

- [Safety and trouble shooting](#)
- [About this manual](#)
- [Product information](#)
- [Installing your monitor](#)
- [On-screen display](#)
- [Customer care and warranty](#)
- [FAQ](#)
- [Glossary](#)
- [Download & print](#)
- [EXIT](#)



# 105E

## Electronic User's Manual

# Safety and Troubleshooting Information

[Safety Precautions and Maintenance](#) • [Troubleshooting](#) • [Regulatory Information](#) • [Other Related Information](#)

---

## Safety precautions and maintenance



**WARNING: Use of controls, adjustments, or procedures other than those specified in this documentation may result in exposure to shock, electrical hazards, and/or mechanical hazards.**

Read and follow these instructions when connecting and using your computer monitor:

Disconnect the monitor from the power supply if the monitor is not to be used for an extended period of time.

Do not attempt to remove the back cover, as you will be exposed to a shock hazard. The back cover should only be removed by qualified service personnel.

Do not place objects on top of the monitor cabinet, objects could fall into vents or cover them and prevent proper cooling of the monitor's electronic devices.

To avoid the risk of shock or permanent damage to the set, do not expose the monitor to rain or excessive moisture.

Do not use alcohol or ammonia-based liquid to clean the monitor. If necessary, clean with a slightly damp cloth. Disconnect the monitor from the power supply before cleaning.

When positioning the monitor, make sure the power plug and outlet are easily accessible.

Consult a service technician if the monitor does not operate normally when operating instructions of this manual are followed.

[RETURN TO TOP OF THE PAGE](#)

# Troubleshooting

[Safety Precautions and Maintenance](#) • [Troubleshooting](#) • [Regulatory Information](#) • [Other Related Information](#)

---

## Common Problems

Having trouble? Something not working? Before calling for help, try these suggestions.

### Having this problem?

### Check these items

No Picture

(Power LED not lit)

Make sure the Power cable is plugged into the power outlet and back of the monitor.  
Power button on the front of your monitor should be in the ON position.  
Disconnect the monitor from the power outlet for about one minute.

No Picture

(Power LED is flashing yellow)

Make sure the computer is turned on.  
Make sure the monitor cable is properly connected to your computer.  
Check to see if the monitor cable has bent pins.  
The Energy Saving feature may be activated

No Picture

(Power LED is green)

Make sure the Brightness and Contrast controls are set correctly.  
Make sure the monitor cable is properly connected to your computer.  
Check to see if the monitor cable has bent pins.  
Make sure the computer Power button is on.

|  |   |
|--|---|
| Screen doesn't show<br>when you turn on the<br>monitor | Make sure the monitor cable is properly connected to your<br>computer. (Also refer to the Quick Start Guide).<br>Check to see if the monitor cable has bent pins.<br>Make sure the computer is turned on. |
| No color or intermittent<br>color                      | If you are using a non-VESA-DDC standard video card,<br>turn the DDC1 / 2B feature Off.   |
| Color appears blotchy                                  | The picture may need degaussing.<br>Remove any nearby magnetic objects.<br>Face the monitor toward the East for the best picture<br>quality.  |
| Missing one or more<br>colors                          | Check the Color Temperature.<br>Make sure the monitor cable is properly connected to your<br>computer.<br>Check to see if the monitor cable has bent pins.  |
| Dim Picture  | Adjust the Brightness and Contrast controls.<br>Check your video card and it's owner's manual instructions<br>for it may be a non-VESA-DDC Standard card.   |
| Picture is too large or<br>too small.                  | Adjust the Horizontal and/or Vertical Size.<br>Adjust the Zoom.   |
| Edges of the picture<br>are not square.                | Adjust the geometry.  |
| Picture has a double<br>image.                         | Eliminate the use of a video extension cable and/or video<br>switch box.<br>Face the monitor toward the East for the best picture<br>quality.   |
| Picture is not sharp.                                  | Check to make sure Moiré is switched off.<br>Adjust Sync Input.   |
| Unstable Picture                                       | Increase your refresh rate.   |

Problem with On  
Screen Display

Refer to the instructions and troubleshooting information in that chapter.

For further assistance, refer to the [Consumer Information Centers](#) list to contact your local Philips distributor.

[RETURN TO TOP OF THE PAGE](#)

## Regulatory Information

[TCO '95/99 Information](#) • [TCO'95/99 Environmental Requirements](#) • [TCO '03 Information](#) • [Recycling Information for Customers](#) • [CE Declaration of Conformity](#) • [Federal Communications Commission \(FCC\) Notice \(U.S. Only\)](#) • [Commission Federale de la Communication \(FCC Declaration\)](#) • [EN 55022 Compliance \(Czech Republic Only\)](#) • [VCCI Class 2 Notice \(Japan Only\)](#) • [MIC Notice \(South Korea Only\)](#) • [Polish Center for Testing and Certification Notice](#) • [North Europe Information \(Nordic Countries\)](#) • [BSMI Notice \(Taiwan Only\)](#) • [Ergonomie Hinweis \(nur Deutschland\)](#) • [Philips End-of-Life Disposal Information for UK only](#)

[Safety Precautions and Maintenance](#) • [Troubleshooting](#) • [Other Related Information](#)

---

### TCO '95/99 Information (For TCO Model Only)



### Congratulations!

You have just purchased a TCO' 95 or TCO' 99 approved and labeled product! Your choice has provided you with a product developed for professional use. Your purchase has also contributed to reducing the burden on the environment and also to the further development of environmentally adapted electronics products.

#### *Why do we have environmentally labeled computers?*

In many countries, environmental labeling has become an established method for encouraging the adaptation of goods and services to the environment. The main problem, as far as computers and other electronics equipment are concerned, is that environmentally harmful substances are used both in the products and during their manufacture. Since it is not so far possible to satisfactorily recycle the majority of electronics equipment, most of these potentially damaging substances sooner or later enter nature.

There are also other characteristics of a computer, such as energy consumption levels, that are important from the viewpoints of both the work (internal) and natural (external) environments. Since all methods of electricity generation have a negative effect on the environment (e.g. acidic and climate-influencing emissions, radioactive waste), it is vital to save energy. Electronics equipment in offices is often left running continuously and thereby consumes a lot of energy.

### *What does labeling involve?*

This product meets the requirements for the TCO' 95/TCO' 99 scheme which provides for international and environmental labeling of personal computers. The labeling scheme was developed as a joint effort by the TCO (The Swedish Confederation of Professional Employees), Svenska Naturskyddsforeningen (The Swedish Society for Nature Conservation) and Statens Energimyndighet (The Swedish National Energy Administration).

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

The environmental demands impose restrictions on the presence and use of heavy metals, brominated and chlorinated flame retardants, CFCs (freons) and chlorinated solvents, among other things. The product must be prepared for recycling and the manufacturer is obliged to have an environmental policy 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.

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

Below 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

SE-114 94 Stockholm, Sweden

Fax: +46 8 782 92 07

Email (Internet): [development@tco.se](mailto:development@tco.se)

*Current information regarding TCO' 95/TCO' 99 approved and labeled products may also be obtained via the Internet, using the address: <http://www.tco-info.com/>*

[RETURN TO TOP OF THE PAGE](#)

---

## Environmental Requirements

### *Flame retardants*

Flame retardants are present in printed circuit boards, cables, wires, casings and housings. Their purpose is to prevent, or at least to delay the spread of fire. Up to 30% of the plastic in a computer casing can consist of flame retardant substances. Most flame retardants contain bromine or chloride, and those flame retardants are chemically related to another group of environmental toxins, PCBs. Both the flame retardants containing bromine or chloride and the PCBs are suspected of giving rise to severe health effects, including reproductive damage in fish-eating birds and mammals, due to the bio-accumulative\* processes. Flame retardants have been found in human blood and researchers fear that disturbances in fetus development may occur.

The relevant TCO' 95/TCO' 99 demand requires that plastic components weighing more than 25 grams must not contain flame retardants with organically bound bromine or chlorine. Flame retardants are allowed in the printed circuit boards since no substitutes are available.

### **Cadmium\*\***

Cadmium is present in rechargeable batteries and in the color-generating layers of certain computer displays. Cadmium damages the nervous system and is toxic in high doses. The relevant TCO' 95/TCO'99 requirement states that batteries, the color-generating layers of display screens and the electrical or electronics components must not contain any cadmium.

### **Mercury\*\***

Mercury is sometimes found in batteries, relays and switches. It damages the nervous system and is toxic in high doses. The relevant TCO' 95/TCO' 99 requirement states that batteries may not contain any mercury. It also demands that mercury is not present in any of the electrical or electronics components associated with the labeled unit.

### **CFCs (freons)**

The relevant TCO' 95/TCO' 99 requirement states that neither CFCs nor HCFCs may be used

during the manufacture and assembly of the product. CFCs (freons) are sometimes used for washing printed circuit boards. CFCs break down ozone and thereby damage the ozone layer in the stratosphere, causing increased reception on earth of ultraviolet light with increased risks e.g. skin cancer (malignant melanoma) as a consequence.

## Lead\*\*

Lead can be found in picture tubes, display screens, solders and capacitors. Lead damages the nervous system and in higher doses, causes lead poisoning. The relevant TCO' 95/TCO' 99 requirement permits the inclusion of lead since no replacement has yet been developed.

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

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

[RETURN TO TOP OF THE PAGE](#)

---

## TCO' 03 Information



### Congratulations!



The display you have just purchased carries the TCO'03 Displays label. This means that your display is designed, manufactured and tested according to some of the strictest quality and environmental requirements in the world. This makes for a high performance product, designed with the user in focus that also minimizes the impact on our natural environment.

**Some of the features of the TCO'03 Display requirements.**

## Ergonomics

Good visual ergonomics and image quality in order to improve the working environment for the user and to reduce sight and strain problems. Important parameters are luminance, contrast, resolution, reflectance, colour rendition and image stability.

## Energy

Energy-saving mode after a certain time-beneficial both for the user and the environment

Electrical safety

## Emissions

Electromagnetic fields

Noise emissions

## Ecology

The product must be prepared for recycling and the manufacturer must have a certified environmental management system such as EMAS or ISO 14 000

Restrictions on

- chlorinated and brominated flame retardants and polymers
- heavy metals such as cadmium, mercury and lead.

The requirements included in this label have been developed by TCO Development in co-operation with scientists, experts, users as well as manufacturers all over the world. Since the end of the 1980s TCO has been involved in influencing the development of IT equipment in a more user-friendly direction. Our labelling system started with displays in 1992 and is now requested by users and IT-manufacturers all over the world.

For more information, please visit  
**[www.tcodevelopment.com](http://www.tcodevelopment.com)**

**[RETURN TO TOP OF THE PAGE](#)**

## Recycling Information for Customers

Philips establishes technically and economically viable objectives to optimize the environmental performance of the organization's product, service and activities.

From the planning, design and production stages, Philips emphasizes the important of making products that can easily be recycled. At Philips, end-of-life management primarily entails participation in national take-back initiatives and recycling programs whenever possible, preferably in cooperation with competitors.

There is currently a system of recycling up and running in the European countries, such as The Netherlands, Belgium, Norway, Sweden and Denmark.

In U.S.A., Philips Consumer Electronics North America has contributed funds for the Electronic Industries Alliance (EIA) Electronics Recycling Project and state recycling initiatives for end-of-life electronics products from household sources. In addition, the Northeast Recycling Council (NERC) - a multi-state non-profit organization focused on promoting recycling market development - plans to implement a recycling program.

In Asia Pacific, Taiwan, the products can be taken back by Environment Protection Administration (EPA) to follow the IT product recycling management process, detail can be found in web site [www.epa.gov.tw](http://www.epa.gov.tw)

For help and service, please contact [Consumers Information Center](#) or [F1rst Choice Contact Information Center](#) in each country or the following team of Environmental specialist can help.

Mr. Job Chiu - Environment manager  
Philips Electronics Industries (Taiwan) Ltd, Monitor Business Unit  
E-mail: [job.chiu@philips.com](mailto:job.chiu@philips.com)  
Tel: +886 (0) 3 454 9839

Mr. Maarten ten Houten - Senior Environmental Consultant  
Philips Consumer Electronics  
E-mail: [marten.ten.houten@philips.com](mailto:marten.ten.houten@philips.com)  
Tel: +31 (0) 40 27 33402

Ms. Delmer F. Teglas  
Philips Electronics North America  
E-mail: [butch.teglas@philips.com](mailto:butch.teglas@philips.com)  
Tel: +1 865 521 4322

[RETURN TO TOP OF THE PAGE](#)

---

## **CE Declaration of Conformity**

Philips Consumer Electronics declare under our responsibility that the product is in conformity with the following standards

- EN60950:1992+A1+A2+A3+A4+A11 (Safety requirement of Information Technology Equipment)
- EN55022:1998 (Radio Disturbance requirement of Information Technology Equipment)
- EN55024:1998 (Immunity requirement of Information Technology Equipment)
- EN61000-3-2:1995 (Limits for Harmonic Current Emission)
- EN61000-3-3:1995 (Limitation of Voltage Fluctuation and Flicker)

following provisions of directives applicable

- 73/23/EEC (Low Voltage Directive)
- 89/336/EEC (EMC Directive)
- 93/68/EEC (Amendment of EMC and Low Voltage Directive)

and is produced by a manufacturing organization on ISO9000 level.

The product also comply with the following standards

- ISO9241-3, ISO9241-7, ISO9241-8 (Ergonomic requirement for Visual Display)
- ISO13406-2 (Ergonomic requirement for Flat panels)
- GS EK1-2000 (GS specification)
- prEN50279:1998 (Low Frequency Electric and Magnetic fields for Visual Display)
- MPR-II (MPR:1990:8/1990:10 Low Frequency Electric and Magnetic fields)
- TCO95, TCO99, TCO'03 (Requirement for Environment Labelling of Ergonomics, Energy, Ecology and Emission,  
TCO: Swedish Confederation of Professional Employees) for TCO versions

[RETURN TO TOP OF THE PAGE](#)

---

## **Federal Communications Commission (FCC) Notice (U.S. Only)**



This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

Reorient or relocate the receiving antenna.

Increase the separation between the equipment and receiver.

Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.



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

Use only RF shielded cable that was supplied with the monitor when connecting this monitor to a computer device.

To prevent damage which may result in fire or shock hazard, do not expose this appliance to rain or excessive moisture.

THIS CLASS B DIGITAL APPARATUS MEETS ALL REQUIREMENTS OF THE CANADIAN INTERFERENCE-CAUSING EQUIPMENT REGULATIONS.

