!

Dieses Handbuch zeigt Ihnen den Anschluß, die Einstellung und die Pflege Ihres Monitors LXA530W/LSA810W. Außerdem sind technische Spezifikationen und ein Kapitel zur Störungssuche enthalten.

1.1 Eigenschaften

The LXA530W is a 38cm/15", LSA810W is a 46cm/18.1", intelligent, microprocessor-based LCD monitors compatible with most analog RGB (Red, Green, Blue) display standards, including PS/V*, PS/2*, Apple* Macintosh* Centris, Quadra, Macintosh II family, and Power Macintosh signals.

Er ermöglicht die Wiedergabe von Texten und Grafikdarstellungen bei Verwendung von VGA, SVGA, XGA (non-interlaced) und den meisten Macintosh-kompatiblen Farbgrafikkarten.

- Die große Kompatibilität des Monitors ermöglicht den Wechsel des Grafikadapters oder der Software ohne den Kauf eines neuen Monitors.
- Digitally controlled auto-scanning is done using an internal microprocessor; for horizontal scan frequencies between 31.0kHz and 60.5kHz for LXA530W, between 31.0kHz and 80.5kHz for LSA810W, and vertical scan frequencies between 30.0Hz and 85Hz for both monitors. Die Mikroprozessorsteuerung des Monitors erlaubt den Betrieb des Monitors in jedem Frequenzmodus mit der Präzision eines Fest-Frequenz-Monitors.
- Neben einer Reihe von bereits voreingestellten Bildschirmstandards bietet der Monitor auch die Möglichkeit, benutzerabhängige Einstellungen für diese und weitere Timings abzuspeichern.
- The LXA530W is capable of producing a maximum horizontal resolution of 1024 dots and a maximum vertical resolution of 768 lines typically, the LSA810W is capable of producing a maximum horizontal resolution of 1280 dots and a maximum vertical resolution of 1024 lines typically. The displays are well suited for Windows environments.
- The monitors have power management function accorded to VESA™-DPMS™-standard. To save energy, the monitor must be connected to a computer system compliant with the VESA™ DPMS™-standard. (Refer to your computer and/or video card instructions for proper operation.)
- For use in a variety of applications, the monitors comply with UL 1950, CSA C22.2 No.950 and EN60950 for safety, FCC Class-B, VCCI Class-B and EN55022 Class-B for EMI, MPR-II, ISO 9241-3, ISO 9241-7 and ISO 9241-8 for ergonomics. Dieser Monitor erfüllt die Richtlinien der TCO '95-Norm für den umweltfreundlichen Gebrauch.
- Die Verwendung eines digitalen Chassis ermöglicht ein kompakteres und leichteres Gehäuse und eine verbesserte Bildqualität.
- Dieser Monitor entspricht den DDC™1/2B(EDID) Spezifikationen der Video Electronics Standards Association (VESA™). Bei Verwendung eines Computers (bzw. einer Grafikkarte), der die DDC™1/2B(EDID) Funktion unterstützt, werden alle Anpassungen automatisch durchgeführt.
- Two display modes, Text mode and Graphic mode, provides a suitable screen image for working purpose.
- Auto Adjustment function provides adjustment-free when changing the signal timing.

ANMERKUNG

The LXA530W and LSA810W don't allow any form of "Sync-On-Green" signal.

1.2 Interne Speicherfähigkeit

Um den Einstellaufwand für den Benutzer so gering wie möglich zu halten, wurden werksseitig bereits die in Tabelle 1 aufgelisteten Bildschirmstandards abgespeichert. Erkennt der Monitor einen dieser Standards, werden Bildlage und -größe automatisch justiert. Diese Voreinstellungen können unter Benutzung der Bedienelemente überschrieben werden. Zusätzlich zu den werksseitig eingestellten Timings können bis zu 7 weitere Timings abgespeichert werden. Um als neues Timing erkannt zu werden, muß das neue Videosignal in der Horizontalfrequenz um mindestens 0.8KHz, in der Vertikalfrequenz um mindestens 1Hz oder in der Polarität der Synchronsignale von sämtlichen bereits abgespeicherten Timings abweichen.

Tabelle 1. Werksseitig Voreinstellungen

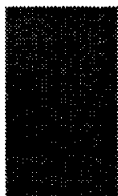
VOREINGESTELLTES TIMING	Fh (kHz)	Fv (Hz)	Polarität	
			H	V
640 x 480 N.I.	35.0	66.7	-	-
832 x 624 N.I.	49.7	74.6	-	-
f152 x 870 N.I.	68.7	75.0	-	-
640 x 350 N.I.	31.4	70.0	+	-
640 x 480 N.I.	31.5	59.9	-	-
640 x 480 N.I.	37.5	75.0	-	-
640 x 480 N.I.	43.3	85.0	-	-
720 x 400 N.I.	31.5	70.0	-	+
800 x 600 N.I.	37.9	60.3	+	+
800 x 600 N.I.	48.1	72.2	+	+
800 x 600 N.I.	46.9	75.0	+	+
800 x 600 N.I.	53.7	85.0	+	+
1024 x 768 N.I.	48.4	60.0	-	-
1024 x 768 N.I.	56.5	70.1	-	-
1024 x 768 N.I.	58.1	72.1	-	-
1024 x 768 N.I.	60.2	75.0	+	+
f024 x 768 N.I.	68.7	85.0	+	+
f280 x 1024 N.I.	64.0	60.0	-	-
f280 x 1024 N.I.	80.0	75.0	+	+

f Available with only LSA810W and not available with LXA530W.

1.3 Power Management Funktion

Dieser Monitor besitzt eine Energiesparfunktion, welche die Leistungsaufnahme reduziert, wenn der Monitor nicht benutzt wird.

When the horizontal sync signal and/or vertical sync signal is off, after about 10 seconds the monitor is switched to a power saving mode which reduces the monitor power consumption to less than 3W. When the monitor is in power saving mode, the screen is off and the power indicator will illuminate at amber. After the signals are restored, picture will be displayed within about 3 seconds.



1.4 DDC

Dieser Bildschirm ist mit der VESA™ DDC™ 1/ DDC™ 2B Funktion ausgestattet. DDC (Display Data Channel) is a communication channel over which the monitor automatically informs the computer about its capabilities (z.B. jeder unterstützte Bildschirmmodus mit dem entsprechenden Timing). DDC benutzt einen Stift des 15-Stift-VGA-Steckers, der vorher nicht verwendet wurde. Das System wird die "Plug & Play"-Funktion nur dann ausführen, wenn sowohl Bildschirm als auch Computer mit der DDC Funktion ausgerüstet sind.

