

NEC

User Manual



T1000

(42" Wide VGA Plasma)

English

German

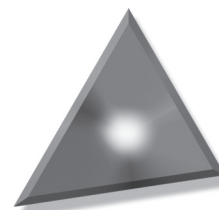
Spanish

Italian

French

Swedish

Russian



PlasmaSync™

**ENGLISH**

This symbol refers to a hazard or unsafe practice, which can result in severe personal injury or death.

DEUTSCH

Dieses Symbol bedeutet eine mögliche Gefahr für Ihr Leben und Ihre Gesundheit, wenn bestimmten Handlungsaufforderungen nicht nachgekommen wird, bzw. wenn entsprechende Vorsichtsmaßnahmen nicht getroffen werden.

ESPAÑOL

Este símbolo indica un posible peligro para su vida y su salud si no se siguen determinadas instrucciones de manejo o si no se adoptan las medidas de precaución correspondientes.

ITALIANO

Questo simbolo indica un potenziale pericolo di morte e di nocività per la salute nel caso in cui non vengano soddisfatti determinati requisiti oppure non vengano prese le relative misure precauzionali.

FRANÇAIS

Ce pictogramme annonce un risque éventuel mettant votre vie et votre santé en danger si vous n'observez pas certaines instructions à suivre, le cas échéant, si vous ne prenez pas les précautions exigées.

SVENSK

Denna symbol anger farligt eller osäkert handhavande som kan leda till allvarlig personskada eller dödsfall.

РУССКИЙ ЯЗЫК

Этот символ обозначает сопряженную с риском деятельность, которая может привести к серьезным травмам или смерти.

**ENGLISH**

This symbol refers to a hazard or unsafe practice, which can result in a personal injury or property damage.

DEUTSCH

Dieses Symbol warnt Sie vor Fehlverhalten, welches Sach- und Umweltschäden zur Folge hat.

ESPAÑOL

Este símbolo le advierte de comportamientos incorrectos que pueden causar daños materiales o medioambientales.

ITALIANO

Questo simbolo mette in guardia contro un possibile uso non corretto, che potrebbe provocare danni materiali ed ambientali.

FRANÇAIS

Ce pictogramme vous avertit qu'un comportement inapproprié peut causer des dommages matériels et des dommages à l'environnement.

SVENSK

Denna symbol anger farligt eller osäkert handhavande som kan leda till personskada eller egendomsskada.

РУССКИЙ ЯЗЫК

Этот символ обозначает сопряженную с риском деятельность, которая может привести к травмам или порче имущества.

**ENGLISH**

This symbol provides information about handling of the product or about the relevant part of the operating instructions to which particular attention should be paid.

DEUTSCH

Dieses Symbol gibt Informationen über die Handhabung des Produkts oder den jeweiligen Teil der Bedienungsanleitung, auf den besonders aufmerksam gemacht werden soll.

ESPAÑOL

Este símbolo señala informaciones sobre el manejo del producto o la parte correspondiente del manual de usuario a las que debe prestarse una atención especial.

ITALIANO

Questo simbolo fornisce informazioni in merito all'utilizzo del prodotto o alla relativa parte delle istruzioni per l'uso a cui si deve prestare particolare attenzione.

FRANÇAIS

Ce pictogramme informe sur les opérations relatives au produit ou attire spécialement votre attention sur une certaine partie des instructions de service.

SVENSK

Denna symbol ger information om hur utrustningen ska handhas eller om den tillämpliga delen i användarhandboken som särskilt ska uppmärksammas.

РУССКИЙ ЯЗЫК

Этот символ дает информацию об обращении с аппаратом или о важной части инструкций по эксплуатации, на которую следует обратить особое внимание.

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Safety instructions

Before you put this plasma TV into operation please read through this user manual carefully.

This plasma TV is intended exclusively for the reception and reproduction of video and audio signals.

Take heed of the safety directions so that when used in compliance with the intended use there is no danger to your health.

Installation and connection errors can damage the unit or any devices connected to it. Take heed of the warnings and directions on the unit and in the operating manuals.

This plasma TV is designed only for use in residential rooms and offices.

Protect the plasma TV against moisture. This includes continuous high levels of air humidity, proximity to water, dripping water, spray water and rain. Do not operate this plasma TV in rooms with a high dust incidence. Do not put any vessels that are filled with water, e.g. vases, on the unit. If you connect an external aerial, please ensure that no water can penetrate the cable infeed.

Under no circumstances may any objects be allowed to enter the unit through the ventilation apertures. This would cause short circuits and could therefore cause a fire. Should anything get into the unit at any time, immediately turn off the unit via the mains power switch and disconnect the mains plug from the plug receptacle. Do not try to open the unit yourself. Instead, contact the hotline or a qualified service engineer.

Protect the plasma TV against heat, heat accumulation and direct sunlight. Avoid proximity to fire, heaters and ovens. Do not drape curtains over the unit.

The ventilation apertures may not be covered or blocked in order to avoid faults and overheating. During installation maintain a sufficient distance from other any equipment, furniture, walls and ceiling so that air circulation is possible.

If the plasma TV is moved quickly from cold surroundings to warm surroundings, moisture can collect on the surface and inside the unit. Should this situation occur, do not switch on the unit, but wait until the moisture has evaporated. If the unit is used with such a collection of moisture, malfunctions may occur.

The voltage supply used must correspond with the specifications on the type plate.

Use only the mains cable supplied.

This plasma TV is completely disconnected from the electrical mains only when the mains switch is switched off and the mains cable is pulled out of the unit or the plug is pulled out of the plug receptacle.

Connect this plasma TV only to a MAINS plug receptacle with an earth conductor connection. Ensure that the mains plug and plug receptacle are accessible at all times.

Differing conditions can cause an electrical hazard, fire or failure of the unit.

Never remove the plug from the receptacle by pulling it out of the plug receptacle by the mains cable. Avoid laying the mains cable in the vicinity of hot objects.

Disconnect the mains plug and aerial plug if there is a thunderstorm or if you are going to be absent for a long period of time. The power supply system can get damaged through an overload caused by lightning striking the antenna system.

Always turn off the plasma TV and the signal source before you connect the two devices.

The plasma unit is equipped with a supplementary filter panel made of glass. If the unit is exposed to an excessive load, e.g. due to shock, vibration, bending or heat shock, the glass surface can break. Do not subject the glass surface to any pressure or knocks. Should the glass be broken, immediately unplug the mains plug from the plug receptacle. Do not touch the fragments with your bare hands. There is a danger of injury from sharp-edged glass fragments.

Important basic principles for use

The plasma TV that you have purchased meets the highest quality requirements in this product segment and has been checked for pixel defects. Despite taking the greatest care during production of these units, for technological reasons it cannot be excluded absolutely that there are some pixels with defects.

We request your understanding for the fact that such defects, provided that they are within the limits specified by the standard, cannot be considered to be as an appliance defect in the terms of the warranty.

The luminance diminishes gradually with increasing usage time, as is the case with all plasma TV's on a phosphorus basis.

PDP Monitor phosphor "burn" (Image Retention) characteristics

Plasma panels like CRTs, (computer monitors and TVs) use phosphor to display images. A fundamental chemical phenomenon of phosphor is that depreciation occurs. That means the phosphor property, which contributes to light output, deteriorates with usage.

Phosphor "burn-in" (Image Retention)

Phosphor used in all plasma screens loses its brightness with usage (so-called "on" state.) Phosphor "burn" is explained as follows: When a static pattern is displayed, this results in higher usage of phosphor for the "on" state pixels compared to the "off" state pixels. This creates a difference in light output between the "on" state pixels and the "off" state pixels. In certain images with big differences in light output, the human eye detects this as a "burn-in" effect.

Life Time

The service life of plasma panels is commonly defined as the period before the reduction in value of brightness amounts to half its original value. Another and more correct way of stating this is its "half life". With the factory default settings, under normal operating conditions, displaying moving video, the average expected half life of plasma displays is more than 60,000 hours.

Note: This figure is for reference only. This average is not a guarantee for either the service life or continued brightness.

Warranty

Phosphor burn and loss in brightness are excluded from the normal and extended manufacturer's warranty.