[RETURN TO TOP OF THE PAGE](#)

---

**[Commission Federale de la Communication \(FCC Declaration\)](#)**



Cet équipement a été testé et déclaré conforme aux limites des appareils numériques de class B, aux termes de l'article 15 Des règles de la FCC. Ces limites sont conçues de façon à fournir une protection raisonnable contre les interférences nuisibles dans le cadre d'une installation résidentielle. CET appareil produit, utilise et peut émettre des hyperfréquences qui, si l'appareil n'est pas installé et utilisé selon les consignes données, peuvent causer des interférences nuisibles aux communications radio. Cependant, rien ne peut garantir l'absence d'interférences dans le cadre d'une installation particulière. Si cet appareil est la cause d'interférences nuisibles pour la réception des signaux de radio ou de télévision, ce qui peut être décelé en fermant l'équipement, puis en le remettant en fonction, l'utilisateur pourrait essayer de corriger la situation en prenant les mesures suivantes:

Réorienter ou déplacer l'antenne de réception.

Augmenter la distance entre l'équipement et le récepteur.

Brancher l'équipement sur un autre circuit que celui utilisé par le récepteur.

Demander l'aide du marchand ou d'un technicien chevronné en radio/télévision.



Toutes modifications n'ayant pas reçu l'approbation des services compétents en matière de conformité est susceptible d'interdire à l'utilisateur l'usage du présent équipement.

N'utiliser que des câbles RF armés pour les connections avec des ordinateurs ou périphériques.

CET APPAREIL NUMERIQUE DE LA CLASSE B RESPECTE TOUTES LES EXIGENCES DU REGLEMENT SUR LE MATERIEL BROUILLEUR DU CANADA.

[RETURN TO TOP OF THE PAGE](#)

## EN 55022 Compliance (Czech Republic Only)

This device belongs to category B devices as described in EN 55022, unless it is specifically stated that it is a Class A device on the specification label. The following applies to devices in Class A of EN 55022 (radius of protection up to 30 meters). The user of the device is obliged to take all steps necessary to remove sources of interference to telecommunication or other devices.

Pokud není na typovém štítku počítače uvedeno, že spadá do do třídy A podle EN 55022, spadá automaticky do třídy B podle EN 55022. Pro zařízení zařazená do třídy A (chranné pásmo 30m) podle EN 55022 platí následující. Dojde-li k rušení telekomunikačních nebo jiných zařízení je uživatel povinen provést taková opatření, aby rušení odstranil.

[RETURN TO TOP OF THE PAGE](#)

---

## VCCI Notice (Japan Only)

This is a Class B product based on the standard of the Voluntary Control Council for Interference (VCCI) for Information technology equipment. If this equipment is used near a radio or television receiver in a domestic environment, it may cause radio Interference. Install and use the equipment according to the instruction manual.



Class B ITE

この装置は、情報処理装置等電波障害自主規制協議会 (VCCI) の基準に基づくクラス B 情報技術装置です。この装置は家庭環境で使用することを目的としていますが、この装置がラジオやテレビジョン受信機に近接して使用されると、受信障害を引き起こすことがあります。取扱説明書に従って正しい取り扱いをして下さい。

[RETURN TO TOP OF THE PAGE](#)

---

## MIC Notice (South Korea Only)

Class B Device

| 장치 종류 | 사용자 안내문   |
|-------|---|
| B급 기기 | 이 장치는 가정용으로 전자파 적합등록을 한 장치로서 주거지역에서는 물론 모든 지역에서 사용할 수 있습니다. |



Please note that this device has been approved for non-business purposes and may be used in any environment, including residential areas.

[RETURN TO TOP OF THE PAGE](#)

---

### **Polish Center for Testing and Certification Notice**

The equipment should draw power from a socket with an attached protection circuit (a three-prong socket). All equipment that works together (computer, monitor, printer, and so on) should have the same power supply source.

The phasing conductor of the room's electrical installation should have a reserve short-circuit protection device in the form of a fuse with a nominal value no larger than 16 amperes (A).

To completely switch off the equipment, the power supply cable must be removed from the power supply socket, which should be located near the equipment and easily accessible.

A protection mark "B" confirms that the equipment is in compliance with the protection usage requirements of standards PN-93/T-42107 and PN-89/E-06251.

## ***Wymagania Polskiego Centrum Badań i Certyfikacji***

Urządzenie powinno być zasilane z gniazda z przyłączonym obwodem ochronnym (gniazdo z kołkiem). Współpracujące ze sobą urządzenia (komputer, monitor, drukarka) powinny być zasilane z tego samego źródła.

Instalacja elektryczna pomieszczenia powinna zawierać w przewodzie fazowym rezerwową ochronę przed zwarciami, w postaci bezpiecznika o wartości znamionowej nie większej niż 16A (amperów).

W celu całkowitego wyłączenia urządzenia z sieci zasilania, należy wyjąć wtyczkę kabla zasilającego z gniazdka, które powinno znajdować się w pobliżu urządzenia i być łatwo dostępne.

Znak bezpieczeństwa "B" potwierdza zgodność urządzenia z wymaganiami bezpieczeństwa użytkowania zawartymi w PN-93/T-42107 i PN-89/E-06251.

## ***Pozostałe instrukcje bezpieczeństwa***

- Nie należy używać wtyczek adapterowych lub usuwać kolka obwodu ochronnego z wtyczki. Jeżeli konieczne jest użycie przedłużacza to należy użyć przedłużacza 3-żyłowego z prawidłowo połączonym przewodem ochronnym.
- System komputerowy należy zabezpieczyć przed nagłymi, chwilowymi wzrostami lub spadkami napięcia, używając eliminatora przepięć, urządzenia dopasowującego lub bezzakłócenowego źródła zasilania.
- Należy upewnić się, aby nic nie leżało na kablach systemu komputerowego, oraz aby kable nie były umieszczone w miejscu, gdzie można byłoby na nie nadeptywać lub potykać się o nie.
- Nie należy rozlewać napojów ani innych płynów na system komputerowy.
- Nie należy wpychać żadnych przedmiotów do otworów systemu komputerowego, gdyż może to spowodować pożar lub porażenie prądem, poprzez zwarcie elementów wewnętrznych.
- System komputerowy powinien znajdować się z dala od grzejników i źródeł ciepła. Ponadto, nie należy blokować otworów wentylacyjnych. Należy unikać kładzenia luźnych papierów pod komputer oraz umieszczania komputera w ciasnym miejscu bez możliwości cyrkulacji powietrza wokół niego.

[RETURN TO TOP OF THE PAGE](#)

---

## **North Europe Information (Nordic Countries)**

Placering/Ventilation

### **VARNING:**

**FÖRSÄKRA DIG OM ATT HUVUDBRYTARE OCH UTTAG ÄR LÄTÅTKOMLIGA, NÄR DU STÄLLER DIN UTRUSTNING PÅPLATS.**

## Placering/Ventilation

### **ADVARSEL:**

SØRG VED PLACERINGEN FOR, AT NETLEDNINGENS STIK OG STIKKONTAKT ER NEMT TILGÆNGELIGE.

## Paikka/Ilmankierto

### **VAROITUS:**

SIJOITA LAITE SITEN, ETTÄ VERKKOJOHTO VOIDAAN TARVITTAESSA HELPOSTI IRROTTAA PISTORASIESTA.

## Plassering/Ventilasjon

### **ADVARSEL:**

NÅR DETTE UTSTYRET PLASSERES, MÅ DU PASSE PÅ AT KONTAKTENE FOR STØMTILFØRSEL ER LETTE Å NÅ.

[RETURN TO TOP OF THE PAGE](#)

---

## **BSMI Notice (Taiwan Only)**

符合乙類資訊產品之標準

[RETURN TO TOP OF THE PAGE](#)

---

## Ergonomie Hinweis (nur Deutschland)

Der von uns gelieferte Farbmonitor entspricht den in der "Verordnung über den Schutz vor Schäden durch Röntgenstrahlen" festgelegten Vorschriften.

Auf der Rückwand des Gerätes befindet sich ein Aufkleber, der auf die Unbedenklichkeit der Inbetriebnahme hinweist, da die Vorschriften über die Bauart von Störstrahlern nach Anlage III  $\alpha$  5 Abs. 4 der Röntgenverordnung erfüllt sind.

Damit Ihr Monitor immer den in der Zulassung geforderten Werten entspricht, ist darauf zu achten, daß

1. Reparaturen nur durch Fachpersonal durchgeführt werden.
2. nur original-Ersatzteile verwendet werden.
3. bei Ersatz der Bildröhre nur eine bauartgleiche eingebaut wird.

Aus ergonomischen Gründen wird empfohlen, die Grundfarben Blau und Rot nicht auf dunklem Untergrund zu verwenden (schlechte Lesbarkeit und erhöhte Augenbelastung bei zu geringem Zeichenkontrast wären die Folge).

Der arbeitsplatzbezogene Schalldruckpegel nach DIN 45 635 beträgt 70dB (A) oder weniger.



**ACHTUNG: BEIM AUFSTELLEN DIESES GERÄTES DARAUF ACHTEN, DAß NETZSTECKER UND NETZKABELANSCHLUß LEICHT ZUGÄNGLICH SIND.**

[RETURN TO TOP OF THE PAGE](#)

---

## End-of-Life Disposal

Your new monitor contains materials that can be recycled and reused. Specialized companies can recycle your product to increase the amount of reusable materials and to minimize the amount to be disposed of.

Please find out about the local regulations on how to dispose of your old monitor from your local Philips dealer.

**(For customers in Canada and U.S.A.)**

This product may contain lead and/or mercury. Dispose of in accordance to local-state and federal regulations.

For additional information on recycling contact [www.eia.org](http://www.eia.org) (Consumer Education Initiative)

[RETURN TO TOP OF THE PAGE](#)

---

**Information for UK only**

**WARNING - THIS APPLIANCE MUST BE EARTHED.**

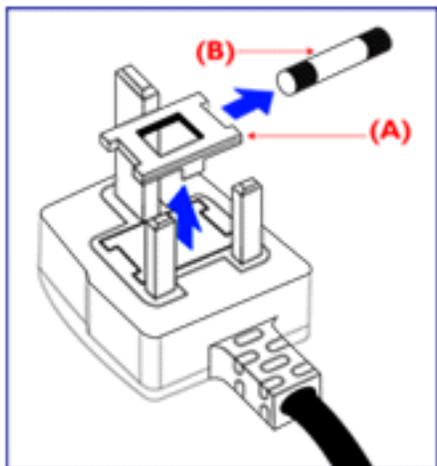
**Important:**

This apparatus is supplied with an approved moulded 13A plug. To change a fuse in this type of plug proceed as follows:

1. Remove fuse cover and fuse.
2. Fit new fuse which should be a BS 1362 5A,A. S.T.A. or BSI approved type.
3. Refit the fuse cover.

If the fitted plug is not suitable for your socket outlets, it should be cut off and an appropriate 3-pin plug fitted in its place.

If the mains plug contains a fuse, this should have a value of 5A. If a plug without a fuse is used, the fuse at the distribution board should not be greater than 5A.



Note: The severed plug must be destroyed to avoid a possible shock hazard should it be inserted into a 13A socket elsewhere.

### How to connect a plug

The wires in the mains lead are coloured in accordance with the following code:

BLUE - "NEUTRAL" ("N")

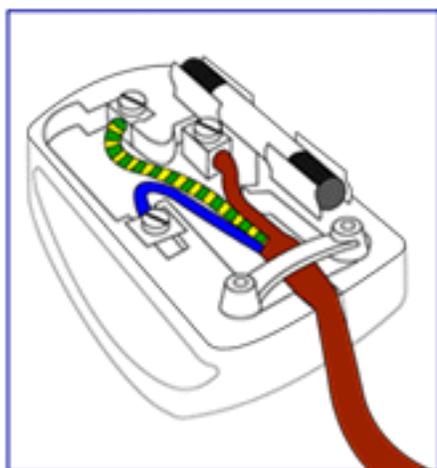
BROWN - "LIVE" ("L")

GREEN & YELLOW - "EARTH" ("E")

1. The GREEN AND YELLOW wire must be connected to the terminal in the plug which is marked with the letter "E" or by the Earth symbol  $\perp$  or coloured GREEN or GREEN AND YELLOW.

2. The BLUE wire must be connected to the terminal which is marked with the letter "N" or coloured BLACK.

3. The BROWN wire must be connected to the terminal which marked with the letter "L" or coloured RED.



Before replacing the plug cover, make certain that the cord grip is clamped over the sheath of the lead - not simply over the three wires.

[RETURN TO TOP OF THE PAGE](#)

## Other Related Information

[Safety Precautions and Maintenance](#) • [Troubleshooting](#) • [Regulatory Information](#) • [Information for Users in the U. S.](#) • [Information for Users Outside the U.S](#)

---

### Information for Users in the U. S.

*For units set at 115 V :*

Use a UL Listed Cord Set consisting of a minimum 18 AWG, Type SVT or SJT three conductor cord a maximum of 15-feet long and a parallel blade, grounding type attachment plug rated 15 A, 125 V.

*For units set at 230 V:*

Use a UL Listed Cord Set consisting of a minimum 18 AWG, Type SVT or SJT three conductor cord a maximum of 15-feet long and a tandem blade, grounding type attachment plug rated 15 A, 250 V.

---

### Information for Users outside the U.S.

*For units set at 230 V:*

Use a Cord Set rated minimum 5 A, 250 V ( for units set at 230V ) or 10A, 125V (for units set at 115V). The Cord Set should have the appropriate safety approvals for the country in which the equipment will be installed.