1.5 Display Mode Selection ("DISPLAY MODE" P19)

The following two display modes are available. You can select either mode suitable to your work, on the OSD ( P19).

Text Mode

The contrast is emphasized than the accuracy of the color appearance in this mode. This mode is suitable for such works that the accuracy of the displayed colors is not so important, e.g. document making, calculation, database making, etc.

Graphic Mode

The accuracy of the color tone is emphasized in this mode. This mode is suitable for such works that the accuracy of the displayed colors is important, e.g. photograph processing, making of illustration, etc.

ANMERKUNG

- When you receive the monitor, "DISPLAY MODE" is set to "GRAPHIC" mode.
- Before selecting "Graphic Mode", perform "AUTO SETUP". If not, the displayed screen may become too bright.
- Before using "Color Matching", set the "COLOR" to "STANDARD", "DISPLAY MODE" to "GRAPHIC". ( P19)

1.6 Auto Adjustment Function ("AUTO ADJUST" P19)

This function is to adjust "CLOCK PHASE" automatically and periodically (once per 30 min.) against changes of the signal condition or ambient temperature and to adjust "CLOCK PHASE", "HORIZONTAL POSITION" and "VERTICAL POSITION" automatically when power on and changing the signal timing.

ANMERKUNG

- When you receive the monitor, "AUTO ADJUST" is set to "ON".
- When using the monitor with some computers, "AUTO ADJUST" may function negatively. In that case, set "AUTO ADJUST" to "OFF".
- When "AUTO ADJUST" is set to "ON", you may feel the screen stopping when using mouse or displaying an animation. However, it is not a fault condition and is caused by the "AUTO ADJUST" worked.



1.7 Screen Auto Expand Function ("FULL SCREEN" P19)

This function is to expand the screen automatically. By a smoothing function, you can get a clear screen when the screen is expanded by this function. This function is available in case that a signal of 832 dots by 624 lines or lower is inputted to Model LXA530W, and a signal of 1024 dots by 768 lines or lower is inputted to Model LSA810W.

ANMERKUNG

- With some resolution, even if it meets the condition above, the screen is not expanded fully to the screen area.
- With some signal type inputted, the screen is not expanded vertically or horizontally.
- With some resolution, the image may be slightly blurred.

1.8 Betriebshinweise

Bitte beachten Sie bei der Aufstellung und dem Betrieb Ihres Monitors folgende Hinweise:

- Stellen Sie den Monitor nicht vor einem hellen Hintergrund oder dort auf, wo das Sonnenlicht oder andere helle Lichtquellen direkt auf den Monitor scheinen, um eine Anstrengung der Augen zu vermeiden. Um eine höchstmögliche Ergonomie zu gewährleisten, sollte der Monitor so aufgestellt werden, daß er sich unterhalb der Augenhöhe befindet.
- Decken Sie die Entlüftungsöffnungen des Monitors nicht zu. Sorgen Sie für ausreichende Belüftung, damit die im Monitor entstehende Wärme abgeführt werden kann.
- **Schützen Sie** den Monitor vor Regen, Feuchtigkeit und Staub, um einen Brand oder Stromstöße zu vermeiden.
- Achten Sie darauf, daß weder der Monitor, noch ein anderer schwerer Gegenstand auf dem Netzkabel stehen. Eine Beschädigung des Netzkabels kann einen Brand oder Stromstöße verursachen.
- Behandeln Sie den Monitor vorsichtig beim Transport.
- Avoid giving any shock or scratch to the screen, as the screen is fragile.

1.9 Reinigung Ihres Monitors

Beachten Sie bei der Reinigung Ihres Monitors bitte folgende Hinweise:

- Ziehen Sie vor der Reinigung immer den Netzstecker aus der Steckdose.
- Reinigen Sie den Bildschirm und das Gehäuse mit einem weichen Tuch.
- Falls der Bildschirm stärker verschmutzt ist, reinigen Sie ihn bitte mit einem milden Reinigungsmittel und einem weichem Tuch.

ACHTUNG

Reinigen Sie das Gerät nicht mit Benzol, Verdünnern oder anderen flüchtigen Stoffen, da die Oberfläche durch diese Stoffe beschädigt werden könnte. Vermeiden Sie längeren Kontakt mit Gummi- oder Vinylprodukten.

1.10 Auspacken

Nach dem Auspacken Ihres Farbmonitors sollten alle in Bild 1 aufgeführten Teile vorhanden sein. Verwerfen Sie den Originalkarton und das Verpackungsmaterial, falls Sie den Monitor später versenden oder transportieren müssen.

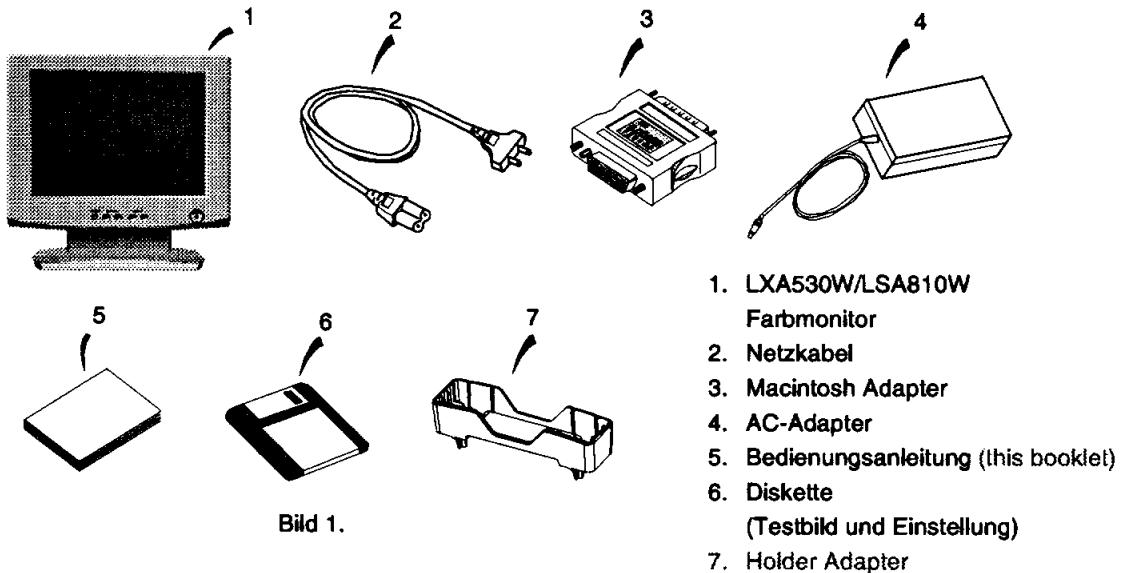


Bild 1.