Period of time before phosphor burn occurs

The exact period of time before phosphor burn occurs is impossible to state due to the fact that many variables are involved. As described below, it is advised that proper measures be taken from the onset in order to decrease the chances of phosphor burn.

Measures to help reduce the chances of phosphor burn

Several simple actions can be taken to reduce the chances of phosphor burn.

- Avoid use of strong, contrasting mono colour still over extensive periods.
- Switch off the monitor when not in use.
- Always enable and use your computer's screensaver function when using an RGB input source. [Please note that some screensavers may have a permanent but varied brightness object moving in a confined area of the screen. This type of so called screen saver will in the long term cause burn-in.]
- Avoid displaying static images or static patterns whenever possible.

If your Plasma TV has been used much, operated for several hours at a time, or in the event that you must display a static image, the following steps should be taken to reduce the likelihood of phosphor burn:

- Lower the monitor's brightness and contrast settings to the lowest acceptable level without impairing readability of the screen image. Settings of approximately 50% of maximum brightness and contrast are recommended.
- Whenever possible, display an image with many colours and colour gradations (i.e. photographic or photo-realistic images).
- Create content using complementary pastel colours with minimal contrast between light and dark areas.
- Avoid displaying images with few colours and distinct, sharply defined borders between colours.
- Avoid displaying static images, such as a company name or logotype, for an extended period on the occasion of business presentations.
- Avoid displaying in the 4:3 mode for an extended period of time. The vertical edges of the 4:3 image can cause phosphor burn.

Possible countermeasures once phosphor burn occurs

Once phosphor burn occurs, it is impossible to completely eliminate it. The best countermeasure is to follow the steps above to help prevent phosphor burn in the first place.

Unfavourable conditions can cause your plasma TV to picture noise (hum). The picture noise (humming) generally comes from the mains voltage supply and can occur through the connection of different earth conductors. You can provide a remedy by putting a so-called sheath current filter between the incoming aerial lead and the aerial input socket on the plasma TV. Sheath current filters are available in the retail trade in the form of a small inline plug.

For technical reasons the unit can generate noise inside itself. However, this must not exceed the value specified in the appliance specification.

If your plasma TV is connected to an external aerial, the latter must be earthed as protection against electric shocks and static charging. The earthing must comply with the valid regulations.

For ergonomic reasons we recommend that you avoid the use of red or blue fonts or symbols on dark backgrounds. On account of the poor contrast such a display causes poor legibility and causes early eye fatigue. Therefore please use displays that are rich in contrast, e.g. black font on a white background.

To avoid aching eyes and obtain an optimized viewing distance, the distance from the unit should be five to six times the display's diagonal dimension. In your television room it should be so light that you could also read. The contrast is lost with too much brightness. Too little light strains the eyes due to the alternation between light and dark on the display.

Waste disposal



If you want to dispose this unit, do not mix it with general household waste. There is a separate collection system for used electronic products in accordance with legislation that requires proper treatment, recovery and recycling.

This unit and its packaging have been produced largely from materials that can be disposed of in an environmentally friendly manner and that can be properly recycled.

After use the unit will be taken back for reuse or recycling, provided that it is handed back in a condition that corresponds to its use having been in compliance with the intended use.

Any non-recyclable parts of the unit will be disposed of in the proper manner.

If you have any questions about disposal, please contact the place where you purchased the unit or our service department.

Cleaning

Before you start any cleaning, turn off the unit and unplug the mains plug from the plug receptacle.

Cleaning the plasma TV

Use a glass cleaning product with a soft cloth for cleaning the plasma TV. Do not use any abrasives!

Cleaning the casing

Do not use any chemical solvents or cleaning agents for cleaning the casing, otherwise the surface of the unit could be damaged. If you clean the surface of the casing with a wet cloth, drops of water can get into the unit, which will cause malfunctions. Use a vacuum cleaner with a soft brush attachment for cleaning the ventilation apertures.

Conformity

This unit is a plasma TV and complies with the following directives and standards of the European Union:

- 89/336/ECCE of 03 May 1989 with subsequent modifications (directive 92/31/ECCE of April 1992 and directive 93/68/ECCE of 22 July 1993)
- 73/23/ECCE of 19 February 1973 with subsequent modifications (directive 93/68/ECCE of 22 July 1993)
- EN55013, EN55020, EN61000-3-2/-3 (ElectroMagnetic Compatibility)
- EN60065 (Safety Requirements).

Conformity with the requirements is certified by the designation of the  mark on the product.

The manufacturer cannot be held liable for operation outside of the operating conditions as described in these operating instructions. Your product liability and warranty claims shall be deemed as invalid.

In the event of any faults

Unplug the mains plug from the plug receptacle, if the unit is damaged.

Pull the mains plug out of the plug receptacle, if the unit gives off any smoke, an unpleasant odour or any unusual noises. Proceed in the same way if the unit is no longer able to display a picture after it has been switched on or during operation. Do not attempt to continue operating the plasma TV in this condition.

Under no circumstances should you open the unit yourself. Inside the display there are no parts that can be serviced or replaced by you. Contact our service hotline or another suitable technical workshop.

Batteries

When inserting the batteries ensure that the polarity (+/-) agrees with the markings on the remote control.



Batteries may not be disposed of in the domestic waste. The used batteries must be disposed of at a municipal collection centre or thrown into the containers provided for this purpose in the retail trade.

Do not expose the batteries to excessive heat, do not throw them into a fire, do not recharge them and do not attempt to open them; they could leak or even explode.

Please remove the batteries from the remote control, if the unit is not to be used for a long period of time.

Overview

The plasma TV offers a broad range of connection options for PCs, DVD players, video recorders, video cameras, etc. No matter whether displayed on television, video or PC, all images are presented with a very sharp outline and distortion-free on an absolutely flat display surface. They have an excellent degree of brightness and exceptional brilliance. Other important features include the display's large diagonal dimensions with a length ratio of 16:9 and a very slim overall depth.

To be able to watch your TV, connect the unit to a terrestrial aerial, SAT receiver or cable TV box.

The TV is operated interactively via the remote control provided and the on-screen menu (OSD). A wide range of picture quality settings can be adjusted using these.

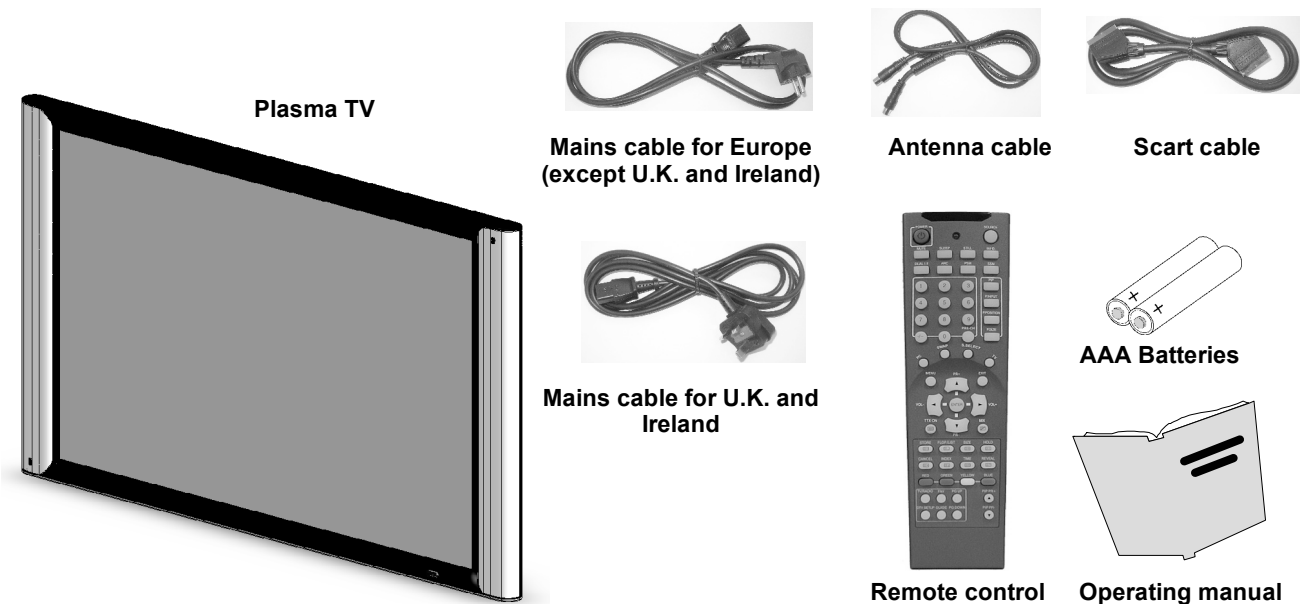
A new type of cooling system means that the plasma TV can operate without any disturbing fan noise. Being as quiet as a conventional television set, the plasma TV is ideal for use in living rooms, as well as conference rooms.