[RETURN TO TOP OF THE PAGE](#)

## Consumer Information Centers

[Antilles](#) • [Argentina](#) • [Australia](#) • [Bangladesh](#) • [Brasil](#) • [Canada](#) • [Chile](#) • [China](#) • [Colombia](#) • [Czech Republic](#) • [Dubai](#) • [Egypt](#) • [Hong Kong](#) • [Hungary](#) • [India](#) • [Indonesia](#) • [Japan](#) • [Korea](#) • [Malaysia](#) • [Mexico](#) • [Morocco](#) • [New Zealand](#) • [Pakistan](#) • [Paraguay](#) • [Peru](#) • [Philippines](#) • [Poland](#) • [Russia](#) • [Singapore](#) • [South Africa](#) • [Taiwan](#) • [Thailand](#) • [Turkey](#) • [Uruguay](#) • [Venezuela](#)

### Eastern Europe

#### CZECH REPUBLIC

Philips Service  
V Mezihorí 2180 00 Prague  
Phone: (02)-6831581  
Fax : (02)-66310852

#### HUNGARY

Philips Markaszerviz.  
Kinizsi U 30-36Budapest 1092  
Phone: (01)-2164428  
Fax : (01)-2187885

#### POLAND

Philips Polska CE  
UL.Marszalkowska 45/49  
00-648 Warszawa  
Phone: (02)-6286070  
Fax : (02)-6288228

## RUSSIA

Philips Representation Office  
Ul. Usacheva 35a  
119048 Moscow  
Phone: 095-937 9300

## TURKEY

Türk Philips Ticaret A.S.  
Talatpasa Caddesi No 5.  
80640-Gültepe/Istanbul  
Phone: (0800)-211 40 36  
Fax : (0212)-281 1809

## Latin America

### ANTILLES

Philips Antillana N.V.Kaminda A.J.E. Kusters 4  
Zeelandia, P.O. box 3523-3051  
Willemstad, Curacao  
Phone: (09)-4612799  
Fax : (09)-4612772

### ARGENTINA

Vedia 3892 Capital Federal  
CP:1430 Buenos Aires  
Phone: (011)-4544 2047  
Fax: (011)-4544 2928

### BRASIL

Philips da Amazonia Ind. Elet.Ltda.  
Av.Luis Carlos Berrini,  
1400-Sao Paulo-SP  
Phone: 0800-7010-203

## CHILE

Philips Chilena S.A.  
Avenida Santa Maria 0760  
P.O. box 2687 Santiago de Chile  
Phone: (02)-730 2000  
Fax : (02)-777 6730

## COLOMBIA

Industrias Philips de Colombia  
S.A.-Division de Servicio  
CARRERA 15 Nr. 104-33  
Bogota, Colombia  
Phone: (01)-8000-111001 (toll free)  
Fax : (01)-619-4300/619-4104

## MEXICO

Consumer Information Centre  
Norte 45 No.669  
Col. Industrial Vallejo  
C.P.02300, -Mexico, D.F.  
Phone: (05)-3687788 / 9180050462  
Fax : (05)-7284272

## PARAGUAY

Philips del Paraguay S.A.  
Avenida Artigas 1513  
Casilla de Correos 605  
Asuncion  
Phone: (021)-211666  
Fax : (021)-213007

## PERU

Philips Peruana S.A.  
Customer Desk  
Comandante Espinar 719  
Casilla 1841  
Limab18  
Phone: (01)-2136200  
Fax : (01)-2136276

## URUGUAY

Ind.Philips del Uruguay S.A.  
Lius Alberto de Herrera 1248-P:10  
Customer Help Desk 11300 Montevideo  
Phone: (02)-6281111  
Fax : (02)-6287777

## VENEZUELA

Industrias Venezolanas Philips S.A.  
Apartado Postal 1167  
Caracas 1010-A  
Phone: (02) 2377575  
Fax : (02) 2376420

## Canada

## CANADA

Philips Electronics Ltd.  
281 Hillmount Road Markham Ontario,  
L6C 2S3  
Phone: 800- 479-6696  
Fax:905-887-3974

## Pacific

## AUSTRALIA

Philips Consumer Service.  
Customer Information Centre.  
3 Figtree Drive  
Homebush Bay NSW 2140  
Phone: CIC:1300 363 391, PCE Service:1 300-361 392  
Fax:+61 2 9947 0063

## NEW ZEALAND

Philips New Zealand Ltd.  
Consumer Help Desk  
2 Wagener Place, Mt.Albert  
P.O. box 1041  
Auckland  
Phone: 0800 477 999 (Toll Free)  
Fax:0800 288 588

## Asia

### BANGLADESH

Philips Service Centre  
100 Kazi Nazrul Islam  
Avenue Kawran Bazar C/A  
Dhaka-1215  
Phone: (02)-812909  
Fax : (02)-813062

### CHINA

SHANHAI  
No. 1102 wuding road, jing an district,  
200040 Shanghai,  
P.R. China  
Phone: 800 820 5128 (Toll Free)  
Fax:21-65610647

NANJING  
No. 12-2 dong da ying bei, zhu jiang road,  
210018 Nanjing,  
P.R. China

Phone: 800 820 5128 (Toll Free)  
Fax:21-65610647

#### HANGZHOU

No. 20 jiao gong road,  
310012 Hangzhou,  
P.R. China

Phone: 800 820 5128 (Toll Free)  
Fax:21-65610647

#### BEIJING

No. 171-3 hai dian road, hai dian district,  
100086 Beijing,  
P.R. China

Phone: 800 820 5128 (Toll Free)  
Fax:21-65610647

#### SHENYANG

No. 84-1 san hao street,  
110003 Shenyang  
P.R. China

Phone: 800 820 5128 (Toll Free)  
Fax:21-65610647

#### XIAN

No. 6-9 yan ta road south part,  
710061 Xian,  
P.R. China

Phone: 800 820 5128 (Toll Free)  
Fax:21-65610647

#### GUANGZHOU

No. 15-17 long kou dong road, tian he district,  
510070 Guangzhou,  
P.R. China

Phone: 800 820 5128 (Toll Free)  
Fax:21-65610647

#### SHENZHEN

Room 603, electronic BLD, No. 30 Shen nan zhong road,  
518031 Shenzhen,  
P.R. China

Phone: 800 820 5128 (Toll Free)  
Fax:21-65610647

## CHANGSHA

Room 18, He yi computer city, chao yang road,  
Changsha,  
P.R. China  
Phone: 800 820 5128 (Toll Free)  
Fax:21-65610647

## WUHAN

No. 60-66 gui yuan road, hong shan district,  
430070 Wuhan,  
P.R. China  
Phone: 800 820 5128 (Toll Free)  
Fax:21-65610647

## CHENGDU

Chengdu Sience-technolege university service BLD, No. 24 nan yi duan of  
Yi huan road,  
410061 Chengdu,  
P.R. China  
Phone: 800 820 5128 (Toll Free)  
Fax:21-65610647

## HONG KONG

Philips Hong Kong Limited  
Consumer Information Centre  
16/F Hopewell Centre  
17 Kennedy Road, WANCHAI  
Phone: 2619-9663  
Fax: 2481 5847

## INDIA

### BOMBAY

Philips India  
Customer Relation Centre  
Bandbox House  
254-D Dr. A Besant Road, Worli  
Bombay 400 025  
Phone: (020)-712 2048 ext 2765  
Fax:(020)-712 1558

## CALCUTTA

Customer Relation Centre  
7 justice Chandra Madhab Road  
Calcutta 700 020  
Phone: (020)-712 2048 ext 2765  
Fax:(020)-712 1558

MADRAS  
Customer Relation Centre  
3, Haddows Road  
Madras 600 006  
Phone: (020)-712 2048 ext 2765  
Fax:(020)-712 1558

NEW DELHI  
Customer Relation Centre  
68, Shivaji Marg  
New Dehli 110 015  
Phone: (020)-712 2048 ext 2765  
Fax:(020)-712 1558

## INDONESIA

Philips Group of Companies in Indonesia  
Consumer Information Centre  
Jl.Buncit Raya Kav. 99-100  
12510 Jakarta  
Phone: (021)-7940040/7984255 Ext 1612  
Fax : (021)-7947511 / 7947539

## JAPAN

Philips Consumer Electronics  
1-11-9,Ebisuminami  
Shibuya-Ku  
Tokyo 150  
Phone: (03)-3719-2235  
Fax : (03)-3715-9992

## KOREA

Philips Korea Ltd.  
Philips House  
C.P.O. box 3680  
260-199, Itaewon-Dong.  
Yongsan-Ku, Seoul 140-202  
Phone: 080 600 6600 (Toll Free)  
Fax:(02)709 1245

## MALAYSIA

Philips Malaysia Sdn. Berhad  
Service Dept.  
No.51,sect.13 Jalan University.  
46200 Petaling Jaya, Selagor.  
P.O.box 12163  
50768 Kuala Lumpur.  
Phone: (03)-7950 5501/02  
Fax:(03)-7954 8504

## PAKISTAN

KARACHI  
Philips Electrical Ind. of Pakistan  
Consumer Information Centre  
F-54, S.I.T.E, P.O.Box 7101  
75730 KARACHI  
Phone: (021)-773 1927  
Fax:(021)-772 1167

Philips Consumer Service Centre  
168-F, Adamjee Road  
Rawalpindi Cantt  
Phone: (021)-773 1927  
Fax:(021)-772 1167

## PHILIPPINES

Philips Electronics and Lighting Inc.

106 Valero St., Salcedo Village

Makati, Metro Manila.

Phone: (02)-888 0572 , Domestic Toll Free:1-800-10-PHILIPS or 1-800-10-744 5477

Fax:(02)-888 0571

## SINGAPORE

Philips Singapore Private Ltd.

Consumer Service Dept.

Lorong 1,Toa Payoh., P.O. box 340

Singapore 1231

Phone:6882 3999

Fax:6250 8037

## TAIWAN

Philips Taiwan Ltd.

Consumer Information Centre

26F, 66, Chung-Hsiao W. Road, Sec. 1

Taipei, Taiwan

Phone: (02)-2382-4567 ,0800-231-099

Fax:(02)2382-3027

## THAILAND

Philips Electronics (Thailand) Ltd.

Philips Service Centre

209/2 Sanpavut Road,

Bangna, Bangkok 10260

Phone : (02)-652 8652

Fax:(02)-614 3531

## Africa

## MOROCCO

Philips Electronique Maroc  
304,BD Mohamed V  
Casablanca  
Phone: (02)-302992  
Fax : (02)-303446

## SOUTH AFRICA

South African Philips.  
S.V. Div. 195 Main R.D.  
Martindale., Johannesburg  
P.O.box 58088  
Newville 2114  
Phone: (011)-4715000  
Fax : (011)-4715020

## Middle East

### DUBAI

Philips Middle East B.V.  
Consumer Information Centre  
P.O.Box 7785  
DUBAI  
Phone: (04)-3353666  
Fax : (04)-3353999

### EGYPT

Philips Egypt  
Consumer Information Centre  
10, Abdel Rahman El Rafei  
Mohandessin - Cairo, P.O.Box 242  
DOKKI  
Phone: (02)-3313993  
Fax : (02)-3492142



## F1rst Choice Contact Information

### Telephone numbers:

|                 |                 |
|-----------------|-----------------|
| Austria         | 01 546 575 603  |
| Belgium         | 02 275 0701     |
| Cyprus          | 800 92256       |
| Denmark         | 35 25 87 61     |
| France          | 03 8717 0033    |
| Germany         | 0696 698 4712   |
| Greece          | 00800 3122 1223 |
| Finland         | 09 2290 1908    |
| Ireland         | 01 601 1161     |
| Italy           | 02 48 27 11 53  |
| Luxembourg      | 408 443 5501    |
| The Netherlands | 053 482 9800    |
| Norway          | 22 70 82 50     |
| Portugal        | 0800 831 363    |
| Sweden          | 08 632 0016     |
| Switzerland     | 02 23 10 21 16  |
| Spain           | 09 17 45 62 46  |
| United Kingdom  | 0207 949 0069   |
| U.S.A.          | 877 835 1838    |

\* Calls charged at local rates

# About This Electronic User's Manual

[About This Guide](#) • [Other Documents You May Need](#) • [Notational Descriptions](#)

---

## About This Guide

This electronic user's guide is intended for anyone who uses the Philips Color Monitor. It describes the monitor's features, setup, operation and all other information, which is the same exact information described in our printed version.

The sections are as follows:

[Safety and Troubleshooting Information](#) provides tips and solutions for common problems, and other related information you may need.

About This Electronic User's Manual gives overview of what information are included as well as notation icon descriptions and other documentation you can refer to.

[Product Information](#) gives an overview of the monitor's features and as well as the technical specifications for this monitor.

[Installing Your Monitor](#) describes the initial setup process and gives an overview of how to use the monitor.

[On Screen Display](#) provides information on adjusting the settings on your monitor.

[Customer Care and Warranty](#) is a list of worldwide Philips consumer information centers along with the help desk phone numbers and information on the applicable warranty of your product..

[Glossary](#) provides more information for technical terms.

[Download](#) allows users to install the entire manual on their hard drive.

[Frequently Asked Questions](#) provides answers to commonly asked questions.

[RETURN TO TOP OF THE PAGE](#)

---

## Other Documents You May Need

In addition to this *Electronic User's Guide*, you may need to refer to the following documentation:

*Philips Color Monitor Quick Start Guide* which summarizes the steps for setting up the monitor. This is included with this product.

[RETURN TO TOP OF THE PAGE](#)

---

## Notational Descriptions

The following subsections describe notational conventions used in this document.

### Notes, Cautions, and Warnings

Throughout this guide, blocks of text may be accompanied by an icon and printed in bold type or in italic type. These blocks are notes, cautions, and warnings, and they are used as follows:



**NOTE:** This icon indicates important information and tips that help you make better use of your computer system.



**CAUTION:** This icon indicates information that tells you how to avoid either potential damage to hardware or loss of data.



**WARNING:** This icon indicates the potential for bodily harm and tells you how to avoid the problem.



**SMART HELP:** This icon indicates helpful information when adjusting the On Screen Display of your monitor.

Some warnings may appear in alternate formats and may be unaccompanied by an icon. In such cases, the specific presentation of the warning is mandated by regulatory authority.

[RETURN TO TOP OF THE PAGE](#)

---

©2003 Koninklijke Philips Electronics N.V.

All rights reserved. Reproduction, copying, usage, modifying, hiring, renting, public performance, transmission and/or broadcasting in whole or in part is prohibited without written consent of Philips Electronics N.V.

## Product Information

[Product Features](#) • [Technical Specifications](#) • [Automatic Power Saving](#) • [Physical Specification](#) • [Pin Assignment](#) • [Product Views](#)

---

### Product Features

| Model  | Color |
|--------|-------|
| 105E69 | Gray  |
| 105E68 | Black |

### **105E6**

15-inch (14.0" VIS) color monitor with excellent front of screen performance for use with MACs and PCs

Autoscan covers horizontal frequencies up to 54 kHz offering a maximum resolution of 1024 x 768 with flicker free display of 800 x 600 at up to 85 Hz

Flat square High Contrast CRT with high-resolution 0.28 mm dot pitch (0.24 hdp).  
CCC (in selected countries only)

[RETURN TO TOP OF THE PAGE](#)

---

### Technical Specifications\*

#### CRT

- Size and deflection 15 inch / 36 cm ; 90° deflection angle
- Dot pitch 0.28 mm
- Horizontal pitch 0.24 mm
- Tube type Shadow mask, flat square, light transmission 57%
- Phosphor P22

- Recommended display area 10.6" x 8.0" / 270 x 202 mm
- Maximum display area 11.1" x 8.4" / 283 x 213 mm

## SCANNING

- Horizontal scanning 30 - 54 KHz
- Vertical scanning 50 - 120 Hz

## VIDEO

- Video dot rate 75 MHz
- Input impedance
  - Video 75 ohm
  - Sync 4.7 kOhm
- Input signal levels 0.7 Vpp
- Sync input signal Separate sync
- Sync polarities Positive and negative

## WHITE COLOR TEMPERATURE

Chromaticity CIE coordinates:

- at 9300 degrees K  $x = 0.283 / y = 0.297$

*\* These information are subject to change without notice.*

[RETURN TO TOP OF THE PAGE](#)

---

## Automatic Power Saving

If you have VESA's DPMS compliance display card or software installed in your PC, the monitor can automatically reduce its power consumption when not in use. And if an input from a keyboard,

mouse or other input device is detected, the monitor will automatically "wake up". The following table shows the power consumption and signaling of this automatic power saving features:

| Power Management Definition |         |        |        |             |                  |           |
|-----------------------------|---------|--------|--------|-------------|------------------|-----------|
| VESA's Mode                 | Video   | H-sync | V-sync | Power Used  | Power Saving (%) | LED color |
| ON                          | Active  | Yes    | Yes    | Typical 65W | 0 %              | Green     |
| OFF                         | Blanked | No     | No     | <5W         | 98%              | Yellow    |

[RETURN TO TOP OF THE PAGE](#)

## Physical Specifications

- Dimensions
  - 14.2" x 14.5" x 15.0" / 360 x 369 x380 mm (including base)
  - 14.2" x 12.5" x 15.0" / 360 x 318 x 380mm (excluding base)
- Weight
  - 11.2 kg
- Power supply
  - 90 - 264VAC, 50/60Hz
  - (Please refer to rating label)
- Temperature (operating)
  - 0° to 40°C / 32° to 104°F
- Temperature (storage)
  - 25° to +65°C / -13° to +149°F
- Relative humidity(storage)
  - 5% to 95%

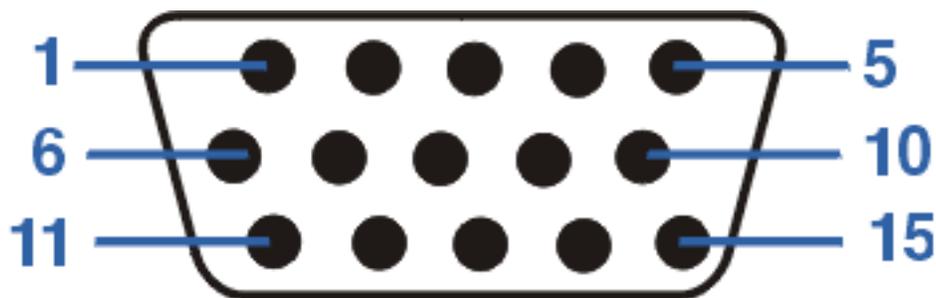
\* Resolution 800 x600, standard size, contrast max., brightness 50%, 9300°, full white pattern.