1.11 Dreh-/Kippfuß

Der Monitor wird mit einem Dreh-/Kippfuß geliefert. Er ermöglicht die Ausrichtung des Monitors nach den Anforderungen des Benutzers für größtmögliche Ergonomie.

Justierung des Bildschirms

Fassen Sie den Bildschirm an den gegenüberliegenden Seiten, wie in Bild 2 gezeigt, an und stellen Sie den gewünschten Dreh- und Kippwinkel ein. You can adjust the monitor as shown below.

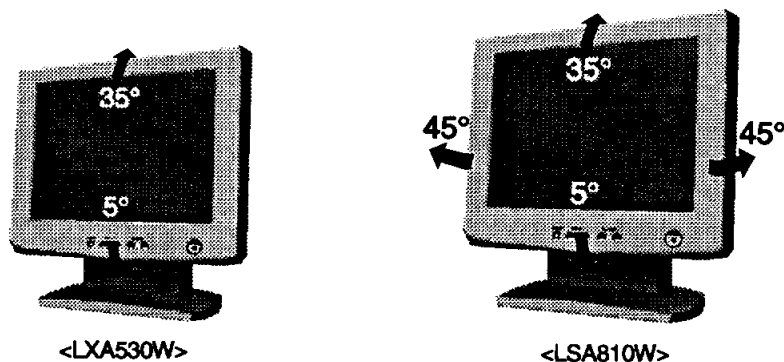


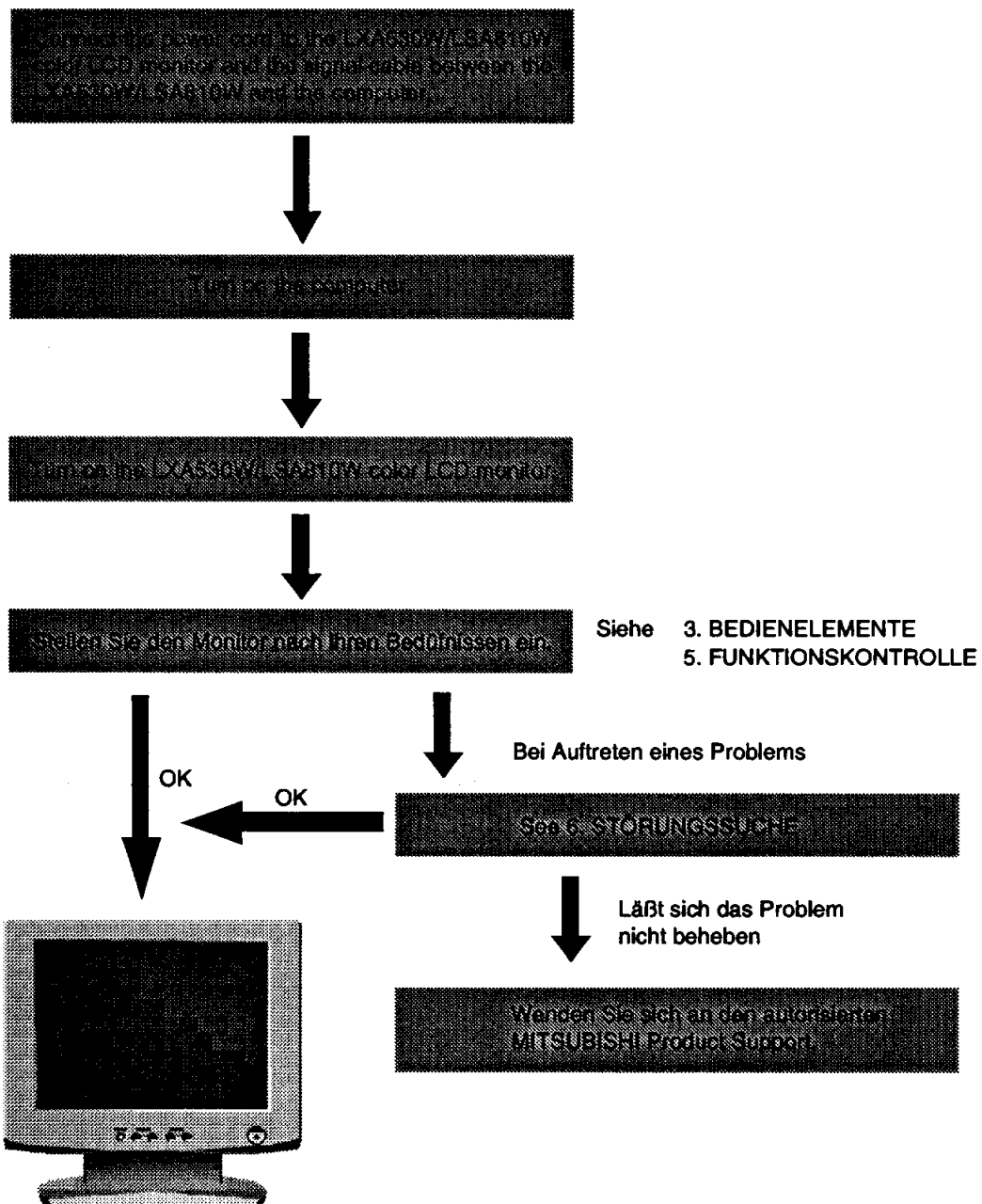
Bild 2.

ACHTUNG

Stecken Sie Ihre Finger nicht in die Löcher (Vorder- und Rückseite) auf dem Schiebeteil des Dreh-/Kippfußes.

1.12 Kurzinstallationsanleitung

Die nachfolgende Abbildung erläutert den Anschluß Ihres Computers und Adapters an den Farbmonitor der LXA530W/LSA810W und die Einstellung des Monitors.



2

ANSCHLUSS DES MONITORS

Auf der Rückseite des Monitors befinden sich zwei Steckeranschlüsse: einer für das DC Netzkabel und einer für das Videosignal (DB9-15P Stecker).

2.1 Anschluß des Netzkabels

Remove the cable cover. (See. Figure 3.) The DC jack from the AC Adapter is connected into the DC power connector on the back of the monitor. One end of the AC power cord is connected into the AC Adapter, and another end of the AC power cord is plugged into a AC outlet. (See Figure 4.) The monitor's auto-sensing AC Adapter can automatically follow the AC input.