Equipment

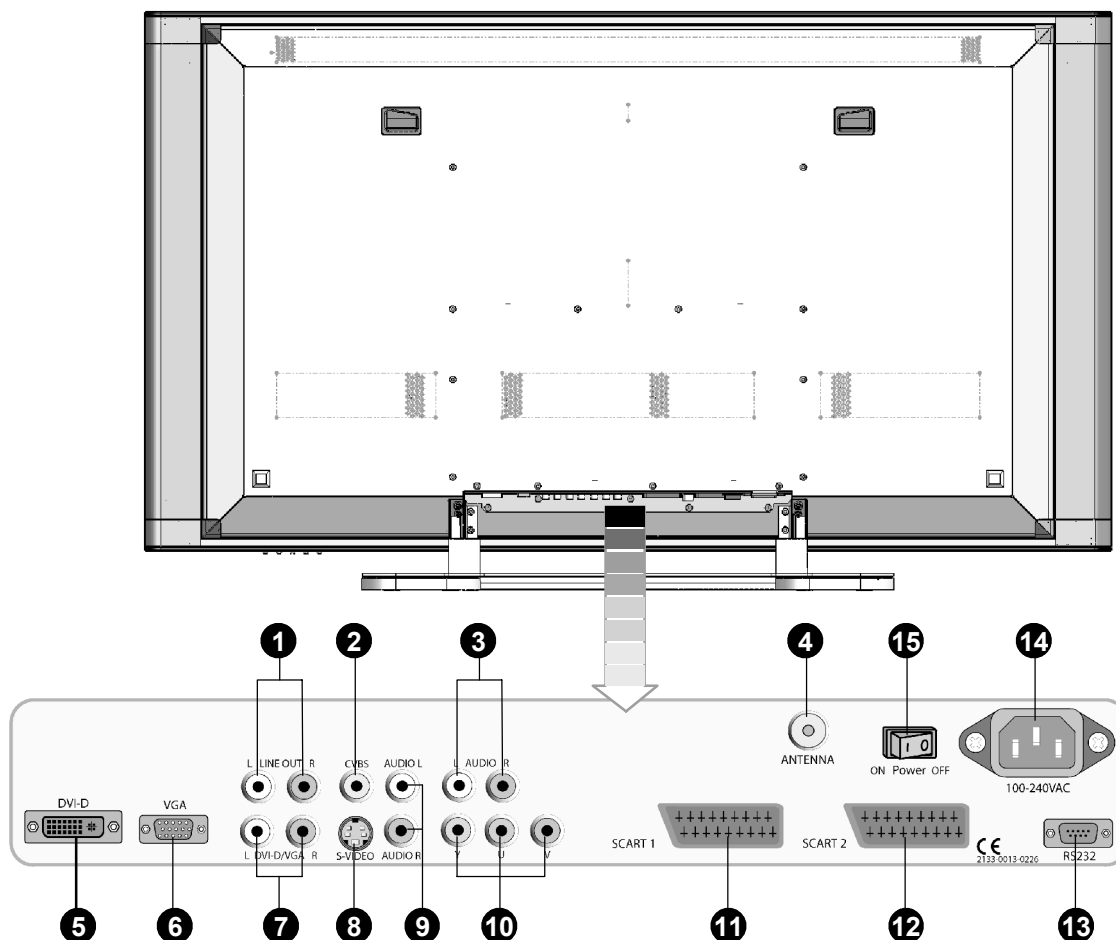
- High-quality aluminium frame
- Fanless design
- 16:9 format
- Full screen in 16:9 and 4:3 format
- Digital comb filter
- Compatible with PAL, SECAM and NTSC
- Compatible with VGA, SVGA, WXGA, XGA and UXGA
- TOP / FLOF Videotext
- Automatic channel identification and channel sorting (where available)
- Sleep Timer
- 2 x EURO SCART (SCART2 with RGB)
- 1 x Y/C (S-Video)
- 1 x YUV
- 1 x CVBS
- 1 x DVI-D (Digital)
- 1 x VGA (Analogue)

Scope of supply

After unpacking, please check the plasma TV for possible transportation damage and ensure that the delivery is complete. The supplier can only accept claims for transportation damage if you advise them of this before starting to use the unit. If any part of the delivery is missing, please contact our service hotline. Please keep the original packing in the event you have to return the display unit.

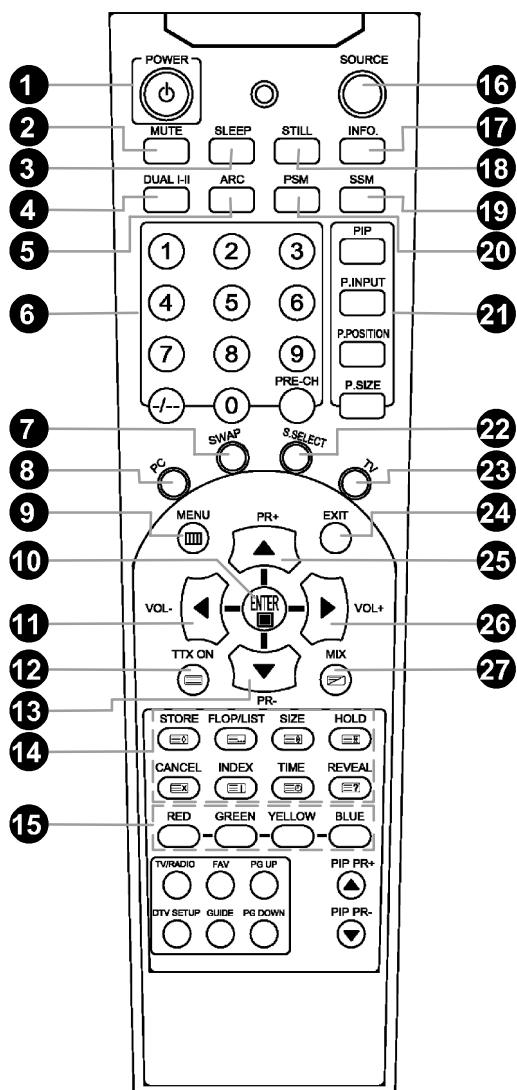


Connection sockets



- | | |
|--|---|
| <p>1 LINE OUT L/R
Audio output for connection of active loudspeakers (with amplifier integrated)</p> <p>2 CVBS
Input for a mixed video signal (composite)</p> <p>3 AUDIO L/R
Audio input for YUV</p> <p>4 ANTENNA
Antenna input (HF)
(terrestrial antenna or cable connection)</p> <p>5 DVI-D
Input for digital video signals, e.g. from the PC or from a DVD player with DVI output</p> <p>6 VGA
Input for analogue RGB signals, e.g. PC</p> <p>7 DVI-D/VGA (L/R)
Audio input e.g. PC (analogue/digital)</p> <p>8 S-VIDEO
Connection of devices with an S-video output
e.g. DVD player, video recorder, camcorder</p> | <p>9 AUDIO L/R
Audio input S-video or CVBS</p> <p>10 YUV
Connection for a DVD player or satellite receiver with YUV output</p> <p>11 SCART 1
Connection of a DVD player, satellite receiver, video recorder</p> <p>12 SCART 2
Connection of a DVD player, satellite receiver (RGB), video recorder, decoder</p> <p>13 RS232
Serial interface for service purposes</p> <p>14 Mains input socket
Connection for the mains cable supplied</p> <p>15 Mains switch (on/off)</p> |
|--|---|

