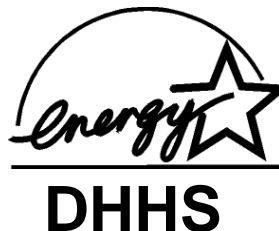
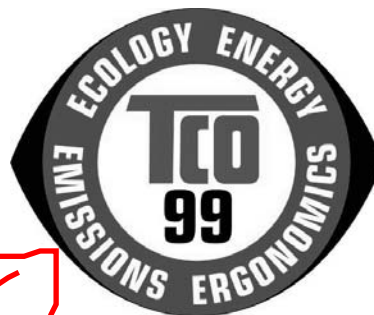


# 17" FLAT DISPLAY COLOR MONITOR

15,8" viewable area



## INSTRUCTION MANUAL

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Changes may be made without the obligation to notify any person.

## **WARRANTY**

The receipt is used as proof of purchase and should be kept in a safe place. This receipt will be required for receiving any warranty benefits. If the product is handed over to a third person, this person will have full rights to the remaining warranty services.

The purchasing receipt and this page should be handed over to the third person. We guarantee, that this monitor is in good condition and conforms technically to all the components outlined in this manual.

The remaining warranty is passed on to exchanged spare parts, when presenting the receipt.

Send in product without accessories and it will be returned without accessories.

The warranty does not cover problems caused by accident, catastrophe, vandalism, improper use, careless use, ignoring safety and maintenance regulations, alterations through software, damaged caused by a virus or any other peripheral or accessory, or damage caused by alterations not manufactured by MEDION. This declaration of limited warranty replaces any other expressed or implicit warranties.

This includes the warranty of sales or the guarantee for specific use, but is not limited to such. In some countries limited warranty is not supported by law. In this case all warranty is limited to the warranty period provided by law. After the warranty period, all guarantees become void.

In some countries a time limit to warranty is not allowed, only in those countries or states the time limit does not apply. Should you have any queries regarding these regulations, please contact us.

## **LIMITS OF LIABILITY**

The information of this manual can be changed without notice, depending on technical progress made. Manufacturer and retailer cannot be held liable for damage caused by mistakes or omission of information provided in this manual. We will never be held liable for:

1. Demands from third party against you for loss or damage
2. Economical damage (including loss of income or savings) or accompanying damage thereof. This will even apply when we have been informed of those damages.

In some countries or states it is unlawful to exclude parts of or limit liability, only in these countries or states the above can be ignored.

## **MAKING COPIES OF THIS MANUAL**

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## SAFETY INSTRUCTIONS

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Please read through this section carefully and follow all the instructions given. In this way you will guarantee reliable operation and a long life for your monitor.

Always keep these instructions handy and close by your monitor.

Keep this Instruction Manual and the packaging safe so that in the event that you sell the monitor you can pass it on to the new owner.

### OPERATIONAL SAFETY



- **Never open the housing** of the Monitor. When the housing is open there is a **danger to life** from electric shock!

- Do not insert any **objects** through the slots and openings **into the inside of the monitor**. This may lead to an electrical short-circuit or even fire resulting in damage to your monitor.



- The slots and openings in the monitor casing are for ventilation purposes. **Do not cover over these openings**, as otherwise this may lead to overheating.
- Do not allow **children** to play **unattended** on electrical equipment. Children may not always correctly recognize danger.
- The monitor **is not** intended for use in a **heavy industry environment**.

- During operation, this product emits x-rays; however, it is well shielded and meets the safety and health requirements of various countries, such as the Radiation Act of Germany and the Radiation Control for Health and Safety Act of the United States.

Radiation emitted by this product is less than 0.1 mR/hr (1 $\mu$ Sv/hr) at a distance of 10 cm from the surface of the cathode-ray tube. The c-ray radiation primarily depends on the characteristics of the cathode ray tube and its associated low-voltage and high-voltage circuitry. Internal controls have been adjusted to ensure safe operation. Only qualified personnel should perform any internal adjustments, as specified in the service manual for this product. Replace the cathode-ray tube with an identical CRT only.

- This product meets the ENERGY STAR guidelines for energy efficiency. The ENERGY STAR name is a U.S. registered mark of the United States Environmental Protection Agency.