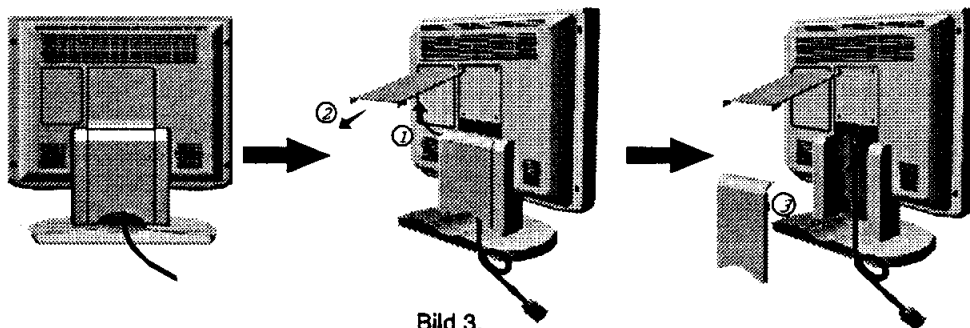


Bild 3.

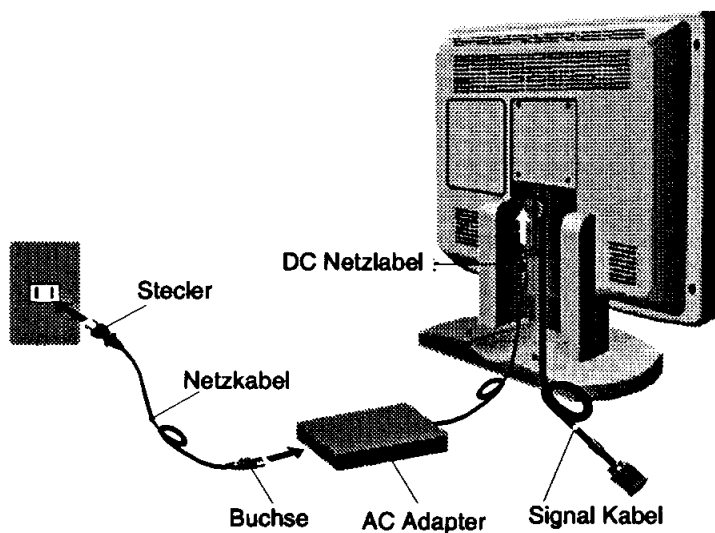
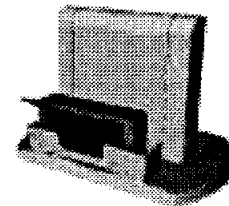


Bild 4.

How to use Holder Adapter



ACHTUNG

Die Stromversorgung dieses Monitors bleibt auch bei ausgeschaltetem Gerät aktiv. Daher sollte sich die Netzsteckdose in der Nähe des Gerätes befinden und leicht zugänglich sein.

Verwenden Sie das externe Netzteil nicht für andere Geräte, da dies zur Beschädigung oder Bränden führen kann.

Même si le moniteur est mis hors tension il reste toujours alimenté. La prise secteur devrait ainsi être facilement accessible en cas d'urgence.

2.2 Anschluß des Signalkabels

Das beigegefügte Signalkabel ist mit einem DB9-15P Stecker für den Anschluß an die VGA-kompatiblen analogen RGB-Ausgänge Ihres PC ausgestattet. Damit kann der Monitor an alle analogen RGB-Eingangssignale angeschlossen werden, wie z.B. an IBM® PS/2 oder Kompatible. Most third party color cards can also be interfaced using the included Macintosh adapter.

2.2.1 Connecting to Any IBM VGA Compatible System

Bild 5 zeigt den Anschluß des Signal Kabels an die VGA-Grafikkarte eines IBM® PS/2 Modell 50, 60, 70 und 80 oder jedes andere VGA-kompatible System.

1. Schalten Sie den Monitor und den PC aus.
2. Schließen Sie das Computerende des Signal Kabel an die 15-polige Buchse an der VGA-Grafikkarte an.
3. Schalten Sie erst den PC, dann den Monitor ein.
4. Wenn Sie das System verlassen, schalten Sie erst den Monitor, dann den PC.

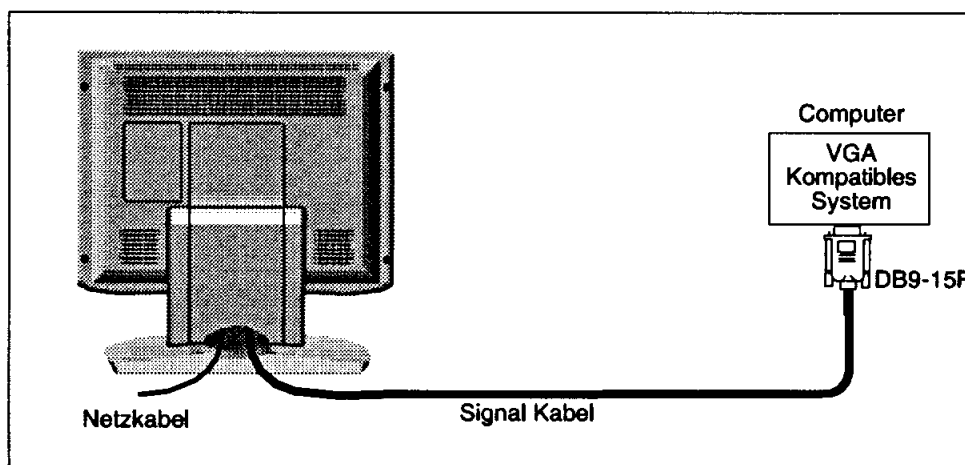


Bild 5.

2.2.2 Anschluß an Apple Macintosh Computer

Bild 6 zeigt den Anschluß an das Grafikboard eines Apple Macintosh mittels des Signal Kabel und Adapters.

1. Schalten Sie den Monitor und den Rechner aus.
2. Stellen Sie die DIP Schalter am Macintosh Adapter der Tabelle entsprechend ein. (Siehe 8.1 Einstellung des Macintosh Adapters AD-A205)
3. Schließen Sie das 15-polige Ende (DB-15P) des Adapters AD-A205 an die 15-polige Buchse an dem integrierten Macintosh Grafikadapter oder der Zusatzgrafikkarte an.
4. Verbinden Sie das 15-polige Sub-Miniatur-Ende (DB9-15P) des Adapters AD-A205 mit dem Signal Kabel (P/C).
5. Schalten Sie zuerst den Macintosh, dann den Monitor ein.
6. Wenn Sie das System verlassen, schalten Sie erst den Monitor, dann den Macintosh aus.