Remote control

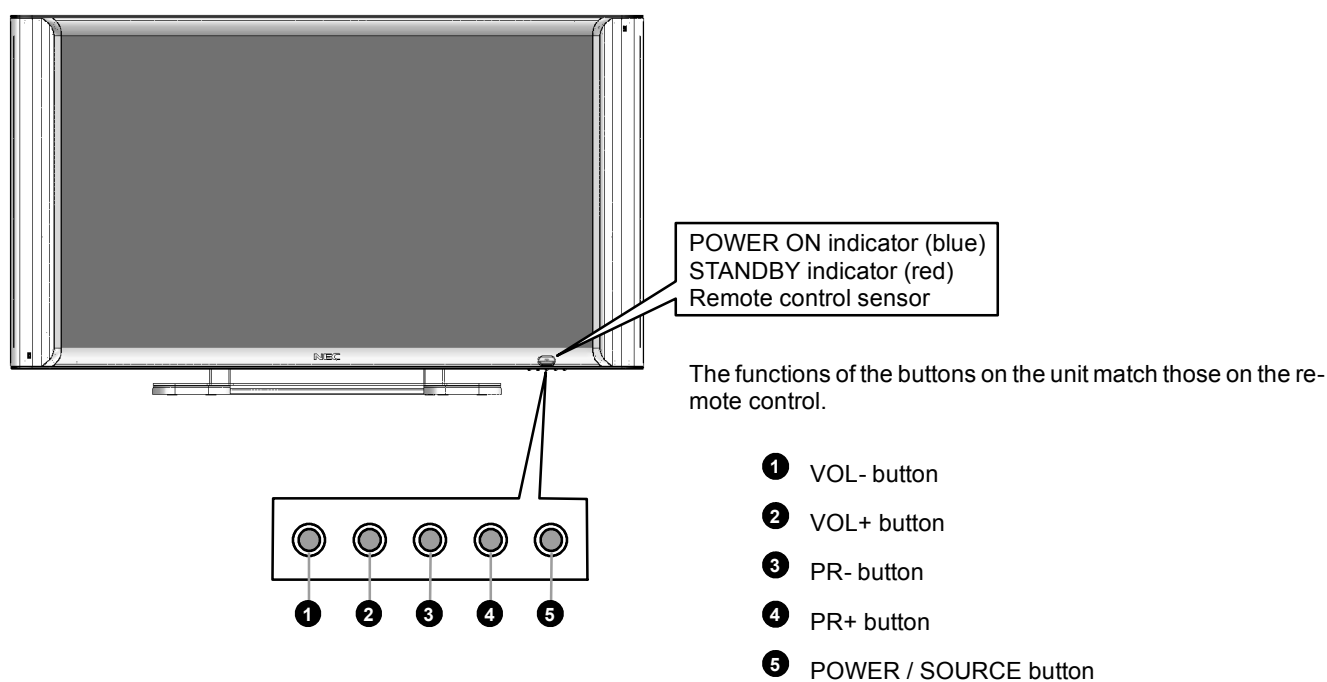


- 1 POWER**
Switches the device on or over to stand-by mode.
- 2 MUTE**
Switches the sound to mute or back on.
- 3 SLEEP**
Sets the timer.
- 4 DUAL I-II**
Selection of sound mode.
- 5 ARC**
Sets the page ratio.
- 6 0 - 9 numeric keys**
Switches the unit on.
TV mode: channel selection
Video text mode: selection of a page.
-/-
Input of a two-digit channel number.
PRE-CH
Changes back to the previous sender.

- 7 SWAP**
Changes the input source from main picture to PIP.
- 8 PC**
Selects the PC connection as an input source.
- 9 MENU**
Opens the OSD menu.
- 10 ENTER**
Selection of a menu option.
- 11 VOL - / ◀**
Reduces the volume.
Execution of a function in the OSD menu.
- 12 TXT ON**
Switches video text mode on or off.
- 13 PR- / ▼**
Reduces the channel number.
Navigation within the OSD menu.
- 14 STORE**
FLOP/LIST
Changes between FLOP and LIST mode.
SIZE
Changes the size.
HOLD
Stops the updating of video text pages.
CANCEL
Exits video text mode.
INDEX
Back to index page.
TIME
Changes between TV picture with time display and video text page.
REVEAL
Displays hidden text on video text pages.
- 15 RED / GREEN / YELLOW / BLUE**
Selection of a video text page.
- 16 SOURCE**
Selects an input source.
- 17 INFO**
Display information about the current source.
- 18 STILL**
Generates a still picture of the current scene.
- 19 SSM**
Selects sound mode.
- 20 PSM**
Selects picture mode.
- 21 PIP**
Switches on PIP mode.
P.INPUT
Changes the PIP input (PC / DVI / YUV).
P.POSITION
Changes the PIP image position. Not possible with the setting "Split Screen".
P.SIZE
Changes the size of the PIP image.
- 22 S.SELECT**
Changes the sound between main picture and PIP.
- 23 TV**
Changes to TV mode.

- 24 **EXIT**
Quits the OSD menu.
- 25 **PR+ / ▲**
Increases the channel number.
Navigation within the OSD menu.
- 26 **VOL+ / ►**
Increases the volume.
Execution of a function in the OSD menu.
- 27 **MIX**
Shows the selected programme and video text
at the same time.

Local operator control



Getting started

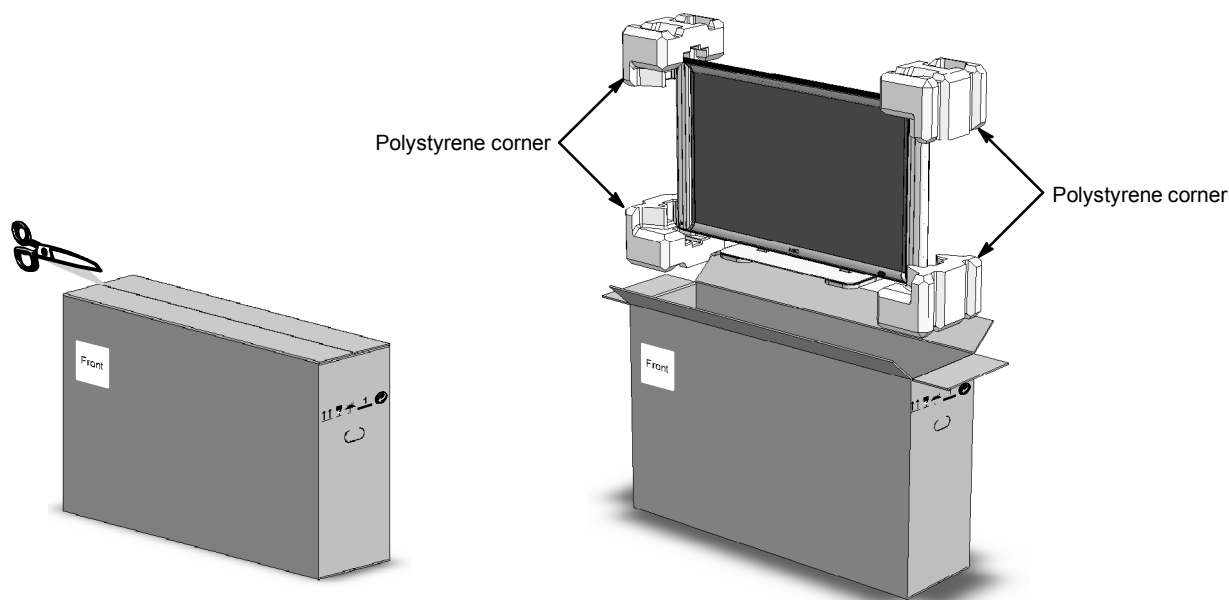


Before you make any connections, switch off all the relevant appliances, including the plasma TV.