Please proceed as outlined in the "**Customer Service**" section (see page 19)

- ◆ if the power cord is worn or damaged
- ◆ if liquid is spilled on the unit
- ◆ if the monitor fails to work properly
- ◆ if the monitor is dropped or the housing is damaged

## REPAIRS

- Leave all repairs of this monitor to **authorized and qualified service personnel** only.
- Should a repair be necessary, please consult our authorized **service hotline** only.

## POINT OF USE

- Keep your monitor and all units connected to it, away from **moisture** and avoid **dust, heat** and **direct sunlight**. Failure to observe these instructions can lead to malfunctions or damage to the monitor.
- Place and operate all units on a **stable, even** and **vibration-free surface** in order to avoid the monitor falling.
- Do not place the monitor near a radiator or heating vent.
- In order to save your eyes and to assure a convenient working area you should **avoid blinding** and **reflections** in the screen as well as **strong contrast**.
- **Never** position **vases or similar objects containing fluids** on the monitor. If liquid should get into the housing, this may cause short circuit and even cause fire.
- While working with screens you should **take breaks periodically** to avoid tension and fatigue.

## AMBIENT TEMPERATURE

- The monitor can be operated at an ambient temperature of between 50° F (10°C) and 95° F (35°C) and at a relative humidity of between 20% and 80% (without condensation).
- When switched off, the monitor can be stored at between -40° F (-40° C) and 149° F (65° C) and at a relative humidity of between 10% and 90% (without condensation).
- After transporting your monitor please wait until it has assumed the ambient temperature before connecting to power outlet and switching it on. Extremely high variations in the **temperature or humidity** may result in condensation forming on the inside of the monitor which could cause an **electrical short-circuit**.

## CONNECTING

Observe the following instructions to connect your monitor properly:

### POWER SUPPLY



- To completely disconnect power from the monitor, you must remove the power cable from the power outlet.
- Do not modify the three-prong grounding type power plug in any way.
- For additional safety we recommend use of **an excessive voltage protection device** to protect your monitor from damage resulting from **voltage surges** or **lightning**.
- Please only use the power connection cable **provided**.
- Now carefully plug in the 15-pin plug of the signal cable **straight** into the VGA socket at rear side of your computer with **slight pressure**. Please pay attention that plug and socket exactly match. Due to the asymmetrical shape there is only one way to fit the plug into. If the alignment fails and force might be used some pins inside the plug may be destroyed. To ensure trouble free connection please tighten both screws of the plug by hand.
- The **power outlet** should be located near the monitor where it is **easy to reach**.
- If you use an **extension cable**, ensure that it fulfills the **requirements**. Please ask your electrician.
- You should lay the cables in a manner that no one will trip or step on it. To avoid damage of cable **do not place any objects on the cable**.
- **Monitors are heavy items**. Please consider to ask another person's help.



## FCC COMPLIANCE STATEMENT

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:

- ◆ Reorient or relocate the receiving antenna.
- ◆ Move the monitor and PC away from the radio or television.
- ◆ Plug the monitor and PC into a different electrical outlet so that the monitor and PC and the radio or television are on separate electrical circuits.
- ◆ Make sure that all peripheral devices are also FCC Class B-certified.
- ◆ Consult a PC dealer or an experienced radio / television technician for help.

The Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. Shielded interface cables, if any, must be used in order to comply with the emission limits.

## PRECAUTIONS

You can increase the service life of your monitor by observing the following precautions:

- **Caution!** There are **no parts which can be serviced** or cleaned inside of the monitor housing.
- Before cleaning **always disconnect the line plug** and all connection cables.
- Do **not use any solvents**, caustic or gaseous cleaning agents.
- Clean the display with a soft, lint-free cloth.

## INTRODUCTION

---

### **NOTES ON THESE INSTRUCTIONS**

We have arranged these instructions so that you can quickly find the subject related information in the table of contents.

An index is located at the end of this manual.

The purpose of these instructions is to show you how to operate your display in easily understandable language.

### **OUR TARGET GROUP**

These instructions are intended for initial users as well as advanced users. Regardless of the possible professional utilization, this display is designed for operation in private households.