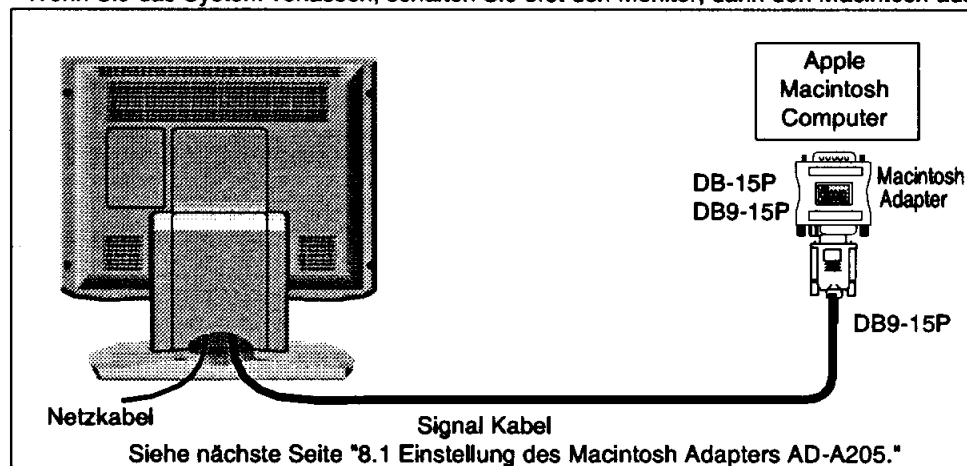


Bild 6.

2.3 Installieren der Anzeigeeinformation für Windows®95.

1. Starten Sie Windows®95.
2. Insert the included Floppy Disk.
3. Klicken Sie auf Start und Einstellungen, um die Systemsteuerung zu öffnen.
4. Doppelklick auf "Anzeige".
5. Klicken Sie auf die Registrierkarte "Einstellungen" im Fenster vom "Anzeige".
6. Klicken Sie auf Taste "Konfiguration ändern..." im Fenster vom Display.
7. Klicken Sie auf "Ändern..." auf der rechten Seite des Felds für den Bildschirm.
8. Klicken Sie auf "Diskette..." in der rechten unteren Ecke des Fensters.
9. Klicken Sie auf "OK" im Fenster "Von Diskette installieren".
10. Click on "Show compatible devices" from the Select Device window.
Confirm your model of "Mitsubishi LXA530W" or "Mitsubishi LSA810W". Klicken Sie auf "OK".
11. Klicken Sie "Schließen" im Fenster "Konfiguration ändern".
12. Klicken Sie auf "OK" im Fenster "Eigenschaften von Anzeige".

2.4 Installieren der Anzeigeeinformation für Windows®98.

1. Power on the monitor, then the computer.
2. "Hardware Wizard" window will open automatically.
3. Insert the included floppy disk into the computer.
4. Click on "NEXT>" or press "Enter" key until finish the recognition of the monitor.
5. Click on "Finish" to close the "Hardware Wizard" window.

3

BEDIENELEMENTE

3.1 Bedienelemente

Bild 7 und 8 zeigen die Position der Bedienelemente und Anzeigen. Jedes Bedienelement ist mit einer Ziffer gekennzeichnet und einzeln beschrieben.

VORDERSEITE

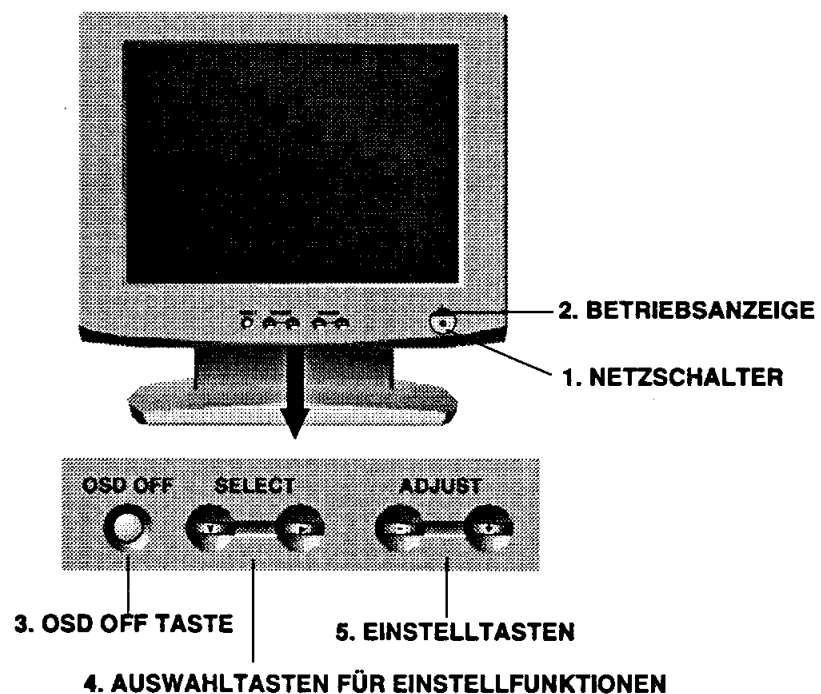


Bild 7.

RÜCKSEITE

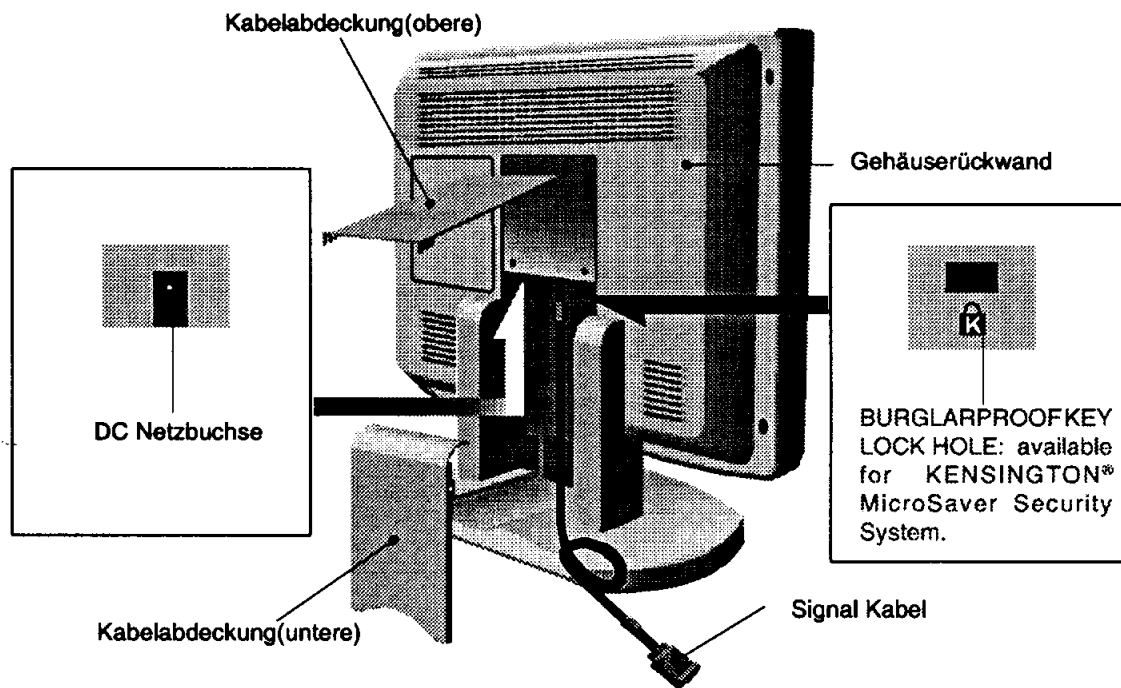


Bild 8.