Unpacking, viewing, locating and installing

Unpacking

- Place the box upright with its underside on a solid base. The direction of the arrowheads on the long side of the box indicates the top of the box.
- Remove the packaging tape from the opening edge and open the box's flap outwards.
- Remove the two top polystyrene packing corners and take the accessories box out of the packing. This is located on the side at the rear of the display.



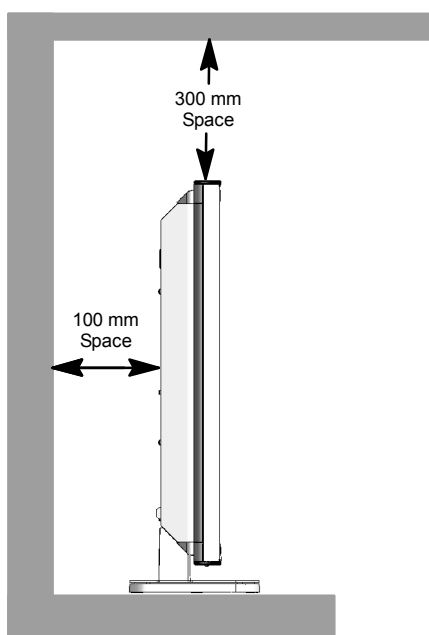
Viewing position

- Although the plasma display has a large display angle, its best performance is achieved when viewed directly from a central front position. Align the display with the most frequent viewing position.

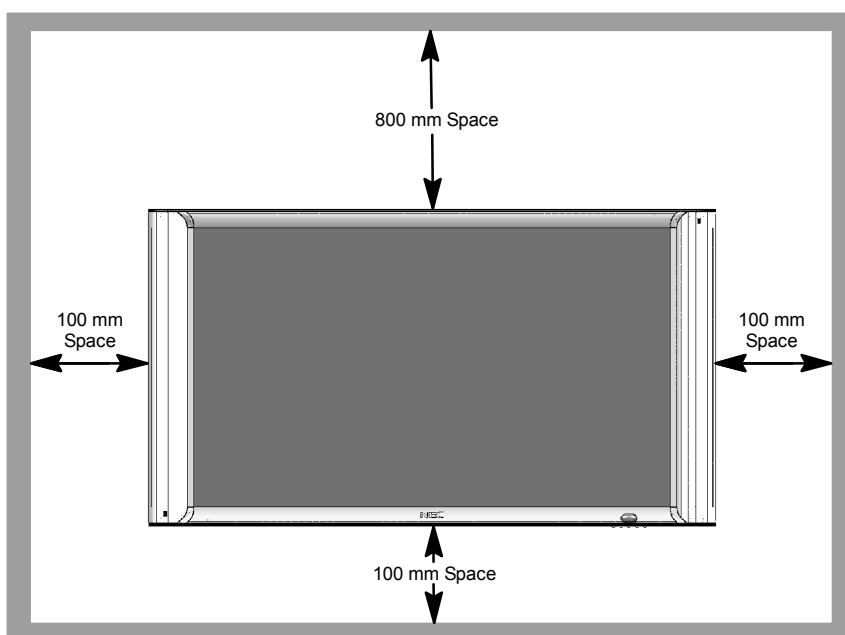
Location

- Light reflection**
Avoid placing the display opposite windows or other light sources.
- Access to the mains input**
The mains input and mains switch should be easily accessible at all times.
- Air supply**
Leave a space at the side and to the rear of at least 100 mm from any furniture. The space above the unit should be at least 300 mm from any furniture or the ceiling.
With the wall mounting the space must above at least 800 mm to any furniture or to the ceiling. Laterally and down you should keep to a least space of 100 mm.
- Ambient temperature**
To ensure safe, reliable operation the ambient temperature must be between 5 °C and 35 °C.

Table installation



Wall mounting



Installation

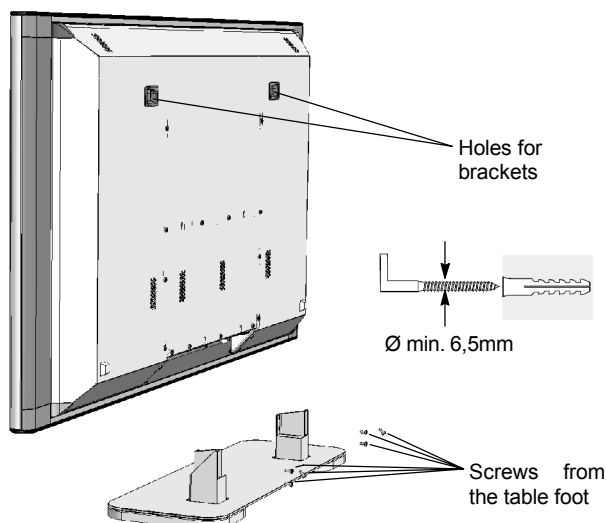


- Two persons are required to remove the plasma TV from the packing. Never lift the display alone. Any attempt to lift the display alone will pose a risk to your health.
- Place the display on a stable, horizontal base. The base must be solid and capable of bearing the load.
- Before installing it, make sure that the display is switched off and that the mains cable and signal cable are unplugged.

Wall mounting



- The plasma TV screen may be mounted on vertical walls **only**.
- Before mounting it check whether the loadbearing capacity of the wall is suitable for 3-times the weight of the plasma display screen (for the weight see page 44 "Technical Specifications"). If in doubt, seek the advice of a qualified installer.
- Before installing it, make sure that the display is switched off and that the mains cable and signal cable are unplugged.
- Two people are required to mount the display screen on the wall.



- ☞ Turn the plasma TV screen so that the front side (screen) is pointing downwards and place it on a completely flat and firm surface.
- ☞ Loosen the 6 screws that fasten it to the table foot and remove these.
- ☞ Fit the 2 fastening hooks (rawl plugs and fastening hooks are **not** included in the items supplied) horizontally and with the appropriate distance between them (for this distance see drilling template in the accessories pack) to the wall.



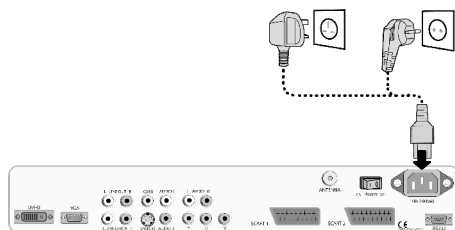
The fastening material must be designed for 3-times the weight of the plasma display screen. If necessary, please consult a qualified installer.

- ☞ Position the plasma TV screen so that the fastening hooks can be introduced into the openings provided for this purpose on the rear side of the appliance.

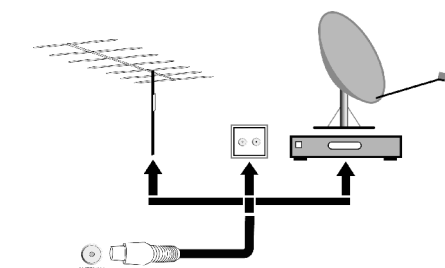
Connecting and switching on the display

Connecting the display

(for an overview of the connection sockets see the illustration on page 9)

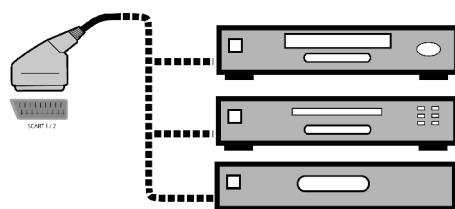


- Plug the mains power cord into the mains input jack on the plasma TV and the mains plug into a plug receptacle.



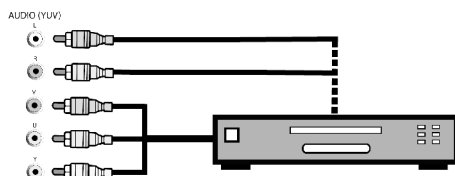
Cable connection / terrestrial aerial / satellite receiver

If you would like to connect a cable, a terrestrial aerial or a satellite receiver, use the ANTENNA socket for this purpose.



Video recorder / DVD player / satellite receiver

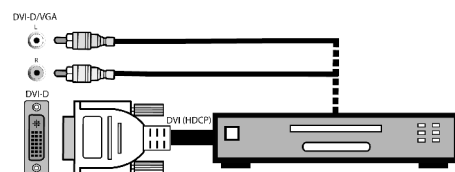
If you receive your TV channels via satellite, connect your receiver by means of a SCART cable to the SCART 1 or SCART 2 socket. In addition, SCART 2 has a connection socket for RGB sources, e.g. a DVD player.