\* These information are subject to change without notice.

[RETURN TO TOP OF THE PAGE](#)

## Pin Assignment

The 15-pin D-sub connector (male) of the signal cable (IBM systems):



| Pin No. | Assignment         | Pin No. | Assignment             |
|---------|--------------------|---------|------------------------|
| 1       | Red video input    | 9       | +5V DDC supply         |
| 2       | Green video input  | 10      | Logic ground           |
| 3       | Blue video input   | 11      | Ground                 |
| 4       | Ground             | 12      | Serial data line (SDA) |
| 5       | PC Ground          | 13      | H. Sync / H+V          |
| 6       | Red video ground   | 14      | V. Sync (VCLK for DDC) |
| 7       | Green video ground | 15      | Data clock line (SCL)  |
| 8       | Blue video ground  |         |                        |

[RETURN TO TOP OF THE PAGE](#)

## Views

Follow the links to see various views of the monitor and its components.

[Front View](#)

[Rear View](#)

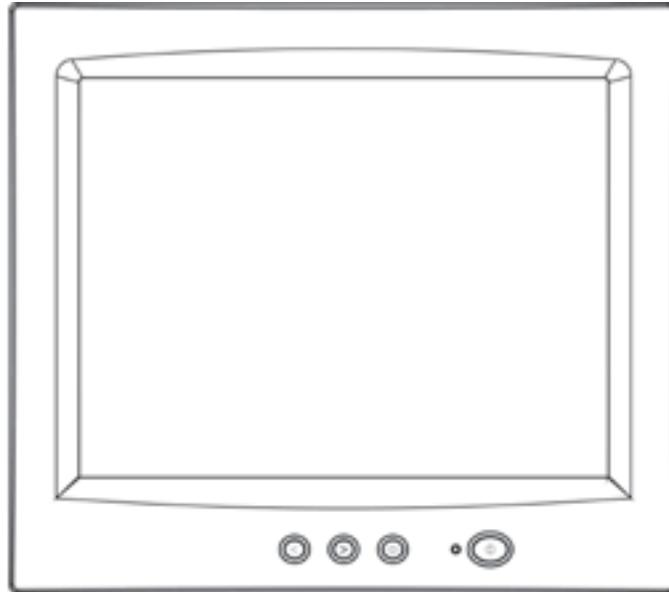
[RETURN TO TOP OF THE PAGE](#)

# Installing your Monitor

[Front View](#) • [Rear View](#)

---

## Front View



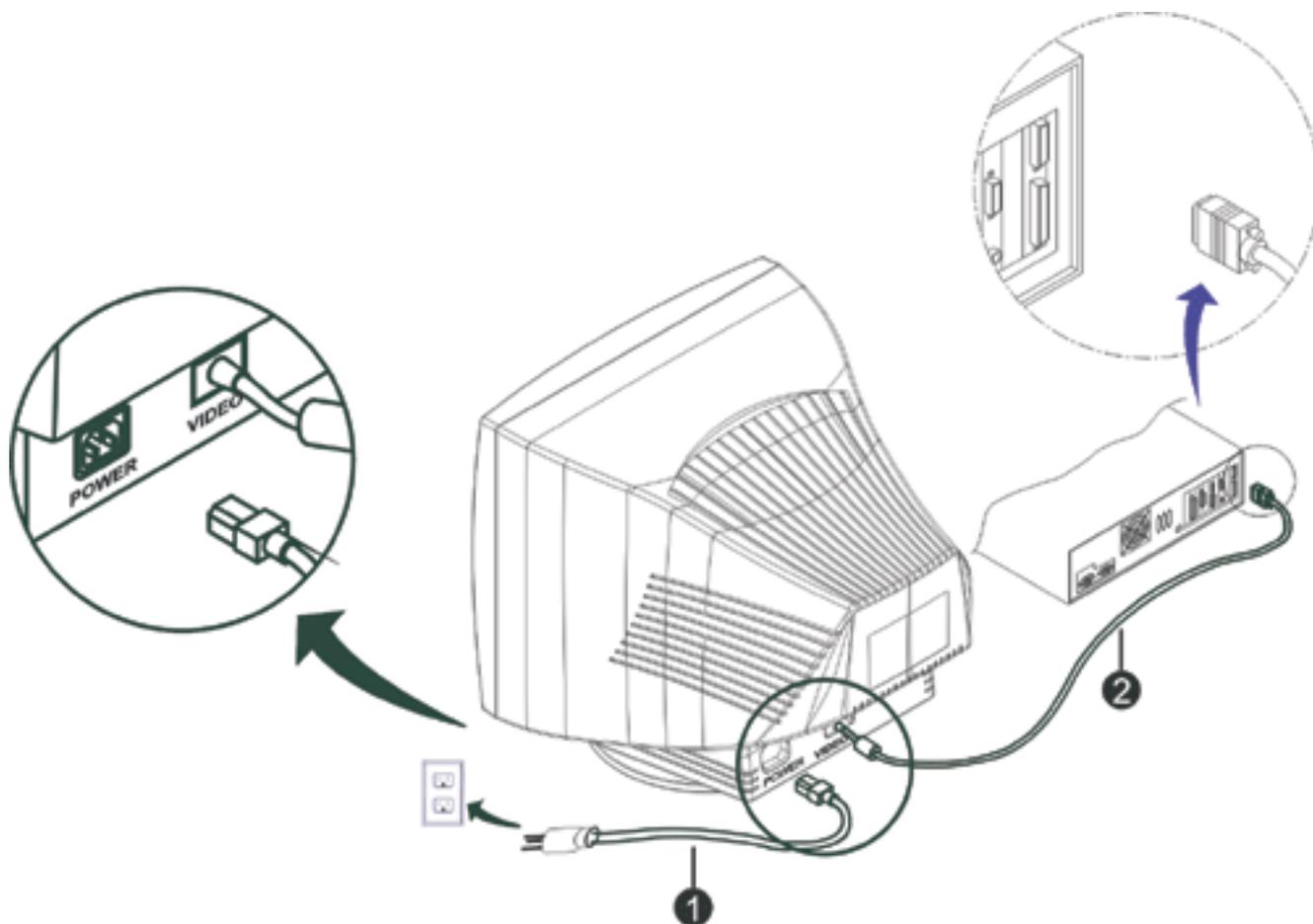
**105E6**



-  Power button switches your monitor on.
-  Launches On -Screen Display  
Make sure the select functions or adjustments  
Exit menus and On-Screen Display
-  Forward button (right arrow) moves forward through menu options or increases adjustment levels.
-  Backward button (left arrow) moves backward through menu options or decreases adjustment levels.

[RETURN TO TOP OF THE PAGE](#)

## Rear View



1. Power in - attach power cable here.
2. Video In - this is a cable which is already attached to your monitor. Connect the other end of the cable to your PC.

[RETURN TO TOP OF THE PAGE](#)

# On-Screen Display

[Description of the On-Screen Display](#) • [The OSD Controls](#)

---

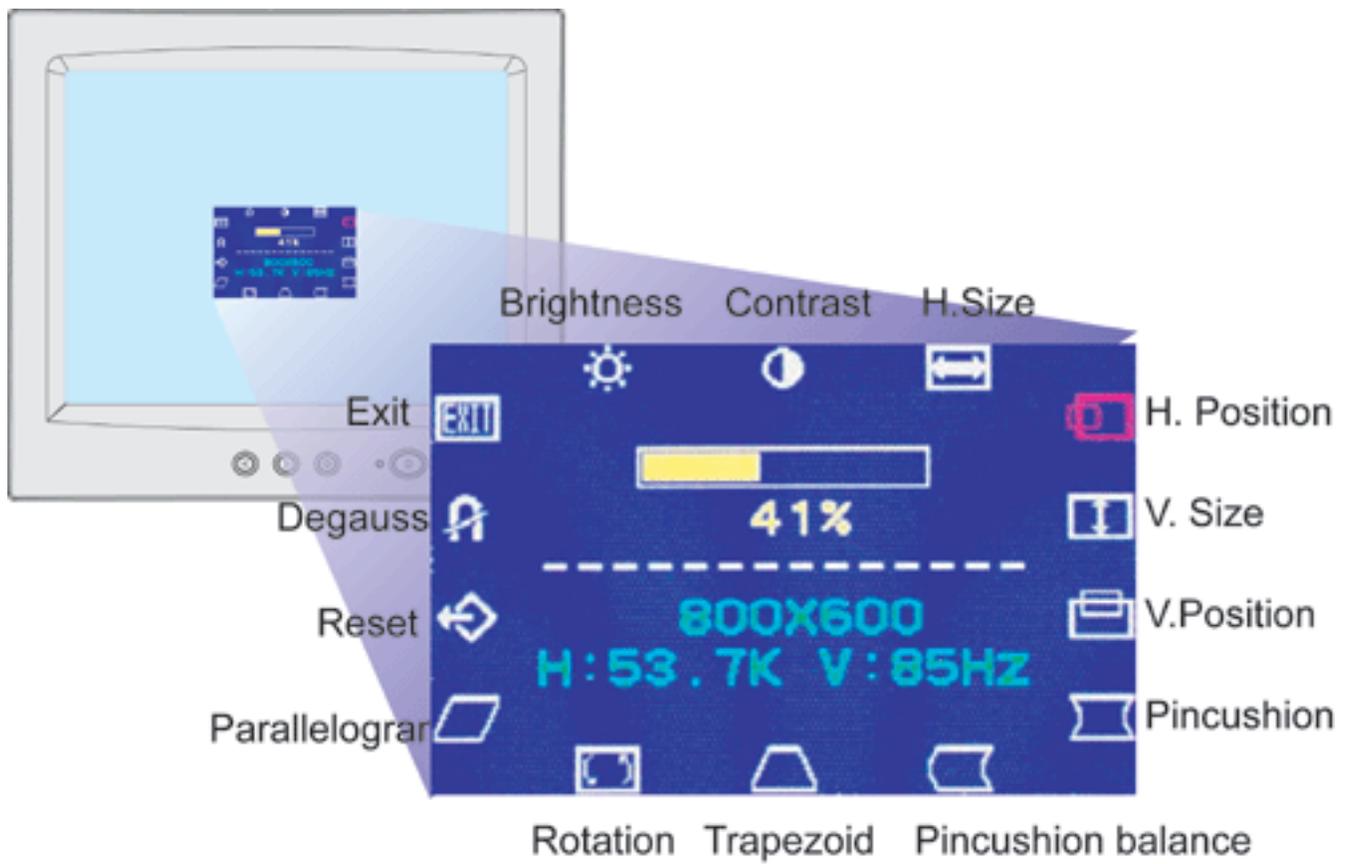
## Description of the On Screen Display

### *What is the On-Screen Display?*

This is a feature in all Philips monitors which allows an end-user to adjust screen performance of monitors directly through an on-screen instruction window. The user interface provides user-friendliness and ease-of-use when operating the monitor.

### *Basic and simple instruction on the control keys.*

On the front controls of your monitor, once you press the  button, the On Screen Display (OSD) Main Controls window will pop up and you can now start making adjustments to your monitor's various features. Use the to   make your adjustments within.



[RETURN TO TOP OF THE PAGE](#)



6. Select the **EXIT** icon if you want to exit the OSD function, and then press the select the  key once. Or wait for 15 seconds, then the OSD display would close automatically.

[RETURN TO TOP OF THE PAGE](#)

## CONTRAST

To adjust your screen's contrast, follow the steps below. Contrast is the difference between the light and dark areas on the screen. A 100% contrast is recommended.

1. Press the  key to display the OSD menu.



2. To select contrast, press the  and  keys until the desired contrast is highlighted.

3. Press the  key to choose the contrast.

4. Use the  and  keys to increase or decrease the parameter level of the setting.

5. Press the  key to save the new setting.

6. Select the **EXIT** icon if you want to exit the OSD function, and then press the select the  key

once. Or wait for 15 seconds, then the OSD display would close automatically.

[RETURN TO TOP OF THE PAGE](#)

## H.Size

Increases and decreases screen width.

1. Press the  key to display the OSD menu.



2. To select H.Size, press the  and  keys until the desired H.Size is highlighted.

3. Press the  key to choose the H.Size.

4. Use the  and  keys to increase or decrease the parameter level of the setting.

5. Press the  key to save the new setting.

6. Select the  icon if you want to exit the OSD function, and then press the select the  key once. Or wait for 15 seconds, then the OSD display would close automatically.

[RETURN TO TOP OF THE PAGE](#)

---

## H.Position

Shifts display image right or left.

1. Press the  key to display the OSD menu.



2. To select H.Position, press the  and  keys until the desired H.Position is highlighted.

3. Press the  key to choose the H.Position.

4. Use the  and  keys to increase or decrease the parameter level of the setting.

5. Press the  key to save the new setting.

6. Select the  icon if you want to exit the OSD function, and then press the select the  key once. Or wait for 15 seconds, then the OSD display would close automatically.

[RETURN TO TOP OF THE PAGE](#)

## V.Size

Increase and decrease screen height.