3.2 Funktion

1. **NETZSCHALTER**: Schaltet das Gerät ein bzw. aus.
2. **BETRIEBSANZEIGE**: Diese Anzeige leuchtet auf, wenn der Monitor eingeschaltet ist.
3. **OSD OFF TASTE**: Durch Betätigen dieser Taste wird des On Screen Display abgeschaltet.
4. **AUSWAHLTASTEN FÜR EINSTELLFUNKTIONEN**: Mit der rechten, linken, oberen oder unteren Auswahltaste wählen Sie die gewünschte Bildeinstellung.
5. **EINSTELLTASTEN**: Mit diesen Tasten justieren Sie die gewünschte Bildeinstellung.

4

AUTOMATISCHE EINSTELLFUNKTION

Two methods, "AUTO SETUP" and "OSD Adjustment" are available for adjusting the screen. (For the "OSD Adjustment", see 5. OSD (On Screen Display) FUNCTIONS.) Conduct the "AUTO SETUP" first. And then, do the "OSD Adjustment" if necessary.

The "AUTO SETUP" is to adjust "CONTRAST", "HORIZONTAL POSITION", "VERTICAL POSITION", "CLOCK", "CLOCK-PHASE" and "BLACK LEVEL" automatically.

ANMERKUNG

- "AUTO SETUP" function may not work well with some computer. In the case, do the "OSD Adjustment".
- In case that LSA810W is used with an interlace signal of resolution 1280 dots by 1024 lines, one line in the top or bottom of the screen is lost. This condition can not be corrected by any adjustment.

Do the "AUTO SETUP" according to the following procedure:

1. Turn on the computer and monitor.

ANMERKUNG

If you don't recognize the icon on the screen, adjust "CLOCK" until you can, with using the "OSD Function". (See page 18.)

If you don't see the icon because of the screen shifted to vertical or horizontal direction, adjust "VERTICAL POSITION" or "HORIZONTAL POSITION" until you can, with using the "OSD Function". (See page 18.)

2. Select "AUTO SETUP" at the OSD menu. (See page 18.)

ANMERKUNG

In case that the screen area has a black back ground like "MS-DOS PROMPT", the "AUTO SETUP" may not work well.

3. Press "+" button. Then, the "AUTO SETUP" start.
During the "AUTO SETUP", "AUTO SETUP" is displayed on the screen and when it finishes, "AUTO SETUP" disappear from the screen. Until finish the "AUTO SETUP", it takes approx. 10 secs.

ANMERKUNG

In case that the monitors are used with an interlace signal, one line in the top or bottom of the screen is lost as a result of the "AUTO SETUP". In the case, adjust the "VERTICAL POSITION" by the "OSD Adjustment".

In case that the "AUTO SETUP" finished unsuccessfully, you may try the "AUTO SETUP" with using the test pattern prepared in the included floppy disk.

The following test patterns are included in the floppy disk:

- "testp1n.exe" for "Windows" computer
- "test-mac" for "Macintosh" computer

To quit the test pattern, press the button of mouse or any key of keyboard.

ANMERKUNG

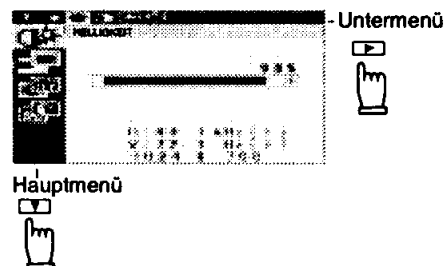
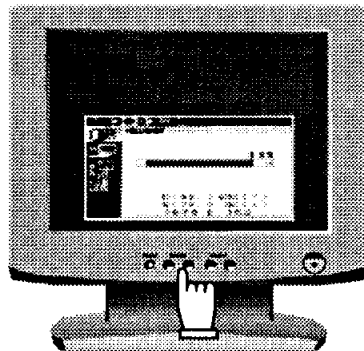
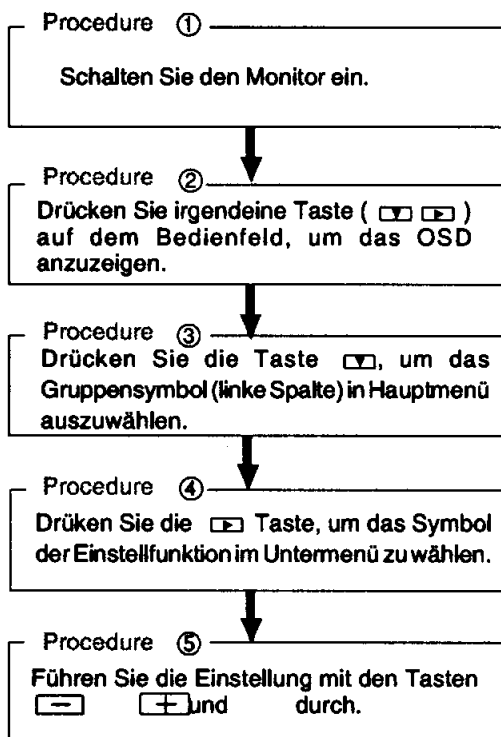
1. Read "readme_e.txt" of floppy disk before use.
2. Macintosh user need to have "PC Exchange" on "Control Panel" to execute the test pattern.

5

FUNKTIONSKONTROLLE

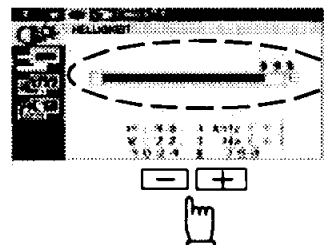
Einstellen des Monitors

Der Monitor verfügt über ein sogenanntes OSD (On Screen Display, Bildschirmmenü), mit dem alle Einstellungen sehr komfortabel durchgeführt werden können. Im folgenden wird Ihnen gezeigt, wie Sie den Monitor mit Hilfe des OSD einstellen können.



ANMERKUNG

If you don't press any button for about 30 seconds, the OSD screen will disappear. Or pressing "OSD OFF" button, the OSD screen will disappear quickly.