### **QUALITY**

In selecting the components we focused on maximum function, simple handling, safety and reliability. The balanced hardware and software concept has allowed to offer you an advanced display design which will provide you a great deal of pleasure for your work and entertainment.

We thank you for your confidence in our products and are pleased to greet you as a new customer.

### **SERVICE**

We support you in your daily work with our individual service. Contact us, we will be glad to help you.

This manual contains a separate chapter on the subject of service beginning on page 19.

## **INCLUDED EQUIPMENT**

Please check the set for completeness and notify us within 14 days after purchase if the set is not complete. With your monitor you receive:

Monitor

Monitor Base

Power Cable

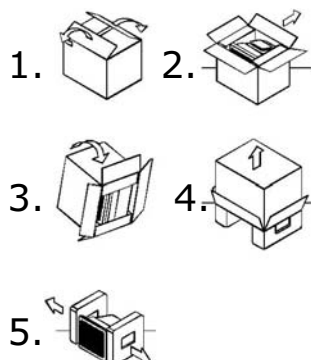
Operating Instructions

Warranty Certificate

## START-UP

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### UNPACKING PROCEDURE

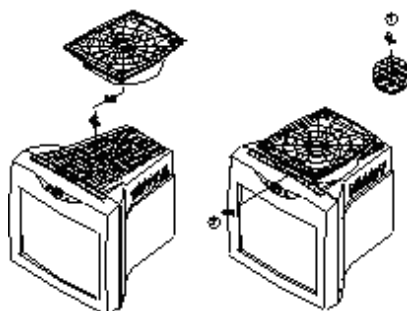


Before start-up please read the Chapter „**Safety instructions**“ on page 1 by all means.

Save the original box and all packing material for future shipping needs.

**Packing materials and product are recyclable.**

### FIXING THE MONITOR BASE



~~(diagram the same)~~

1. Lay the monitor on its side or on the top.
2. Locate the slots at the bottom of the monitor and feed the hooks of the base into the slots.
3. Slightly push the base towards the monitor's screen side until it clicks into place.
4. To remove the base, hold the bottom of the base then push it out.

### Preparations On Your Computer

If you have operated your computer previously with another monitor, it might be necessary for you to make a few preparations. This is required when your previous monitor was operated with settings which are not supported by your new monitor.

### DISPLAY PROPERTIES

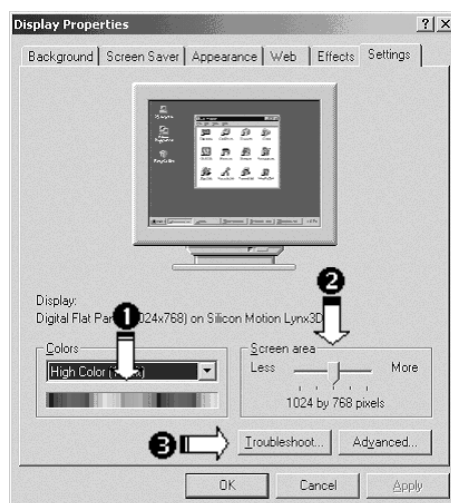
This Windows program offers you the possibility of adapting the display to your monitor. This includes items such as the background image, the screen saver, the Active Desktop (Web) as well as other settings for your monitor and video card.

To customize your desktop or display follow these instructions:

- To access display properties, click on the "Start" button and select "Settings". Then select "Control Panel".

or

- Under "Control Panel", double-click on the "Display" icon.



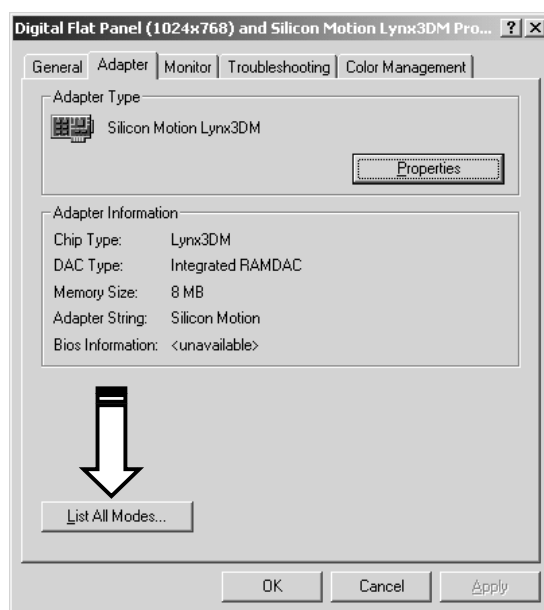
(Diagram the same)