1. Press the  key to display the OSD menu.



2. To select V.Size, press the  and  keys until the desired V.Size is highlighted.

3. Press the  key to choose the V.Size.

4. Use the  and  keys to increase or decrease the parameter level of the setting.

5. Press the  key to save the new setting.

6. Select the  icon if you want to exit the OSD function, and then press the  key once. Or wait for 15 seconds, then the OSD display would close automatically.

[RETURN TO TOP OF THE PAGE](#)

---

## V.Position

Shifts display image up or down.

1. Press the  key to display the OSD menu.



2. To select V.Position, press the  and  keys until the desired V.Position is highlighted.

3. Press the  key to choose the V.Position.

4. Use the  and  keys to increase or decrease the parameter level of the setting.

5. Press the  key to save the new setting.

6. Select the  icon if you want to exit the OSD function, and then press the select the  key once. Or wait for 15 seconds, then the OSD display would close automatically.

[RETURN TO TOP OF THE PAGE](#)

---

## Pincushion

Adjusts concave and convex portion of pincushion effect.





2.To select Pincushion balance, press the  and  keys until the desired Pincushion balance is highlighted.

3.Press the  key to choose the Pincushion balance.

4.Use the  and  keys to increase or decrease the parameter level of the setting.

5.Press the  key save the new setting.

6.Select the  icon if you want to exit the OSD function, and then press the select the  key once. Or wait for 15 seconds, then the OSD display would close automatically.

[RETURN TO TOP OF THE PAGE](#)

## Trapezoid

Adjusts the top and bottom display widths.

1.Press the  key to display the OSD menu.



2.To select Trapezoid, press the  and  keys until the desired Trapezoid is highlighted.

3.Press the  key to choose the Trapezoid.

4.Use the  and  keys to increase or decrease the parameter level of the setting.

5.Press the  key save the new setting.

6.Select the  icon if you want to exit the OSD function, and then press the select the  key once. Or wait for 15 seconds, then the OSD display would close automatically.

[RETURN TO TOP OF THE PAGE](#)

## Rotation

Adjusts the rotation of the display clock or anti-clockwise.

1.Press the  key to display the OSD menu.



2.To select Rotation, press the  and  keys until the desired Rotation is highlighted.

3.Press the  key to choose the Rotation.

4.Use the  and  keys to increase or decrease the parameter level of the setting.

5.Press the  key save the new setting.

6.Select the  icon if you want to exit the OSD function, and then press the select the  key once. Or wait for 15 seconds, then the OSD display would close automatically.

[RETURN TO TOP OF THE PAGE](#)

## Parallelogram

Adjusts the tilt of the display sides to the left or right.

1.Press the  key to display the OSD menu.



2.To select Parallelogram, press the  and  keys until the desired Parallelogram is highlighted.

3.Press the  key to choose the Parallelogram.

4.Use the  and  keys to increase or decrease the parameter level of the setting.

5.Press the  key save the new setting.

6.Select the  icon if you want to exit the OSD function, and then press the select the  key once. Or wait for 15 seconds, then the OSD display would close automatically.

[RETURN TO TOP OF THE PAGE](#)

---

## Reset

Resets to default values.

1.Press the  key to display the OSD menu.



2. To select Reset, press the  and  keys until the desired Reset is highlighted.
3. Press the  key to choose the Reset.
4. Use the  and  keys to increase or decrease the parameter level of the setting.
5. Press the  key save the new setting.
6. Select the  icon if you want to exit the OSD function, and then press the select the  key once. Or wait for 15 seconds, then the OSD display would close automatically.

[RETURN TO TOP OF THE PAGE](#)

---

## Degauss

Demagnetizes the screen to reduce color impurities.

1. Press the  key to display the OSD menu.



2.To select Degauss, press the  and  keys until the desired Degauss is highlighted.

3.Press the  key to choose the Degauss.

4.Use the  and  keys to increase or decrease the parameter level of the setting.

5.Press the  key save the new setting.

6.Select the  icon if you want to exit the OSD function, and then press the select the  key once. Or wait for 15 seconds, then the OSD display would close automatically.

[RETURN TO TOP OF THE PAGE](#)

## Customer Care & Warranty

PLEASE SELECT YOUR COUNTRY/AREA TO READ THE WARRANTY COVERED:

**WESTERN EUROPE:** [Austria](#) • [Belgium](#) • [Cyprus](#) • [Denmark](#) • [France](#) • [Germany](#) • [Greece](#) • [Finland](#) • [Ireland](#) • [Italy](#) • [Luxembourg](#) • [the Netherlands](#) • [Norway](#) • [Portugal](#) • [Sweden](#) • [Switzerland](#) • [Spain](#) • [United Kingdom](#)

**EASTERN EUROPE:** [Czech Republic](#) • [Hungary](#) • [Poland](#) • [Russia](#) • [Turkey](#) • [Bulgaria](#)

**LATIN AMERICA:** [Antilles](#) • [Argentina](#) • [Brazil](#) • [Chile](#) • [Colombia](#) • [Mexico](#) • [Paraguay](#) • [Peru](#) • [Uruguay](#) • [Venezuela](#)

**NORTH AMERICA:** [USA & Canada](#)

**PACIFIC:** [Australia](#) • [New Zealand](#)

**ASIA:** [Bangladesh](#) • [China](#) • [Hong Kong](#) • [India](#) • [Indonesia](#) • [Japan](#) • [Korea](#) • [Malaysia](#) • [Pakistan](#) • [Philippines](#) • [Singapore](#) • [Taiwan](#) • [Thailand](#)

**AFRICA:** [Morocco](#) • [South Africa](#)

**MIDDLE EAST:** [Dubai](#) • [Egypt](#)

---

## Your International Guarantee

Dear Customer,

Thank you for purchasing this Philips product which has been designed and manufactured to the highest quality standards.

If, unfortunately, something should go wrong with this product Philips guarantees free of charge labor and replacement parts irrespective of the country where it is repaired during a period of 12 months from date of purchase. This international Philips guarantee complements the existing national guarantee obligations to you of dealers and Philips in the country of purchase and does not affect your statutory rights as a customer.

The Philips guarantee applies provided the product is handled properly for its intended use, in accordance with its operating instructions and upon presentation of the original invoice or cash receipt, indicating the date of purchase, dealer's name and model and production number of the product.

The Philips guarantee may not apply if:

- the documents have been altered in any way or made illegible;
- the model or production number on the product has been altered, deleted, removed or made illegible;
- repairs or product modifications and alterations have been executed by unauthorized service organizations or persons;
- damage is caused by accidents including but not limited to lightning, water or fire, misuse or neglect.

Please note that the product is not defective under this guarantee in the case where modifications become necessary in order for the product to comply with local or national technical standards which apply in countries for which the product was not originally designed and/or manufactured. Therefore always check whether a product can be used in a specific country.

In case your Philips product is not working correctly or is defective, please contact your Philips dealer. In the event you require service whilst in another country a dealer address can be given to you by the Philips Consumer Help Desk in that country, the telephone and fax number of which can be found in the relevant part of this booklet.

In order to avoid unnecessary inconvenience, we advise you to read the operating instructions carefully before contacting your dealer. If you have questions which your dealer cannot answer or any related question please contact the [Philips Consumer Information Centers](#) or via:

International Guarantee

Website: <http://www.philips.com>

# Glossary

[A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

---

## A

### *Autoscan*

A microprocessor-based feature of Philips Brilliance monitors is able to detect automatically horizontal and vertical frequencies of input signals with those of the installed video card. An autoscan monitor can thus operate with a wide range of video cards. MultiSync, a registered trademark of NEC, provides a similar function.

[RETURN TO TOP OF THE PAGE](#)

---

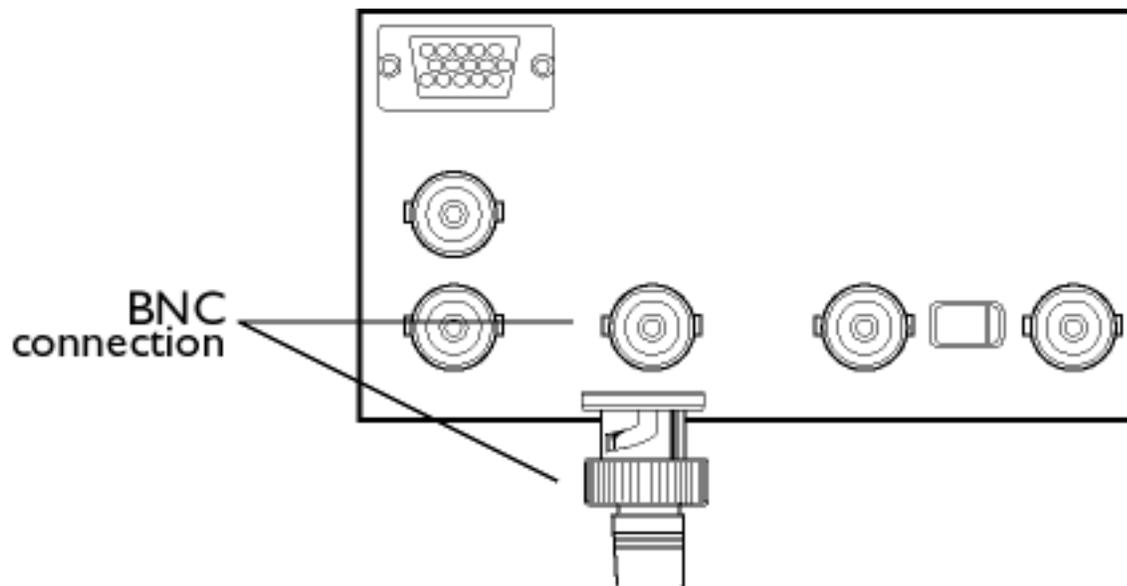
## B

### *Balanced pincushion*

See Geometric distortion

### *BNC connection*

A special construction of connector used in some monitors with higher horizontal scanning frequency. The BNC connection can provide the optimum shielding and matching characteristic impedance of video signal path to ensure the best video performance.



[RETURN TO TOP OF THE PAGE](#)

---

## C

### *CE Mark*

CE mark is displayed on products per EMC and LV ( low Voltage Device ) directives in compliance with European Community safety, EMI and EMS requirements and is compulsory on products for sale in the European Community.

### *Color temperature*

A way of describing the color of a radiating source in terms of the temperature (in degrees Kelvin) of a black body radiating with the same dominant frequency as the source.

Most Philips monitors offer the possibility of setting the color temperature to any desired value.

### *Contrast*

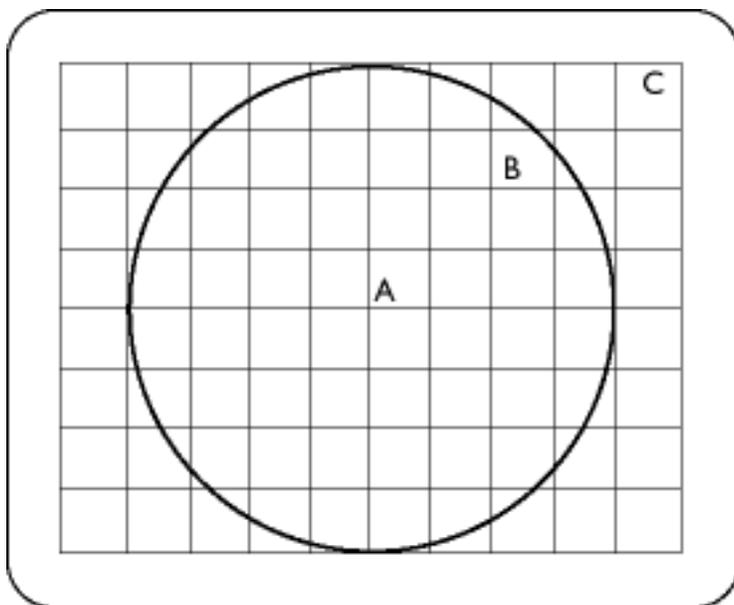
The ratio between the brightness of the brightest and darkest parts of a picture. The darkest part of

a picture is set by the brightness of the unexcited phosphor, which is governed by the degree with which ambient light is reflected. Contrast is therefore reduced in conditions of high ambient light levels. Black Matrix tubes reflect less ambient light so exhibit higher contrast than other tubes.

### *Convergence error*

Beam misalignment causing one or more of the three beams passing through the wrong aperture in the shadow mask and striking a phosphor dot in the wrong triad.

Convergence error is expressed in mm often at three well-defined points on the screen, designated A, B and C (see figure ). Also known as misconvergence.



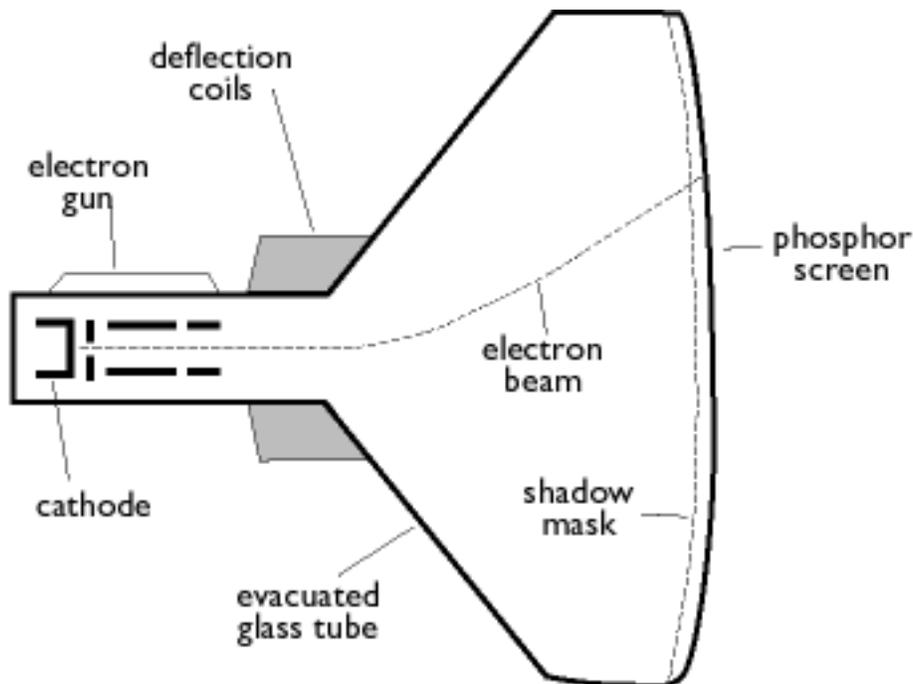
*Points where convergence error is specified.*

### *Convergence-error correction*

A method of correcting for convergence error to insure that all three beams land simultaneously in the same triad. This is usually accomplished by means of special convergence-error correction coils in the deflection yoke.

### *CRT*

Cathode-ray tube - the general term for all tubes in which one or more electron beams emitted by a cathode are periodically scanned across a phosphor screen by means of deflection circuitry. A special form of the cathode-ray tube is the TV and monitor picture tube.