DVD player / satellite receiver

For connection of a DVD player or another video source to a YUV-output please use the display's YUV-input and the audio input AUDIO (YUV).

If your DVD player has a HDMI output port, you can use the DVI input port and the audio input port DVI-D/VGA (L/R) on the plasma TV using commercially available cable.

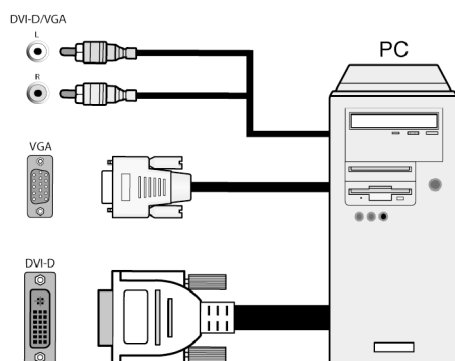


If a DVD player is connected to the DVI input port of the display screen, the following must be ensured:



- Before you make a connection between the DVD player and the display screen using the cables, you must disconnect the mains plug of the DVD player from the plug socket.
- Once the cables are plugged in on the DVD player and on the display screen, the mains plug of the DVD player can be reconnected to the mains.

If you do not comply with this procedure, damage can be caused to the DVD player or to the display screen!



VGA (RGB analogue)

Use the VGA socket to connect your PC DSUB socket to the display. For the PC-sound, use the audio input DVI-D/VGA (L/R) at the display.



On older PC graphic cards it is possible that pin 9 is barred. Should this be the case, please contact the service hotline.

DVI-D (RGB digital)

Use the DVI-D socket to connect your PC DVI-D socket to the display. For the PC-sound, use the audio input DVI-D/VGA (L/R) at the display.

SDTV - HDTV compatible

The plasma TV is able to process standardized normal resolution (SDTV) and future-safe high-resolution video signals (HDTV) via the interfaces provided.

To make the connection of your external signal sources, such as DVD player and SAT receiver, easier for you, you will find an assignment of the possible signal types to the screen's corresponding optimal input jack in the following overview.



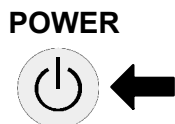
Please refer to the operating manual for the external device to determine the type of signal!

Type of signal	Synchronization	Device input	Comments (standard)
YUV, YPrPb - Sync On Green			
PAL, NTSC 480i30, 576i25	Sync On Green	YUV (3 x RCA)	CCIR601
480p60	BiLevel Sync	YUV (3 x RCA)	CEA770.2
576p50	BiLevel Sync	YUV (3 x RCA)	CEA770.2
720p50	TriLevel Sync	YUV (3 x RCA)	
720p60	TriLevel Sync	YUV (3 x RCA)	
1080i25	TriLevel Sync	YUV (3 x RCA)	
1080i30	TriLevel Sync	YUV (3 x RCA)	
RGB			
PAL, NTSC 480i30, 576i25	Composite Sync	SCART1	
VGA analogue (30 kHz - 80 kHz; 50 Hz - 90 Hz)	External H-sync and V-sync	VGA analogue (DSUB 15)	
DVI with or without HDCP copy protection			
480p60	External H-sync and V-sync (TMDS)	DVI-D	
576p50			
720p50			
720p60			
1080i25			
1080i30			
CVBS, Video			
PAL, NTSC 480i30, 576i25	Composite Video	SCART1/2, CVBS (RCA)	CCIR601
S-VHS, Y/C, S-Video			
PAL, NTSC 480i30, 576i25	Composite Video (on Y)	Y/C (MiniDIN)	CCIR601

Switching on the display

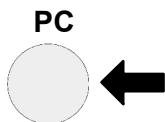


- Switch the mains switch on the rear side of the display to position "1". The plasma TV is now in stand-by mode and can be switched on by means of the [POWER] key on the remote control.



Cable connection / terrestrial aerial / satellite receiver / DVD player / video recorder

- Switch on the display by pressing the [POWER] button on your remote control.



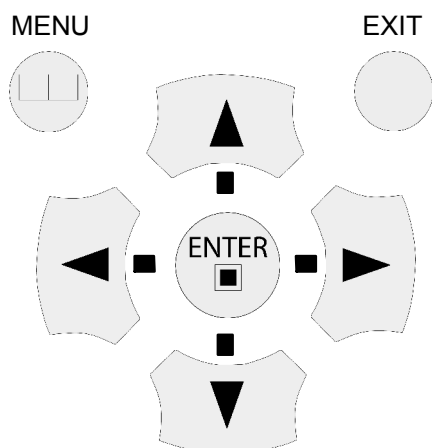
PC

- Switch on the display by pressing the [PC] button on your remote control and select the appropriate signal input PC or DVI. To do so, access your display's OSD menu via the remote control [SOURCE] button and select your input signal.

Using the OSD menu (On Screen Menu)

Configuring settings

Your display can be configured and operated using the simple OSD menu. 7 buttons are available on the remote control for this purpose:



MENU

- Activates main OSD when no main OSD activated.
- Navigates parent menu when main OSD activated.
- Closes the child menu.
- Stops auto frequency search.

ENTER

- Changes input source that selected by source select navigation.
- Executes function by OSD help commands when main OSD activated.
- Activates child menu when child menu exists.

EXIT

- Close the OSD.



- Increases program number & tune channel when no OSD activated.
- Navigates input source when source OSD activated.
- Executes function by OSD help commands when main OSD activated.
- Navigates previous menu when main OSD activated.



- Decreases program number and tune channel when no OSD activated.
- Navigates input source when source OSD activated.
- Executes function by OSD help commands when main OSD activated.
- Navigates next menu when main OSD activated.



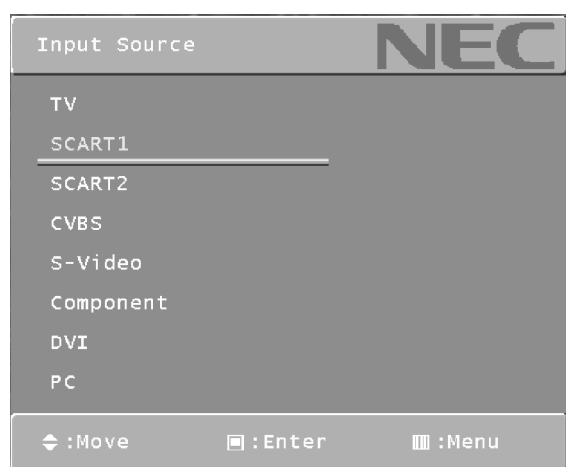
- Decreases the speaker sound volume when no OSD is activated.
- Executes function by OSD help commands when main OSD activated.
- Decreases values of user menu when main OSD activated.



- Increases speaker sound volume when no OSD activated.
- Executes function by OSD help commands when main OSD activated.
- Increases values of user menu when main OSD activated.

OSD Menu

Select Source



- Press [Source] button on the remote control. Then you can see the source list menu shown as below. Press [▲] or [▼] button on the remote control to select the source.

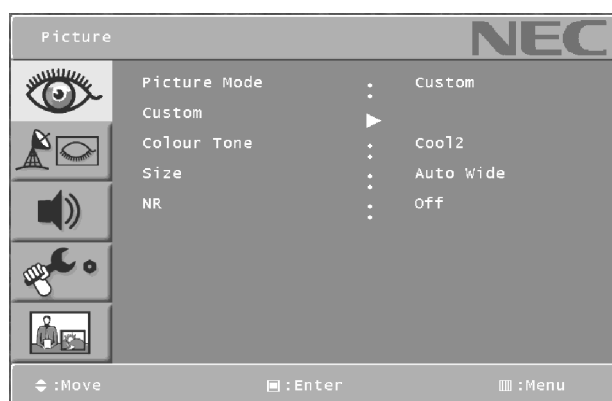
Volume Control



- Press [VOL+] or [VOL-] button on the remote control to adjust the volume level.
- Press [MUTE] button on the remote control when you need to cut the sound temporarily.