Then click **"Colors"** to set the color depth (number of colors displayed). Your monitor supports a maximum color depth of 16 million colors corresponding to 32 bit or "True Color".

The resolution can be set under **"Screen area"**. Your monitor can display a maximum of 1280 x 1024 resolution.

The image refresh rate can be set under **"Other options"**. A window with the characteristics of your video card appears depending on the configuration of your computer.

Under **"Video card"** you can change the desired value in the selection field **"Image refresh rate"**.

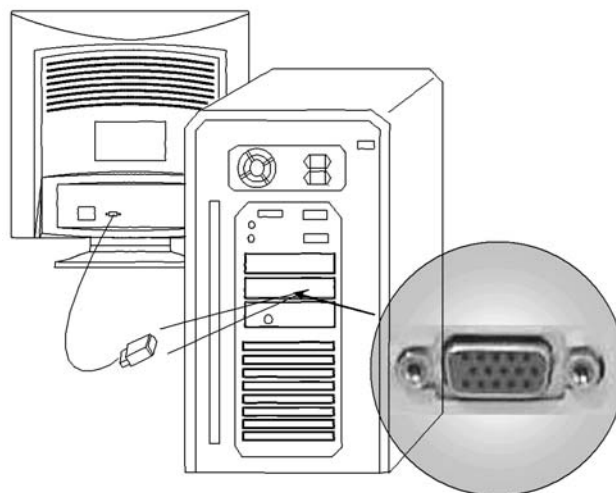


~~(Diagram the same)~~

➤ **Caution!** If your setting does not coincide with the values supported by your display, you may not see any image.

## CONNECTING VGA SIGNAL CABLE

1. Ensure that the monitor is not yet connected to the electrical power outlet (power cord not yet plugged in) and neither the monitor nor the computer is switched on.
2. Prepare your computer for the monitor if necessary (see previous pages) with the correct settings for your monitor.
3. Plug the signal cable of the monitor into the matching VGA socket on the computer.



~~(Diagram the same)~~

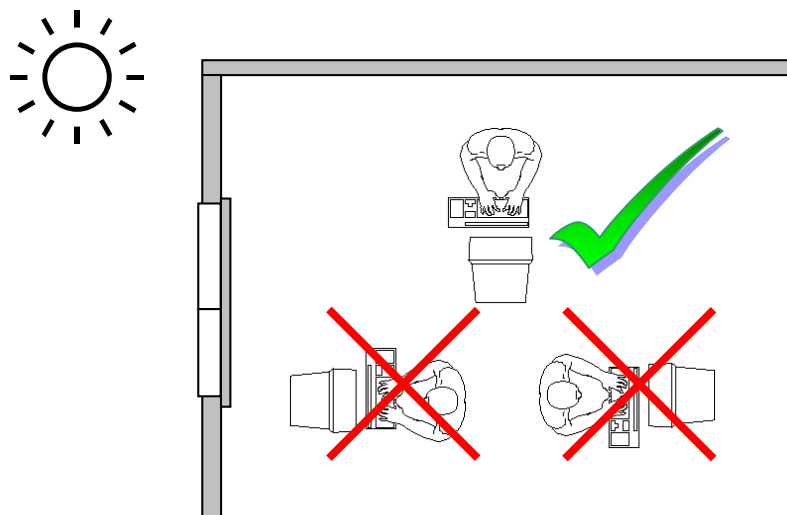
4. Now connect the power plug of the monitor using the power cable supplied with a properly configured power outlet. The outlet should be near the monitor and ease to access.
5. Switch on the monitor with the On/Off switch (see next page for details).
6. Now turn on the computer