[RETURN TO TOP OF THE PAGE](#)

## D

### *DDC (Display Data Channel)*

DDC is a communication channel for displays and computers. The DDC feature allows the monitor controller to be automatically configured to make optimal use of the display without manual user interaction. DDC is implemented as part of the new Plug & Play approach introduced into the PC market to increase user friendliness.

The three levels developed for Plug & play are: (1) DDC1, monitor send data to the PC; (2) DDC2B, PC can request information from monitor; and (3) DDC2Bi which is a two-way communication - monitor can be addressed and PC or graphics board can give commands to monitor.

### *DDC 1/2B*

See DDC.

### *DDC 2Bi*

See DDC.

### *Degaussing*

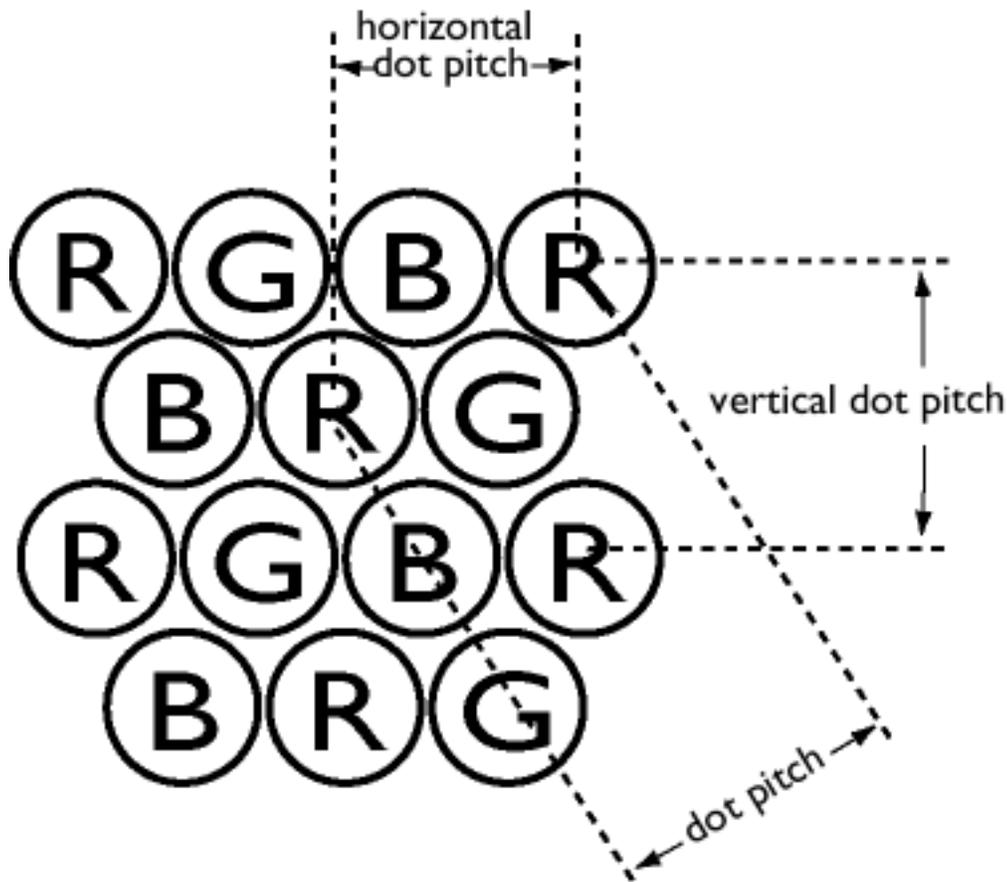
The procedure of demagnetizing the shadow mask and associated metal parts of a picture tube at switch-on to minimize picture distortion. This is usually accomplished by means of a special degaussing coil through which a decaying alternating current is passed to generate an alternating magnetic field that gradually decays to demagnetize the tube. Some monitors offer a manual degaussing facility that can be activated at any time.

### *Digital control*

Microprocessor-based digital control of picture parameters and video modes for complete control of picture settings and modes and instant recall of all settings at the push of a button. This is a very advanced feature that allows the user to switch to any required mode at any instant without having to spend time readjusting the picture. It is currently available in most Philips monitors.

### *Dot pitch*

The shortest distance between two phosphor dots of the same color on the screen. The smaller the dot pitch, the better the resolution of the monitor.



*Dot rate* Frequency in MHz of the dot clock. It is a measure of the speed with which data is transferred between the video card and subsequent processing circuitry.

Also known as video dot rate.

[RETURN TO TOP OF THE PAGE](#)

## E

### *Electromagnetic radiation standards*

International standards set to limit electromagnetic emissions from monitors. There are currently two important standards both derived from regulations originally laid down by Swedish authorities.

## MPR-II

The standard originally proposed by the Swedish National Board of Measurement and Testing. It set maximum levels of electromagnetic radiation emitted by monitors, and has now been adopted as a world standard. MPR-II defines maximum permitted electrostatic, magnetic and electric field levels measured at a distance of 50 cm from the center of the monitor (see table).

## TCO

In 1991, the Swedish Tjänstemannens Central Organization (TCO, Swedish confederation of Professional Employees ) set a standard even more severe than MPR-II, especially for alternating electric fields (AEF). The TCO standard is more severe since not only are the permitted field levels reduced compared with MPR-II, but the measuring distance is also reduced (see table).

## Electromagnetic radiation standards

### *EMI (Electrical Magnetic Interference)*

The electrical and/or magnetic radiation coming from the working electrical or electronic equipment.

### *EMS (Electrical Magnetic Sustainment)*

The ability of electrical or electronic equipment to function properly in the environment with electrical and/or magnetic interference.

[RETURN TO TOP OF THE PAGE](#)

---

## F

### *Flicker*

Very rapid variations in picture intensity caused by the finite time required for the electron beam to scan a picture onto the screen. Two kinds of flicker occur: line flicker caused by the electron beam scanning-in each line of the picture; and frame flicker (or field flicker if the picture is interlaced) caused by the frame repetition rate of 50 frames/second. Frame flicker is noticeable with GUI and DTP software (which have a light background), and can be very disturbing, especially for those who work regularly with displays - contributing to eye strain, headaches, visual blurring, stress, etc. The problem can, however, be eliminated by increasing the refresh rate (number of frames/second) of the monitor to a value above around 70 Hz. Sensitivity to flicker appears to diminish with increasing

age.

[RETURN TO TOP OF THE PAGE](#)

---

## H

### *Hertz*

The unit of frequency named after the physicist Heinrich Hertz (1857-1894). 1 hertz (Hz) is equal to 1 cycle/second.

### *Horizontal dot pitch*

See Dot pitch.

### *Horizontal scanning frequency*

Also called line frequency and expressed in kHz, it is the number of video lines written on the screen every second (from left to right). The higher the horizontal scanning frequency, the better the resolution (i.e., the higher the resolution and/or the higher the refresh rate).

[RETURN TO TOP OF THE PAGE](#)

---

## I

### *INF File*

### **INF file (Information File)**

Information (INF) files store information in a specific format. The set-up functions retrieve information from the INF file to use when performing installation operations. Examples of the type of information stored in an INF file include INI and registry changes, file names, and locations of the source files on source media.

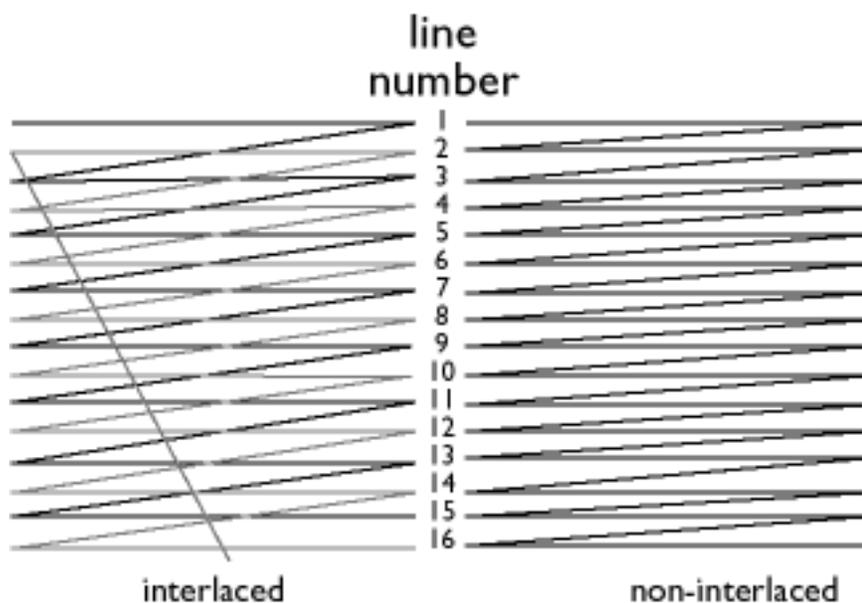
### *Interlaced/non-interlaced*

#### **Interlaced.**

The method of writing a picture on the screen by initially writing all even lines and subsequently writing all odd lines of the picture. Result: The complete picture is composed of two interlaced half pictures (or fields). With interlacing, a vertical (or field) frequency of 50 Hz means a picture (or frame) frequency of 25 Hz.

#### **Non-interlaced.**

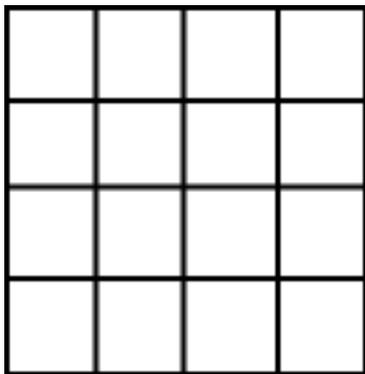
The method of writing a picture on the screen by successive video lines of the picture so that a full frame is written onto the screen in one vertical sweep of the beams. With a non-interlaced display, a vertical frequency of 50 Hz means a picture (or frame) frequency of 50 Hz. At any given resolution, non-interlaced modes are preferable to interlaced modes; however, generation of non-interlaced modes is more expensive.



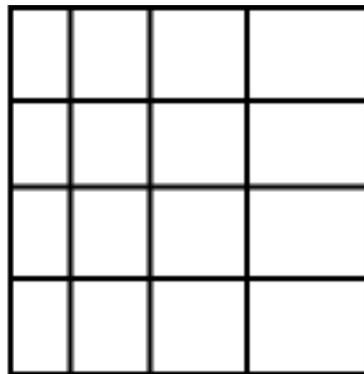
[RETURN TO TOP OF THE PAGE](#)

**L***Linearity*

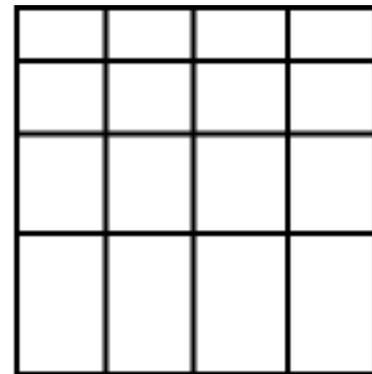
The degree to measure the actual location of a pixel on the screen corresponds with its intended location. ( see figure )



intended raster



horizontal linearity  
distortion



vertical linearity  
distortion

*Line frequency*

See Horizontal scanning frequency.

*Low-emission monitor*

A monitor that complies with international standards on radiation.

See Electromagnetic radiation standards.

*Low-frequency electric and magnetic fields*

Alternating fields generated by the deflection yoke. These are subject to increasing attention, notably by governing authorities, the trade and the press. Although there is no scientific evidence

that monitor emissions are harmful, much effort has gone into reducing emissions on the principle of better safe than sorry. Currently, there are two areas of interest: very-low frequency (VLF) electric and magnetic fields extending from 2 kHz to 400 kHz, and extreme low frequency (ELF) fields extending from 5 Hz to 2 kHz.

See also *Electromagnetic radiation standards*.

[RETURN TO TOP OF THE PAGE](#)

---

## M

### *Moiré effect*

A fringe pattern arising from the interference between two superimposed line patterns.

In a monitor it comes from the interference between the shadow mask pattern and the video information (video moiré), and between the shadow mask pattern and the horizontal line pattern (scan moiré). It shows itself as wavy patterns on the screen and becomes more noticeable as monitor resolution increases. Since the video signal varies continuously, little can be done about video moiré. Scan moiré depends on the horizontal scanning frequency and can be alleviated by appropriate choice of frequency. Autoscan (MultiSync) monitors, which operate over a range of scanning frequencies, may sometimes exhibit moiré in certain video modes.

### *MPR*

See *Electromagnetic radiation standards*.

### *MultiSync monitor*

See *Autoscan monitor*.

[RETURN TO TOP OF THE PAGE](#)

## N

### *Non-interlaced*

See Interlaced/non-interlaced.

[RETURN TO TOP OF THE PAGE](#)

---

## O

### *OSD (On Screen Display)*

The feature that allows an end user to adjust screen performance and parameters of monitors directly through an on-screen instruction window. See CustoMax in CrystalClear section.

### *Overscan*

The practice in which areas without useful video information are scanned outside the visible screen area in order to make maximum use of the screen for display of active video information. This practice is occasionally necessary because some video cards generate a video pattern that is smaller than the visible screen area, resulting in an image that is smaller (and less legible) than it needs to be.

[RETURN TO TOP OF THE PAGE](#)

---

## P

### *Parallelogram Distortion*

See Geometric distortion.

### *Phosphor*

Generic name for the class of substances that exhibit luminescence. To produce a picture on screen, phosphors are deposited on the inner surface of the picture-tube screen and excited into luminescence by the electron beam. Typical examples of phosphors are P22 medium short-persistence phosphor and EBU high-color-saturation phosphor.

### *Pin-cushion Distortion*

See Geometric distortion.

### *Pixel*

Abbreviation for picture element, the smallest element of the picture that can be displayed on the screen. The smaller the pixel size, the better the resolution of the monitor. Pixel size is determined by the size of the electron spot on the screen and not necessarily by the phosphor dot pitch (the size of the triad). Thus, a monitor with a large electron spot covering several triads can exhibit poor resolution even though its dot pitch is small.

### *Pixel frequency*

The number of pixels that can be written in a video line per second.

### *Pixel rate*

See pixel frequency

### *Plug-and-Play*

See DDC. See USB section.

[RETURN TO TOP OF THE PAGE](#)

---

## R

### *Raster*

The area on screen that electron beam can reach.

### *Refresh rate*

See Vertical scanning frequency.

### *Resolution*

The number of pixels that can be displayed on the screen. The resolution is specified as the number of pixels in a line multiplied by the number of horizontal lines.

See also video graphic adapter.