OSD Menu Structure

OSD (On Screen Display) allows users to control or adjust various features and settings in accordance with his/her preferences.



Main Menu

- Press the [MENU] button on the remote control to enter the main OSD menu.
- First, select Main menu item you need with [▲] and [▼] button.
- To select a main menu items, just press [ENTER] or [▶] button on the remote control.

Sub Menu

Each menu item has its own sub menu items to set.

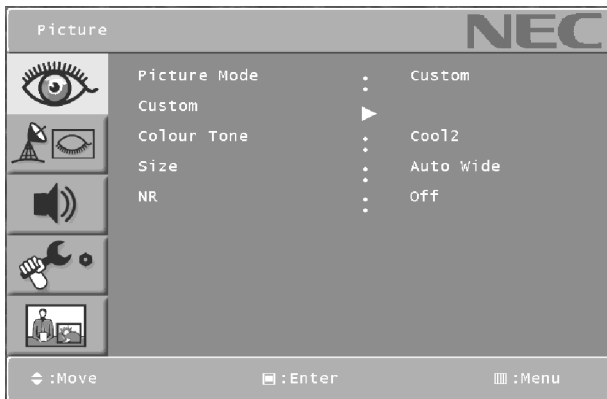
Sub Menu items

If there is a ▶ part, the item has an under menu.

- You can enter the under menu and adjust an item you need.
- Select sub-menu item with [▲] or [▼] button on the remote control and press [▶] or [ENTER] button to enter the sub-menu.

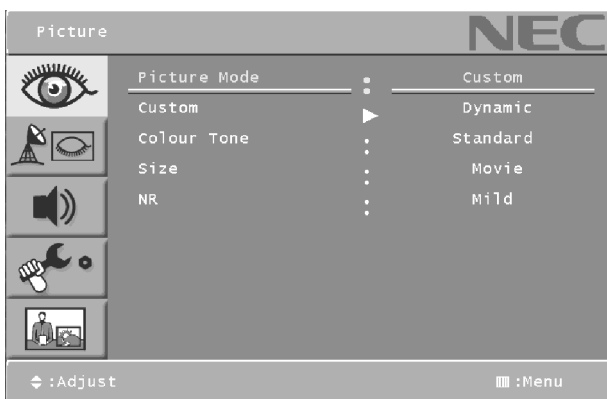
If there is a ▶ part, you can set the item by selecting [▶].

Picture



- ✎ Press [MENU] button to display the main OSD menu.
- ✎ Select the Picture main menu.
- ✎ Press [ENTER] / [▶] to enter the sub menu.

Picture Mode

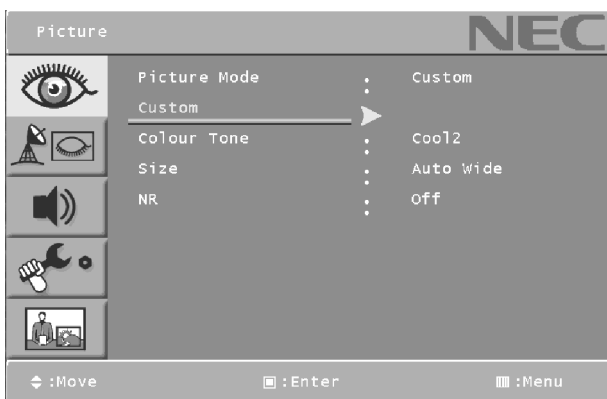


- ✎ Select Picture Mode and press [ENTER] button to enter the sub menu. Then the Picture popup window appears.
- ✎ Select the Picture Mode with [▲] or [▼] button and press [MENU] / [◀] button.
- ✎ Press [MENU] button to return.

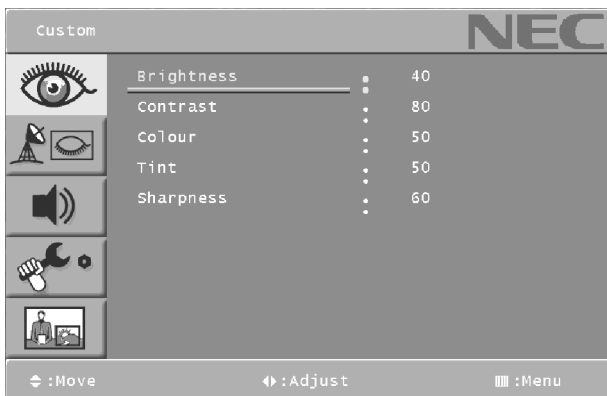
Quick way to select the Picture Mode

- ✎ Press the [PSM] button on the remote control.
- ✎ As you press the button continuously, you can select the picture mode in the following sequence :
Custom → Dynamic → Standard → Movie → Mild.
- ✎ In RGB, DVI mode, you can select :
Custom → High → Middle → Low.

Custom



- ✎ Press [MENU] button to display the main OSD menu.
- ✎ Select the Picture main menu.
- ✎ Press [ENTER] / [▶] to enter the sub menu.

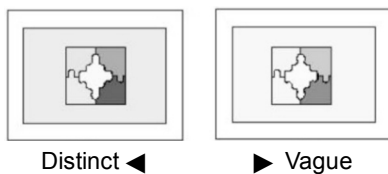


- ✎ Select Custom and press [ENTER] / [▶] button to enter the sub menu. Then the custom sub mode appears.



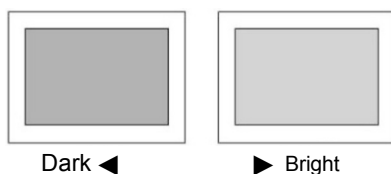
- You will see the picture setting bars. Just press [◀] / [▶] button on the remote control. You can adjust each values of the custom setting, but the changed values are stored as in Custom mode.

Contrast



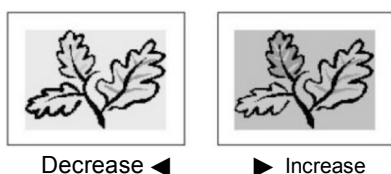
- Adjust brightness difference between bright part of the screen and dark part.

Brightness



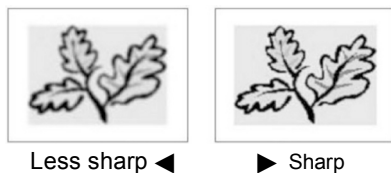
- Adjust brightness of the screen.

Colour



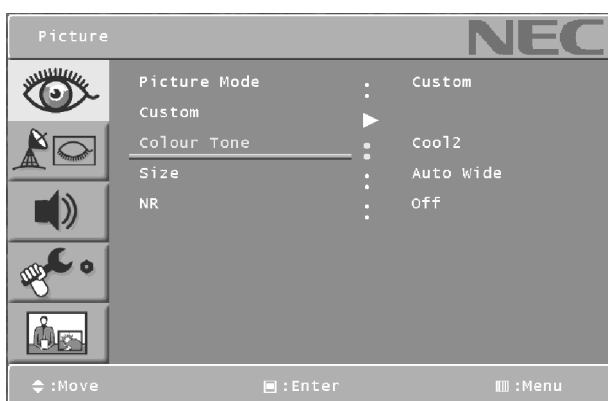
- Adjust deep and light colour of the screen.

Sharpness



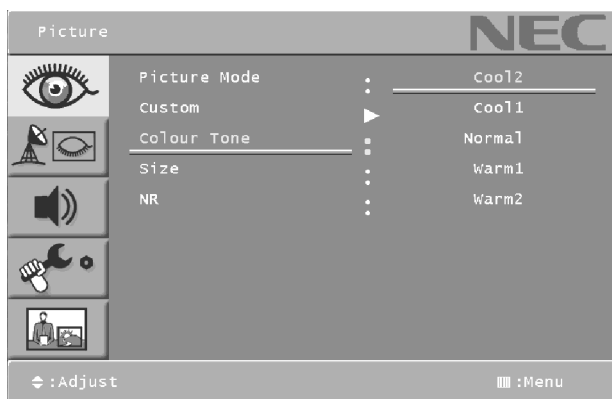
- Adjust vividness of the screen.