## PRESET MODES

Resolution	Horizontal frequency (kHz)	Vertical frequency (Hz)	Resolution	Horizontal frequency (kHz)	Vertical frequency (Hz)
720 x 400	31,47	70	1024 x 768	60,02	75
640 x 480	31,47	60	800 x 600	62,96	100
800 x 600	37,88	60	1280 x 1024	64,34	60
640 x 480	43,27	85	1024 x 768	68,68	85
800 x 600	46,8	75	1024 x 768	80	100
1024 x 768	48,36	60	1280 x 1024	80	75
800 x 600	53,67	85	1280 x 960	85,9	85

## POSITIONING OF THE MONITOR

Please ensure that the monitor is set up in such a way that reflections, glare and light-dark contrast are avoided (as this will make the screen less attractive to look at).





## WORKING ERGONOMICS

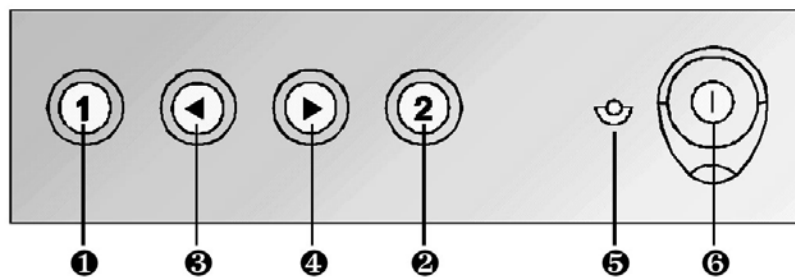


- Hand's support rest: 5 - 10 cm
- Top line of screen should keep eye's level or be a little beneath
- Eye's distance to screen: 50 - 70 cm
- Legroom (vertical): at least 65 cm
- Legroom (horizontal): at least 60 cm

The illustration above should give you a guideline for an ergonomic workplace.

## USER CONTROLS AND INDICATORS

---



~~(diagram the same)~~

- ❶ Displays menu & exits menu
- ❷ Confirms menu selection
- ❸ Scrolls through menu to choose an icon for adjustment / Adjusts level of selected icon
- ❹
- ❺ Power LED
- ❻ Power ON/OFF switch

## THE OSD (ON SCREEN DISPLAY)

You can adjust certain parameters of the screen display via the OSD menu (On Screen Display).

Press button ❶ to enter the menu. Keep pressing this button, until the desired icon (and the function associated with it) is highlighted.

Use button ❷ to confirm your entry, and activate the function. Use buttons ❸ or ❹ to change the current setting.

Press button ❶ again to save the changed values. Now you can do more changes in the main menu, or exit the menu by pressing button ❶ again.

If you do not press any button within 15 seconds, the On Screen Menu will exit automatically, and changes done by you will be saved.

On the following pages, main functions or adjustment options via the OSD are explained.

### ADJUSTMENT OPTIONS

#### **CONTRAST / BRIGHTNESS**

Use button ❹ to increase the brightness or the contrast, use button ❸ to decrease their values. You can use button ❷ to select between brightness and contrast.

#### **VERTICAL / HORIZONTAL SCREEN SIZE**

Enlarges or reduces the displayed screen image.

#### **HORIZONTAL AND VERTICAL SCREEN POSITION**

Adjustment of horizontal or vertical screen position.



### **VERTICAL PINCUSHION**

Controls the curvature of the vertical screen edge.



### **TRAPEZOID**

Controls the ratio of the upper horizontal width to the lower screen edge.



### **SCREEN TILT**

Controls the tilt of the screen.



### **COLOR**

To select between 9300° K, 6500° K, or the customizable color. The color **green** cannot be changed.

⇒ **Important!** - The user color cannot be retrieved from the memory. Therefore, take note of the initial setting before adjustment. When the monitor is turned off, the adjustment done last will be kept.



### **SELECTING THE LANGUAGE**

The language for the menu on the screen display can be selected from English, French, German, Italian, and Spanish.



### **DISPLAY OF INPUT FREQUENCY**

Displays the horizontal and vertical frequency.



### **MANUAL DEGAUSSING**

When this function is selected, button ② must be pressed.