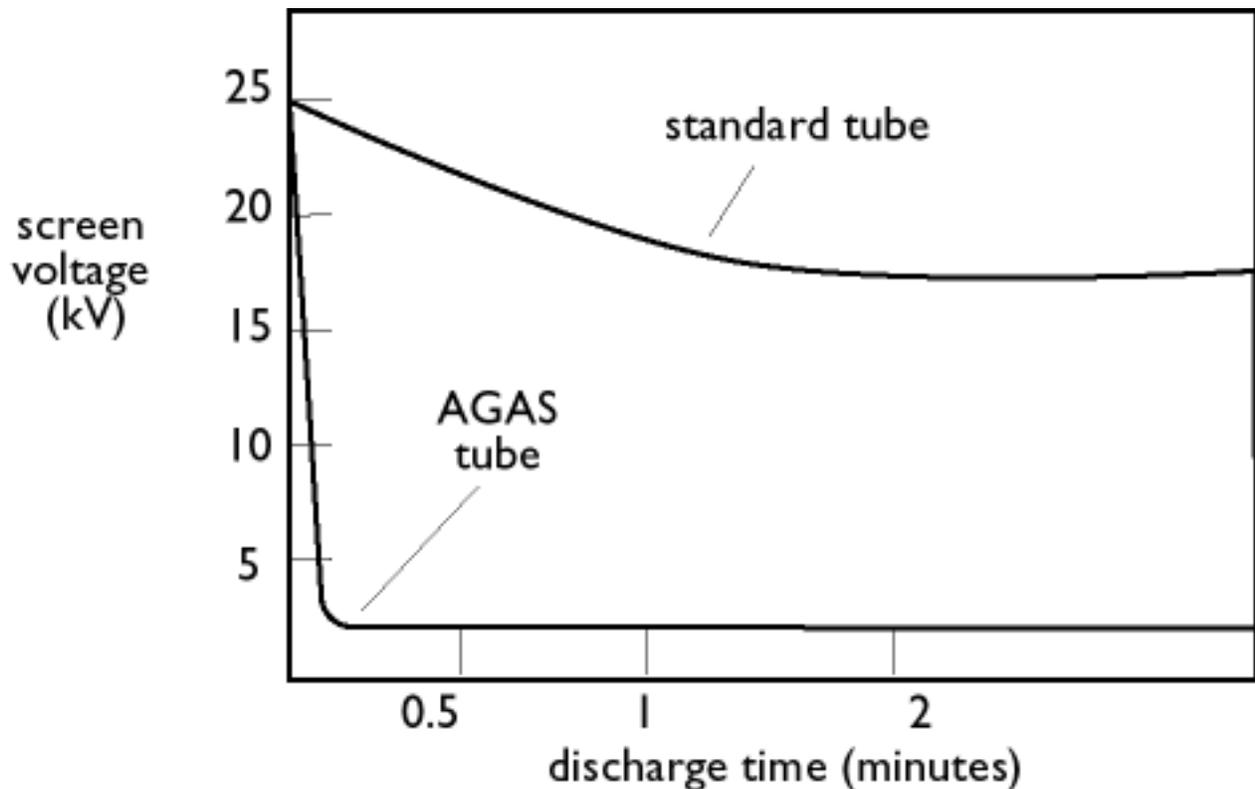
### *Rotation function*

The feature that allows users to adjust the whole screen rotating to be horizontal.

Because of the magnetic field of earth, the screen of monitor will be tilt when the screen faces toward the different direction.

[RETURN TO TOP OF THE PAGE](#)

---

**S***Screen coatings**Anti-Static coatings*

Due to bombardment by beam electrons, monitor screens become electrically charged when in use. Electrically charged screens surfaces can attract dust particles. An Anti-Static coating is a conductive coating deposited on the screen (or on a glass panel immediately in front of the screen) that conducts away the charge and prevents screen dust build-up.

*AGAS (Anti-Glare, Anti-Static) coating*

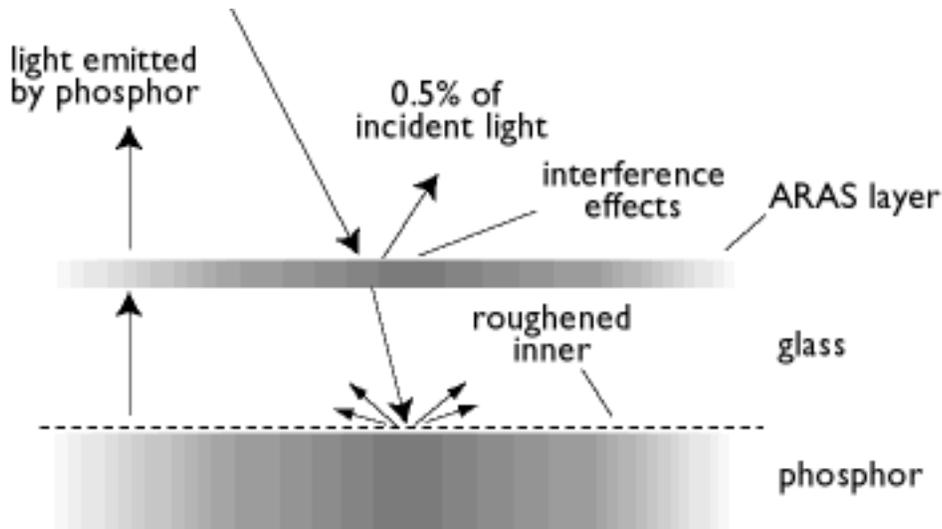
AGAS is a silica coating applied to the surface of the screen by a spinning and spraying process. It operates by diffusing reflected light to blur images of light sources on the screen. To provide anti-static properties, the coating is impregnated with small conductive particles.

*ARAS (Anti-Reflection, Anti-Static) coating*

ARAS is one of the most effective anti-reflection/anti-static screen treatments currently available. It is composed of a multi-layer structure of transparent dielectric material that suppresses specular reflections by broadband interference effects at the screen surface. Anti-static properties are

provided by a single conductive layer within the multi-layer structure.

With ARAS, the intensity of reflected light is reduced from around 4.5% of the incident light (the reflectivity of uncoated screens) to less than 0.5%. ARAS also has a major advantage over other screen treatments: It doesn't diffuse or scatter reflected light, so picture contrast and sharpness remain completely unimpaired. It's also easy to clean and tough enough to withstand commercially available cleaning agents.



*The ARAS coating reflects only about 0.5% of the incident light.*

*AGRAS (Anti-Glare anti-Reflection Anti-Static) coating.*

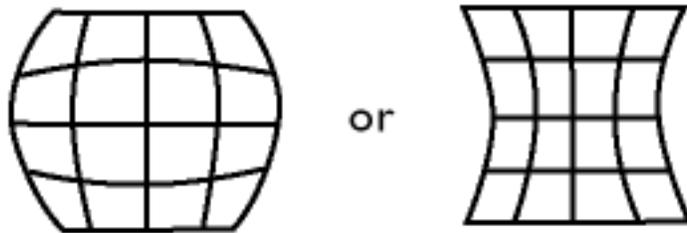
A combined anti-reflection, anti-glare, anti-static coating.

*Self-test function*

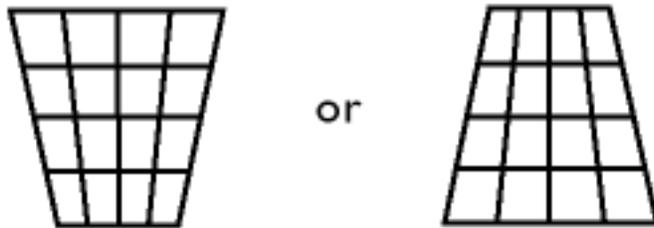
A monitor equipped with hardware or software to automatically detect cable connection status.

*Shape*

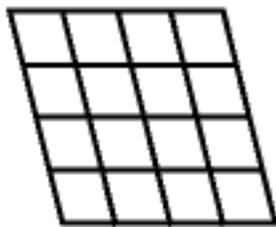
Deviation of a reproduced picture from its intended shape. The following types of distortion are most common:



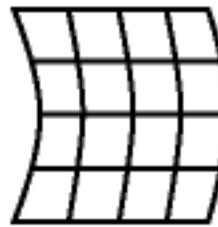
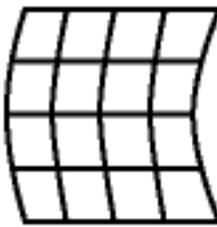
pincushion distortion



trapezoid distortion



parallelogram distortion



balanced pincushion distortion

### *SOG (Synchronization On Green)*

A properly functioning color monitor requires five kinds of signals: horizontal sync pulse, vertical sync pulse, red color signal, green color signal and blue color signal. Signals from a PC are transmitted to a monitor using one of three methods:

1. Separate sync: Horizontal and Vertical sync signals transmitted separately.
2. Composite sync: Horizontal and vertical sync pulses mixed into a single signal train.
3. SOG: Horizontal and vertical sync pulses mixed, then combined with the green color signal.

[RETURN TO TOP OF THE PAGE](#)

## T

### *TCO*

See Electromagnetic radiation standards.

### *Tilt function*

See rotation function.

### *Trapezoid distortion*

See Geometrical distortion.

### *TTL signal*

A TTL (Transistor-transistor-logic) signal is a digital signal level for controlling the screen colors. With TTL driving, the red, green and blue signals can only be switched on or off or provided with an intensity signal. A TTL-driven monitor can thus display a maximum of 64 colors. Video standards such as MDA, CGA and EGA are based on TTL level.

[RETURN TO TOP OF THE PAGE](#)

---

## U

### *USB or Universal Serial Bus*

[A smart plug for PC peripherals.](#) USB automatically determines resources (like driver software and bus bandwidth) required by peripherals. USB makes necessary resources available without user intervention.

USB eliminates "case angst" -- the fear of removing the computer case to install add-on

peripherals. And USB also eliminates adjustment of complicated IRQ settings when installing new peripherals.

USB does away with "port gridlock." Without USB, PCs are normally limited to one printer, two Com port devices (usually a mouse and modem), one Enhanced Parallel Port add-on (scanner or video camera, for example) and a joystick. More and more peripherals for multimedia computers arrive on the market every day. With USB, up to 127 devices can run simultaneously on a computer.

USB permits "hot plug-in." There's no need to shut down, plug in, reboot and run set-up to install peripherals. And no need to go through the reverse process to unplug a device.

In short, USB transforms today's "Plug-and-Pray" into true Plug-and-Play!

## Hub

A Universal Serial Bus device that provides additional connections to the Universal Serial Bus.

Hubs are a key element in the plug-and-play architecture of USB. The Figure shows a typical hub. Hubs serve to simplify USB connectivity from the user's perspective and provide robustness at low cost and complexity.

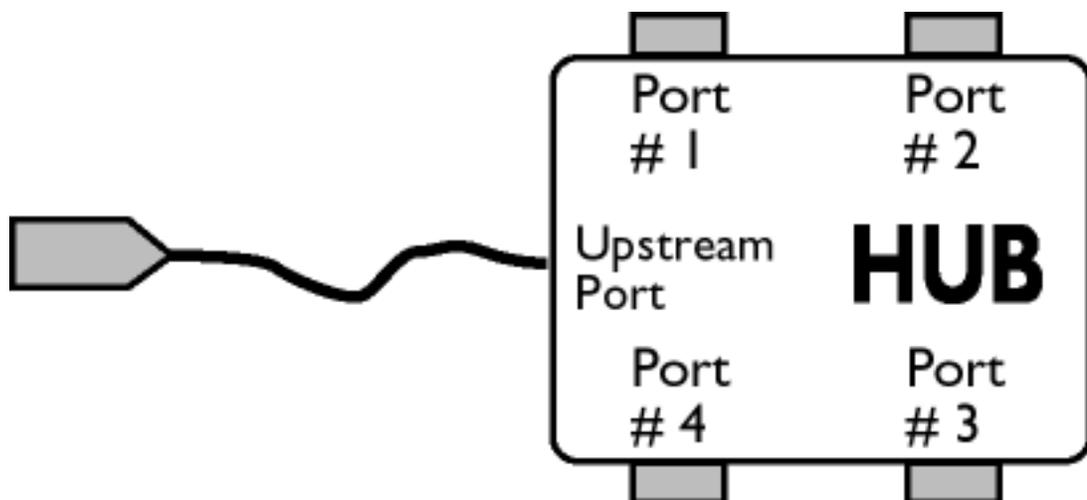
Hubs are wiring concentrators and enable the multiple attachment characteristics of USB. Attachment points are referred to as ports. Each hub converts a single attachment point into multiple attachment points. The architecture supports concatenation of multiple hubs.

The upstream port of a hub connects the hub towards the host. Each of the other downstream ports of a hub allows connection to another hub or function. Hubs can detect, attach and detach at each downstream port and enable the distribution of power to downstream devices. Each downstream port can be individually enabled and configured at either full or low speed. The hub isolates low speed ports from full speed signaling.

A hub consists of two portions: the Hub Controller and Hub Repeater. The repeater is a protocol-controlled switch between the upstream port and downstream ports. It also has hardware support for reset and suspend/resume signaling. The controller provides the interface registers to allow communication to/from the host. Hub specific status and control commands permit the host to configure a hub and to monitor and control its ports.

## Device

A logical or physical entity that performs a function. The actual entity described depends on the context of the reference. At the lowest level, device may refer to a single hardware component, as in a memory device. At a higher level, it may refer to a collection of hardware components that perform a particular function, such as a Universal Serial Bus interface device. At an even higher level, device may refer to the function performed by an entity attached to the Universal Serial Bus; for example, a data/FAX modem device. Devices may be physical, electrical, addressable, and logical.



## Downstream

The direction of data flow from the host or away from the host. A downstream port is the port on a hub electrically farthest from the host that generates downstream data traffic from the hub. Downstream ports receive upstream data traffic.

## Upstream

The direction of data flow towards the host. An upstream port is the port on a device electrically closest to the host that generates upstream data traffic from the hub. Upstream ports receive downstream data traffic.

## *UPS (Universal Power Supply)*

The monitor with UPS feature can work in different countries with various mains voltage.

[RETURN TO TOP OF THE PAGE](#)

## V

### *Vertical dot pitch*

See Dot pitch.

### *Vertical scanning frequency*

Expressed in Hz, this is the number of fields written to the screen every second in interlaced mode. In non-interlaced mode vertical scanning frequency is the number of frames (complete pictures) written to the screen every second (also known as refresh rate).

### *Vertical sync pulses*

A train of square shaped waveforms that define the start of a new frame.

## VESA

Video Electronic Standards Association, a consortium of manufacturers formed to establish and maintain industry-wide standards for video cards and monitors. VESA was instrumental in the introduction of the Super VGA and Extended VGA video graphics standards (see Video graphics adapters) with a refresh rate of 70 Hz, minimizing flicker and helping to reduce operator eyes fatigue and stress.

### *Video dot rate*

See Dot rate.

### *Video graphics adapters*

A card equipped with a character or graphic generator and video memory, which maps to the

screen. A microprocessor scans video memory and translates bit information from the computer into displayable video signals for the monitor. These cards comply with various standards that determine the nature and quality of the display.