5.1 Einstellfunktionen

Press "ALL RESET" to restore to the factory preset level.							
Drücken sie gleichzeitig   Taste, um die werkseitig voreingestellten Werte wiederherzustellen.							
Set data by each timing.							
Set data does not change by the changing of the signal timing.							
Gruppen symbol	Symbol	Funktion	Drücken Sie die Minus Taste:  	Drücken Sie die Plus Taste:   			
		HELLIGKEIT	Um die Helligkeit zu verringern.	Um die Helligkeit zu erhöhen.	X		X
		KONTRAST	Um den Kontrast zu verringern.	Um den Kontrast zu erhöhen.	X		X
		SCHWARZPEGEL	Um den Schwarzpegel zu verringern.	Um den Schwarzpegel zu erhöhen.	X		X
		FARBE	STANDARD: To set the color to the factory standard.	CUSTOM: Adjustable to favorite color.	X		X
		FARBTEMPERATUR	To decrease the color temperature. ANMERKUNG Available to adjust when "CUSTOM" selected on "COLOR". "STANDARD" selected on "COLOR" doesn't indicate the icon.	To increase the color temperature.	X		X
		TAKT	Um Bildbreite nach links zu verringern.	Um die Bildbreite nach rechts auszuweiten.		X	X
		TAKTPHASE	Um das Rauschen (Schnee) des Bildes zu verringern.			X	X
		HORIZONTALE BIDLAGE	Um das Bild nach links zu verschieben.	Um das Bild nach rechts zu verschieben.		X	X
		VERTIKALE BIDLAGE	Um das Bild nach unten zu verschieben.	Um das Bild nach oben zu verschieben.		X	X
		V-RESOLUTION	To narrow the height of the image on the screen.	To expand the height of the image on the screen.		X	X
		H-RESOLUTION	To narrow the width of the image on the screen.	To expand the width of the image on the screen.		X	X
		AUTOEINSTELLUNG	—————	Do Auto Setup.	-	X	
		AUTOM.-KORREKTUR	To select the AUTO ADJUST off.	To select the AUTO ADJUST on.	X		X
		ANZEIGEMODUS	Display by TEXT mode.	Display by GRAPHIC mode.	X		X
		VOLLBILD	To be off the Full Screen Mode.	To be on the Full Screen mode.		X	X
		WERKSEINSTELLUNG	—————	To restore to the factory preset mode.	-	X	X
		OSD POSITION	To move the OSD position for 5 places.		X		X
		POWER-SAVE	Um das Powermanagement einzuschalten.	Um das Powermanagement auszuwählen.	X		X
		SPRACHE	Wählt die OSD Sprache aus. ENG.....Englisch, FRA.....Französisch, ESP.....Spanisch, ITA.....Italienisch, GER.....Deutsch, JPN.....Japanisch		X		

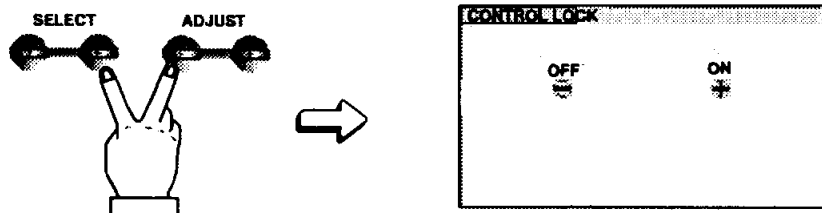
X: Einstellfunktion

5.2 CONTROL LOCK Mode Operation

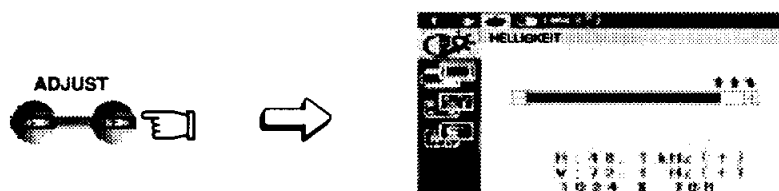
tion

CONTROL LOCK

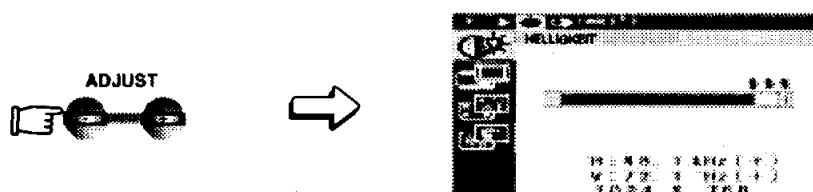
1. Press the right of select button and minus of adjust button together, the "CONTROL LOCK" screen appears.



2. Press the plus button to lock on the OSD. During the Locked condition, "Key mark (🔒)" is indicated on the upper-right of the OSD screen and "BRIGHTNESS" is only adjustable.



3. Press the minus button to lock off the OSD, and if you press any select or adjust button, Key mark (🔒) is disappeared from the OSD screen. You can operate OSD, again.

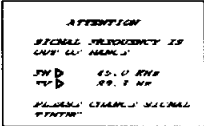
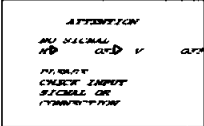


6

STÖRUNGSSUCHE

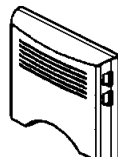
Bevor Sie sich an den MITSUBISHI Product Support wenden, überprüfen Sie bitte die unten genannten Anschlüsse und Einstellungen.

Sollten Sie kein Standardsignal verwenden, prüfen Sie bitte, please check the signal timing of your computer with the specification outlined in 7. SPECIFICATION.

PROBLEM		KONTROLLE	POSITION
Kein Bild	LEDan (GRÜN)	Kontrast- und Helligkeitsregler in minimaler Position?	Vorderseite (Stellen Sie die maximale Helligkeit ein oder drücken Sie die Reset-Taste)
	LED aus	- Netzschalter eingeschaltet? - Netzkabel korrekt angeschlossen?	- Vorderseite - Rückseite
	blinkt	- Signalkabel angeschlossen? - Netzschalter des Computers eingeschaltet? - Power Management function is active?	- Rückseite - Computer
The following message appeared: 		Eingangssignalfrequenz außerhalb des zulässigen Bereichs?	Spezifikation des Grafikadapters und Monitors prüfen.
The following message appeared: 		- Signalkabel angeschlossen? - Netzschalter des Computers eingeschaltet? - Power Management function is active?	- Rückseite - Computer
Illegible image, abnormal position of screen, or too small or too large of a display size		- Bei User Timing, RESOLUTIONCLOCK, CLOCK-PHASE H-POSITION und V-POSITION einstellen. - Im Einzelfall kann es vorkommen, daß der Monitor aufgrund des verwendeten Signaltimings keine Voll bilddarstellung bietet. Wechseln Sie in diesem Fall die Auflösung oder die Vertikalfrequenz des Signals. - Um die Speicherung der geänderten Werte sicherzustellen, warten Sie einige Sekunden bevor Sie das Eingangssignal wechseln oder den Monitor ausschalten.	- Vorderseite (OSD) - Vorderseite (OSD)
Kann die beigelegte Diskette nicht lesen.		Ist PC Exchange installiert??	Computer