⇒ **Note:** During degaussing a sharp click sound can be heard. This is normal, and should not worry you.



### RETRIEVING STANDARD VALUES

The factory setting can be retrieved again. When the monitor is operated in a customized mode, then this function has no effect.



### HORIZONTAL MOIRE (PICTURE ADJUSTMENT)



### VERTICAL MOIRE (PICTURE ADJUSTMENT)

To reduce horizontal or vertical moiré patterns on the screen display.

### SAVING ENERGY

This monitor can be switched into various states of energy saving by the respective computer or operating system. This meets the current requirements for reduction of power consumption.

The monitor supports the following states of low energy consumption, corresponding to "VESA Standard Power Display Management Signal" guideline.

Status	Power consumption	LED color
On Off	Normal < 5 Watt	Green Orange

It takes about 20 seconds to switch from **off** to normal operation.

## TECHNICAL SPECIFICATION

<b>Model</b>	<b>1786 LH</b>
Screen size	17" (43cm) diagonal 15,75" (40 cm) viewable area
Dot pitch	0,27 mm
Dimensions	15,91" x 16,06" x 16,62"
Video input	15-pin sub-D connector
Max. resolution	1280 x 1024 dots
Bandwidth	110 MHz
Synchronization	
Horizontal:	30 to 86 kHz
Vertical:	50 to 120 Hz
Input signal	RGB – video, analog Synchr., TTL separate
Weight	37,04 lb
Operating voltage	AC 100 to 240 V~
Frequency	50 to 60 Hz
Power consumption	75 Watt max. (1,8 A)
Oper./ storage temperature	50°F to 95°F / - 40°F to 149°F 10°C to 35°C / - 40°C to 65°C
Oper./ storage altitude	10.000 ft / 40.000 ft
Oper./ storage Humidity	20%-80% / 10%-90% (not condensing)
Regulations	meets UL, FCC, Energy Star, <del>TCO 99</del> and DHHS
<b>Specifications are subject to change without notice.</b>	

## CUSTOMER SERVICE

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### TROUBLESHOOTING

If your Monitor should cause problems please check if it is properly installed according to the information given in chapter "Start-Up" starting on page 8. If the problems cannot be solved read the following chapter for a possible solution.

### LOCALIZING THE CAUSE

Errors may have simple causes, but sometimes they are caused by faulty equipment. We would like to give you some ideas to solve common problems. Should these instructions not lead to success, please call us!

### CHECK CABLES AND CONNECTIONS

Visibly check all cables and connections. Should all lights be off, check whether all equipment is supplied with power.

### ERRORS AND POSSIBLE CAUSES

#### The monitor is blank:

Please check:

- ☐ Image refresh frequency. The current Image refresh frequency must be supported by the monitor.
- ☐ Energy Star mode. Press any key or move the mouse to deactivate the mode.
- ☐ Signal connector pins. If pins are bent or damaged, please contact customer service.
- ☐ Please set correct values supported by your monitor (see "Preparations on Your Computer", page 9).

### **Picture is unstable or scrolling:**

Please check:

- ☐ Signal connector pins. If pins are bent or damaged, please contact customer service.
- ☐ Video card. Are all settings correct?
- ☐ Image refresh frequency. Please choose values valid for your system.
- ☐ Please remove interfering devices (cordless phones, speaker boxes etc.) near your monitor.
- ☐ Avoid using signal extensions cords.

### **Characters look too dark, the picture is too small or too big, not centered etc.:**

- ☐ Adjust the related settings (see chapter "The OSD", page 15).

### **Colors are displayed incorrectly:**

- ☐ Check the signal connector pins. If pins are bent or damaged, please contact customer hotline.
- ☐ Adjust the related settings (see chapter "The OSD", page 15).
- ☐ Avoid using signal extensions cords.

### **DO YOU NEED ADDITIONAL HELP ?**

Should our suggestions given in the chapters above not solve your problem, please contact us. You'd ease our trying to help you by providing the following information:

- How is your computer configuration ?
- What additional peripheral devices do you use ?
- Which error messages are displayed ?
- Which program(s) were active when the error occurred ?
- What did you do so far to solve the problem ?
- If you've received a customer number before, kindly tell us.