[VGA \(Video Graphics Array\)](#), introduced in 1987, was the first analog card. It offered still higher resolution than EGA: 640 X 480 pixels for graphics and 720 x 400 pixels for text, and a color palette of 256 colors. VGA could also emulate EGA and CGA.

[Super VGA](#), devised by VESA in 1989, offers a resolution of 800 x 600 pixels.

[Extended VGA](#), introduced by VESA in 1991, offers a top resolution of 1024 x 768 pixels (non-interlaced) and a refresh rate slightly higher than IBM's XGA 8514A.

[High-end, graphics adapters](#), introduced over the last three years for professional workstations, offer top resolutions from 1280 x 1024 to 1600 x 1280, horizontal line frequencies up to 90 kHz and bandwidths up to 200 MHz.

### *VIS (Viewable Image Size)*

The real screen dimensions that users can see measured diagonally. The VIS of a monitor is always less than the so called screen size of a monitor. For example, the VIS of a 17-inch monitor is only about 16 inches. It depends on the useful screen size of CRT and the opening of a monitor's front cabinet.

[RETURN TO TOP OF THE PAGE](#)

## Download and Print

This page provides an option to read the manual in .pdf format. PDF files can be downloaded into your hard disk, then viewed and printed with Acrobat Reader or through your browser.

If you do not have Adobe® Acrobat Reader installed, click on the link to install the application.  
[Adobe® Acrobat Reader for PC](#) / [Adobe® Acrobat Reader for Mac](#).

### ***Download instructions:***

To download the file:

1. Click-and-hold your mouse over the icon below. (Win95/98 users right-click)
2. From the menu that appears, choose 'Save Link As...', 'Save Target As...' or 'Download Link to Disk'.
3. Choose where you would like to save the image; click 'Save' (if prompted to save as either 'text' or 'source', choose 'source').

### ***Printing instructions:***

To print the manual:

1. With the manual file open, follow your printer's instructions and print the pages you need.



[105E6.pdf](#)

[English language manual](#)

## Frequently Asked Questions

### 1. What does the "Designed for Windows" logo signify?

The "Designed for Windows" logo means your Philips monitor fulfills the requirements and recommendations of the PC9x (97, 98, or 99) System Design Guide and passes stringent WHQL tests.

### 2. What models are Mac compatible?

All listed Philips monitors are Mac compatible. BUT, you may need an adapter to connect the monitor to your Mac system. Please contact your dealer/reseller for details.

### 3. What is TCO?

TCO is a Swedish abbreviation for the Swedish Confederation of Professional Employees.

### 4. What is MPR?

MPR is a Swedish abbreviation for the Swedish National Board of Measurement and Testing.

### 5. What are the differences between MPRII, TCO92, TCO95, TCO99 and TCO'03?

In the general hierarchy of standards, TCO'03/TCO99 is the highest level of certification. Next is TCO95, which is "better" than TCO92, which, in turn, is better than MPRII. Below, we compare the standards in each category.

-TCO 92 Phase out: June 30, 2000

-TCO 95 Will be end December 31, 2003

Emissions:

MPRII: Set low emission rules for visual displays.

TCO92: Imposed more stringent standards than MPRII.

TCO95: Further toughened TCO92 rules.

TCO99: Delineated even more severe standards and test procedures than TCO95.

TCO'03: Same as TCO99 standard + Testing uncertainty.

Safety:

MPRII: No requirement.

TCO92/95/99/03: All set requirements.

Energy Saving:

MPRII: No requirement.

TCO92: Standby mode < 30W, Off mode < 8W

TCO95: Standby mode < 30W, Off mode < 8W

TCO99: Standby mode < 15W, Off mode < 5W

TCO'03:Standby mode < 15W, Off mode < 5W

Visual Ergonomics:

MPRII: No requirement.

TCO92: No requirement.

TCO95: Set ergonomic rules including minimum contrast level, flicker and jitter.

TCO99: Tightened TCO95 rules.

TCO'03: Tighten TCO99 rule for CRT and new requirement of screen color for TFT LCD Monitors.

Ecology:

MPRII: No requirement.

TCO92: No requirement.

TCO95: Set general ecological standards including recycling preparation, environmental policy and environmental certification.

TCO99: Further tightened TCO95 norms.

TCO'03:Require the recycling information to users.

## **6. How do I enable the energy saving function?**

Go to 'My Computer' and select 'Control Panel' followed by 'Monitor Control.' Select 'All default selection' and choose your Philips monitor model from the default driver list. Plug and Play will automatically enable the EPA tick box for you. In DOS or Windows 3.1, you must first make sure your PC supports power saving.

## **7. What is refresh rate?**

"Refresh rate" describes the number of times an entire screen is vertically scanned each second. In other words: If a monitor's refresh rate is 85 Hz, its screen is refreshed - or vertically scanned - 85 times per second. A higher the refresh rate means better image stability and less flicker. A high refresh rate helps users who work long hours in front of a monitor avoid eye fatigue and stress. To change the refresh rate, go into "Start/Settings / Control Panel / Display / Properties / Setting/Advance/Adaptor" Windows settings of the computer, the monitor will automatically adjust itself to the video card.

## **8. Why does the picture on the screen appear to flicker?**

A low refresh rate or electrical interference typically causes flickering in the picture. Possible solutions include the following:

- Verify that the proper drivers are installed for your video card.
- Make sure that all electrical devices (such as mobile phones) are at least 1m from the monitor.
- Place the monitor in another physical location away from electrical interference.
- Adjust the refresh rate to 75hz or higher.

**9. How do I adjust my monitor's resolution?**

Available resolutions are determined by the capabilities of your video card and graphic driver. Under Windows '95, you may select the desired available resolution through the 'Display properties/Settings' menu.

**10. How can I adjust the size, position and rotation of my screen?**

Depending on the model you own, you can use your CustoMax Software, On Screen Display (OSD) or control knobs located on the monitor.

**11. What if I get lost when making monitor adjustments?**

Simply press OK button then select "Reset to factory settings" to restore all settings.

**12. What is LightFrame™?**

LightFrame™ is a Philips technology breakthrough which offers a unique and revolutionary solution for boosting a monitor 's brightness and sharpness. With LightFrame™, the user experiences TV quality performance for video or photos without deterioration to the monitor 's performance in windows used for other applications.

**13. How does LightFrame™ work?**

LightFrame™ consists of a software application and an Integrated Circuit (IC) embedded in the monitor. Together, they boost brightness and sharpness in a user defined window or screen area. Unique LightFrame™ technology dramatically improves photo and video display quality.

**14. Why is LightFrame™ important to me?**

With LightFrame™, selected Philips monitors deliver TV quality video and photo display while maintaining monitor performance for text-based applications. The result is that movies and other video are brighter and livelier; photos are more vibrant and lifelike.

**15. Will anyone else have this?**

LightFrame™ was invented, developed and patented by Philips. It is a unique feature that you will find exclusively in Philips monitors.

**16. Will LightFrame™ shorten the life of a monitor?**

No. Extensive testing has confirmed LightFrame™ does not adversely affect monitor life. Today's state-of-the-art Philips monitors employ improved phosphors and are designed for high light output. LightFrame™ normally highlights photos and videos. Though the peak brightness of the highlighted area is strongly increased, the average brightness - a determining factor for cathode deterioration - is not normally increased. In any case, a special Automatic Beam Limiter (ABL) circuit keeps a monitor's maximum average brightness within acceptable levels.

**17. I get a message warning that my monitor 'may not support LightFrame™'. I am certain my monitor does. What is wrong?**

Only a Philips driver can determine if your monitor is equipped with LightFrame™; a generic Windows driver cannot. Install the special Philips driver that came with your monitor. If the warning continues to flash after your Philips driver is installed, ignore the message. LightFrame™ will function properly.

**18. What will happen when my system is no longer connected to a LightFrame(tm) enabled monitor - for example, when I take my notebook on the road?**

Philips exclusive LightFrame™ feature requires the combined operation of hardware that resides in your monitor and software installed on your system. It only works when a monitor with built-in hardware receives commands from system software. Without both the LightFrame™ hardware equipped monitor and system software, the LightFrame™ does not function.

**19. What is "XtraSpace Design" (XSD)?**

XSD stands for XtraSpace Design, a Philips breakthrough that reduces a CRT display device's footprint. Philips XSD monitors combine the world's smallest front-to-back footprint with excellent front of screen performance.

**20. How did Philips achieve XtraSpace Design?**

Philips achieved this breakthrough in reduced footprint CRT display devices through short depth tubes and a focused design process that squeezed every excess millimeter out of XSD monitor desk space requirements.

**21. What does Auto Calibrate do?**

It makes your monitor perform better and last longer. As a monitor becomes older, brightness gradually deteriorates and its colors change. This well-known process effects all monitors. Eventually after a number of years, the monitor's brightness deteriorates to below 50% of its original value. At this stage, the usable life of a monitor is considered ended. Auto Calibrate regularly readjusts color temperature and luminance to their original values.

**22. How does Philips Auto Calibrate feature benefit me?**

With Auto Calibrate, it takes a monitor's luminance 33 percent longer to deteriorate to the 50 percent level that marks the end of a display device's useful life. Thanks to Auto Calibrate, a monitor with a normal life of 10,000 hours, for example, would last for 13,300 hours, a full one third longer.

**23. How does Auto Calibrate work?**

During the calibration process, different predefined black and white images are displayed on the screen. The beam currents of the red, green and blue cannon are accurately measured and compared to the original values stored in the monitor. By readjusting gain values of the individual cannons, deviation is reduced to zero. Default values are stored during production. If the user sets a new color temperature, this new value is saved as the new default value.

**24. When should calibration be performed?**

The calibration process takes less than six seconds. During this period, different specific images are displayed. After the process is finalized, the original image is redisplayed. Constant re-calibration is not required. Calibration should be performed after the monitor is warmed up. Auto Calibration takes place when a monitor receives a signal indicating an imminent switch to its sleep mode/stand-by mode.

**25. My screen shows "NO SIGNAL", how can I get rid of this?**

Check the following for possible solutions:

- Bent pins on the video cable.
- Make sure the computer is turned on.
- Ensure the VGA Cable is properly connected.
- Ensure the BNC/D-Sub connector on the rear of the monitor is in the correct position, newer models have this option in the On Screen Display under Input Signal Selection.
- Video card may be not a VESA standard (try the monitor with another computer).

**26. Why does my monitor display "OUT OF FREQUENCY RANGE"?**

The video card installed in your computer may be too high for the monitor 's specifications. Please contact your computer manufacturer for details on how to lower resolution for your operating system.

**27. What is Moire? Why does my monitor have this wavy phenomenon?**

Moire is a natural effect or phenomenon of CRT that has the appearance of a wavy pattern, which is repetitive and superimposed on the screen as ripple images. These are a few suggestions to help reduce or minimize the effects:

- Some monitors have a Moire cancellation feature, activate it to the on position or adjust the Moire cancellation function via the OSD on the monitor.
- Change resolution to the recommended standard for the specific monitor size.
- Change Window viewing pattern/scheme to a pattern where the Moire is less visible.
- Change horizontal and vertical size to optimize the reduction of the Moire effect.

**28. My monitor appears to be missing one or more colors. How do I correct this?**

- If the OSD menu is also missing a color, please contact service for details.
- Set color temperature to 9300 color coordination.
- Check the video cable for any bent pins.
- Video card could be defective (try the monitor with another computer).

**29. When I degauss my monitor, it makes a loud noise. Is this normal?**

Yes, when degaussing your monitor via the OSD, it is normal for the monitor to make a relatively loud noise. Please be aware that many models will not degauss more than once within any given time period (up to 10 minutes). This is due to the unit having a temperature sensitive resistor. While the unit is degaussing, the resistor increases in value with heat and once it reaches a certain temperature, the resistance will rise and prevent voltage from reaching the degaussing coil. This is what stops the degausser, and this device's resistance will decrease as it cools back off, enabling the degauss function to operate again. This is an intentional design and is an industry standard, not just for Philips monitors. Please be aware that not all models in the Philips range has this manual degauss function. Some models are built with an auto degauss feature which automatically degausses the monitor when it is switched on.

**30. How do I adjust the picture on the screen?**

Please perform the following to correct the picture image:

- Reset your monitor via the OSD menu.
- Adjust the Horz (width) and/or Vert size (height) in the OSD.
- Change monitor timing to work at the recommended resolution.

**31. The edge of the picture on the screen appears to be distorted. How can I correct this?**

Please perform the following to correct the picture image:

- A magnetic or electrical interference typically causes poor geometry in the picture. Place the monitor in a different physical location.
- Reset the monitor to the factory preset via the OSD menu.
- Access the Geometry Menu in the OSD of the Monitor and perform the necessary adjustments.
- Change the monitor timing to the recommended resolution.

### **32. The picture appears too dim. How can I correct this?**

Adjust Brightness and/or Contrast via the monitor 's OSD. Some models have a Video Input Select

under Advanced Controls in the monitor 's OSD. Most computers require it to be set at 0.7V.

Please review the following for possible solutions:

- If the OSD menu is also dim, please contact service for repair.
- Reset the monitor via the OSD menu.
- Change the color temperature settings to 9300 color coordination via the OSD menu.
- Set the Contrast to maximum level (100) and Brightness to middle level (50).

Video card could be defective (try the monitor with another computer)

### **33. How can I increase the color display of my monitor?**

The amount of video memory your video card holds determines the amount of colors that can be displayed on your computer screen. To get the most out of your video card, you will need to either install the latest drivers onto your computer or upgrade the video cards memory. Please check with your computer or video card manufacturer for further details.

### **34. Why is there no picture on my monitor?**

- Check the wall socket for power. Verify that there is power by connecting another product.
- Ensure the power cable is correctly attached to both the wall socket and the monitor.
- Check that the power button is switched on.
- Unplug the monitor for approx. 1 minute and plug it in again. Switch the monitor back on.

### **35. Why is there no picture on my monitor even though the power LED is yellow/amber or flashing green?**

- Reboot your computer while holding the Ctrl key on your computer. If you see any picture during the boot procedure, please verify the settings of your video card (for Windows go to Control Panel and select Display).
- Check that the video cable is not damaged, bent or that any of the pins in the connector are damaged (please be aware that some VGA connectors have one missing pin). If damaged, replace with a new cable.
- Check that the cable is attached correctly to the computer.
- Press any key on the keyboard to wake-up the computer from power saving mode.

**36. Why is there no picture on my monitor even though the power LED is green?**

- Verify the Contrast and Brightness setting of the monitor. First press and hold the 5 (-) button to increase Contrast and then press and hold the 4 (+) button to increase Brightness. These buttons are located on the front of your monitor.
- Press both the 5(-) button and the OK button at the same time to switch input A|B.
- Try and repeat step 48 above.

**37. Why does the picture disappear after I press the on/off button quickly?**

This is a unique Philips feature designed to preserve the life of your monitor. Please allow 5 seconds between powering off and on your monitor, your picture will then be restored.