7

SPEZIFIKATIONEN

		LXA530W	LSA810W
LCD BILDSCHIRM	LCD Bildschirm	38cm/15" Color TFT Farbbildschirm	46cm/18.1" Color TFT Farbbildschirm
	Bildschirm	Active Matrix	
	Auflösung	1024 dots x 768 linien	1280 dots x 1024 linien
	Punktabstand	0.297mm	0.2805mm
	Farbstufen	R, G, B vertikale streifenart	
	Frontglasbeschichtung	Antireflektierend, Antistatische Beschichtung	
	Betrachtungswinkel	±70°(Horizontal),+50°--70°(Vertikal)	±70°(Horizontal),+70°--40°(Vertikal)
EINGANGSSIGNAL	Video	0.7Vp-p analog RGB	
	Synchronisation	2.5 ~ 5.0Vp-p separated or composite sync (TTL Level)	
	Eingangsimpedanz	Video	75 Ω
FREQUENZ- BEREICH	Horizontal	31.0 - 60.5kHz	31.0 - 80.5kHz
	Vertikal	30.0 - 85.0Hz	
BILDFLÄCHE	H x V	304.1mm x 228.1mm	359mm x 287.2mm
NUMBER OF COLOR		Approx. 16,19 Million Colors	
HELLIGKEIT (with standard full white video signal)		250 cd/m ² (Typ.)	180 cd/m ² (Typ.)
EINGANGSANSCHLUß		DB9-15P	
BETRIEBS- BEDINGUNGEN	Temperatur	5 - 35°C	
	Feuchtigkeit	10 - 90%rel. Luftf.(nicht kondensierend)	
	Farbmonitor	DC 15V	
NETZSPANNUNG	AC-Adapater	AC100~240V±10% 50/60Hz 45W Max.	AC100~240V±10% 50/60Hz 55W Max.
ZULASSUNGEN/ PRÜFZEICHEN	Sicherheit	UL1950 (UL), CSA C22.2 No.950 (C-UL) EN60950 (TÜV-GS), IEC950	
	EMC	FCC Class-B, DOC Class-B EN55022 Class-B, EN50082-1 VCCI Class-B	
	Andere	CE-Marking, MPR-II ISO 9241-3, ISO 9241-7, ISO 9241-8(TÜV-ERGO) TCO '95 ZH1/618 (TÜV-GS) International ENERGY STAR Program	
GEHÄUSE		(B)15.4" x (H)14.7" x (T)6.3" (B)392mm x (H)374mm x (T)160mm	(B)18.1" x (H)18.9" x (T)8.7" (B)460mm x (H)481mm x (T)220mm
GEWICHT		5.6kg (12.4lbs.) <i>f</i>	9.0kg (19.9lbs.) <i>f</i>
DREH-/KIPPFUSS		-5° ~ +35° Kippwinkel	-5° ~ +35° Kippwinkel ±45° Swivel Angle
OPTIONAL PARTS (Please contact your dealer)		KT-X402(USB Unit) 	

f Without AC Adapter and cables.

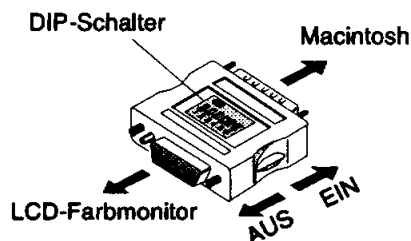
8

ANHANG

8.1 Einstellung des Macintosh Adapters

Der Macintosh Adapter erlaubt Ihnen die Möglichkeiten der Standardgrafikkarte Ihres Macintosh vollständig zu nutzen.

- (1) Stellen Sie die DIP-Schalter des Adapters ein, bevor Sie diesen an den Computer anschließen.
- (2) Stellen Sie die DIP-Schalter gemäß nachfolgender Tabelle ein. Durch Verwendung der folgenden Tabelle, können Sie die Hauptauflösung schnell wählen.
Falls Sie eine andere Auflösung für den Betrieb wünschen, siehe die nächste Seite unter "Einstellungstabelle für Macintosh Adapter".



Apple Macintosh	LXA530W		LXA110	
	Schalter EIN	Schaltereinstellung	Schalter EIN	Schaltereinstellung
Macintosh LC III, LC475, LC630	2,4		2,4	
Macintosh Quadra 700, 900			1,2,3,4	
Macintosh Quadra 610, 650, 800, 840AV, 950 Macintosh Centris 610, 650, 660AV	2,3		1,2,3,4	
Performa 6260, 6310, 6410, 6420 Power Macintosh 6100, 6100AV, 6200, 6300, 7100AV, 7200, 7300, 7500, 7600, 8100, 8100AV, 8500, 8600, 9500, 9600 Workgroup Server 7350, 8150, 9150, 9650			1,2,6	
Macintosh LC, LC II, IIx, IIvx Power Macintosh 4400, G3	3,4		3,4	

- (3) Die "Einstellungstabelle für Macintosh Adapter AD-A205" zeigt alle verfügbaren Modi für Macintosh Systeme und alle möglichen Kombinationen mit dem Monitor. Wir empfehlen jedoch, daß Sie den Monitor mit voreingestelltem Timing verwenden (siehe 1.2 Interne Speicherfähigkeit).
- (4) Bitte beachten Sie die Bedienungsanleitung Ihres Computers für die Einstellung der Auflösung. An manchen Computern kann die Auflösung nicht geändert werden.

ANMERKUNG

1. Die Auflösung wird nicht geändert, wenn Sie bei eingeschaltetem Computer die DIP-Schalter einstellen. Unbedingt die Stromversorgung des Computers ausschalten, wenn Sie die DIP-Schalter einstellen.
2. Die DIP-Schalter mit einem spitzen Gegenstand (wie z.B. Bleistift oder Kugelschreiber) einstellen, indem dieser am Ende der Schalternut eingesetzt wird.



AD-A205 Mac Adapter Setting Chart for LSA810W

Die DIP-Schalter auf "EIN" stellen, wie es nachfolgend dargestellt ist. (Beispiel 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 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620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 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