Colour Tone

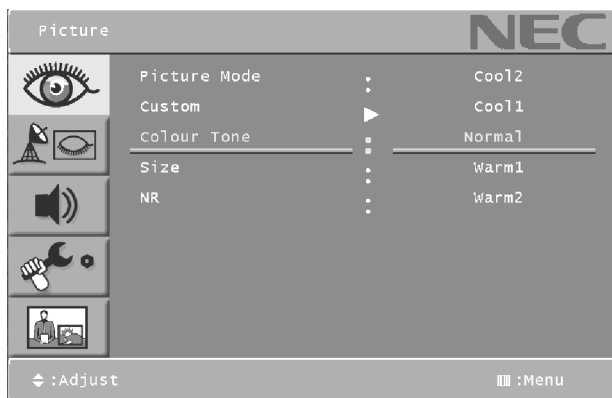


- Your Plasma TV has 5 screen temperatures (colour settings).

- Press [MENU] button to display the main OSD menu.
- Select the Picture main menu.
- Press [ENTER] / [▶] to enter the sub menu.



- ☞ Select Colour Tone and press [ENTER]/[▶] button to enter the sub menu. Then the picture popup window appears.
- ☞ Select the colour tone with [▲] or [▼] button and press [MENU] [◀] button.
- ☞ Press [MENU] button to return.

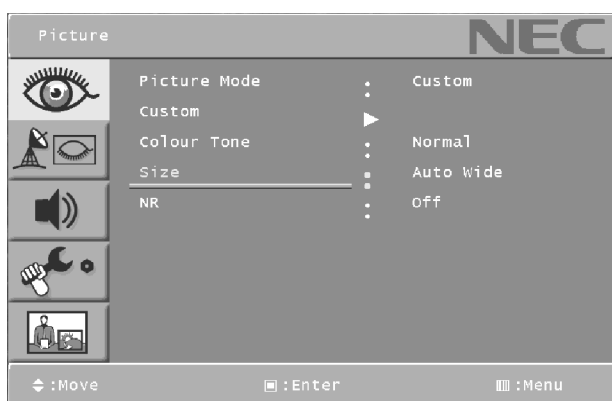


Warm 1, 2
Screen seems warm: Strong Red.

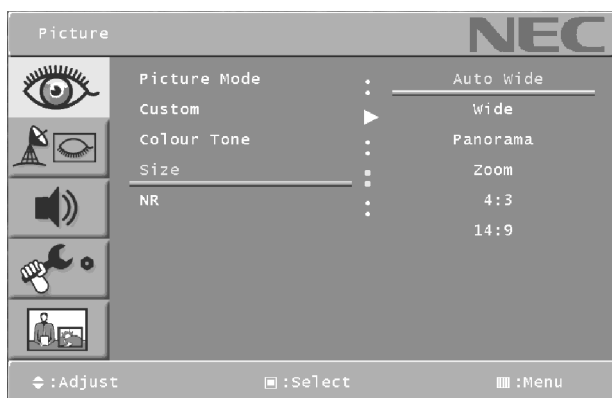
Normal
Normal: Factory default.

Cool 1, 2
Screen seems cool: Strong Blue.

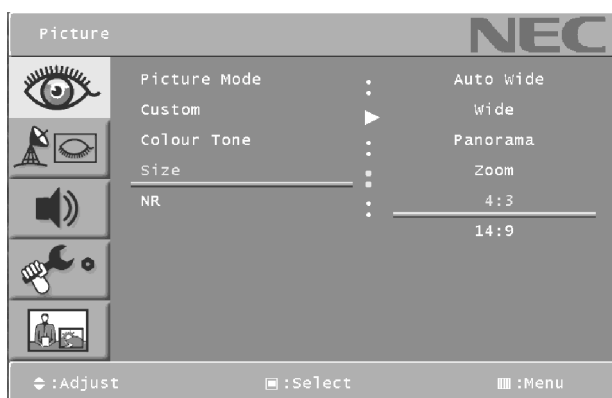
Size



- ☞ Press [MENU] button to display the main OSD menu.
- ☞ Select the Picture main menu.
- ☞ Press [ENTER] / [▶] to enter the sub menu.
- ☞ Select Size and press [ENTER]/[▶] button to enter the sub menu. Then the picture popup window appears.

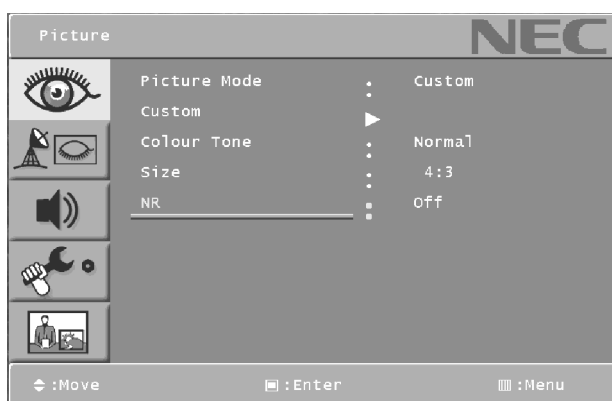


- ☞ Select the Size with [▲] or [▼] button and press [MENU] / [◀] button.

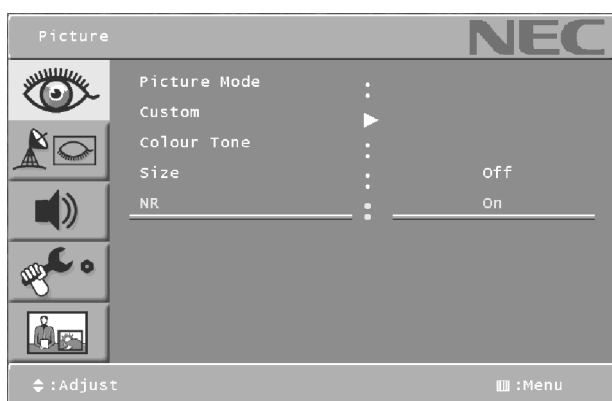


Press [MENU] button to return.

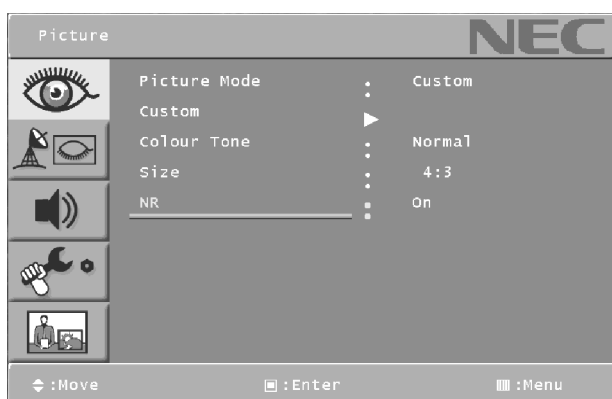
NR (Noise Reduction)



- Press [MENU] button to display the main OSD menu.
- Select the Picture main menu.
- Press [ENTER] / [▶] to enter the sub menu.



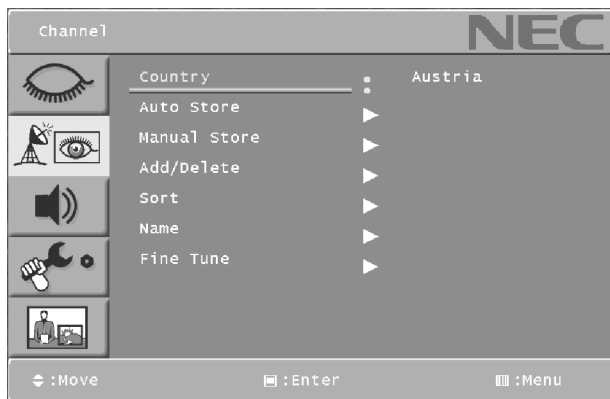
- Select NR and press [ENTER] / [▶] button to enter the sub menu. Then the picture popup window appears.
- Select the On / Off with [▲] or [▼] button and press [MENU] / [◀] button.



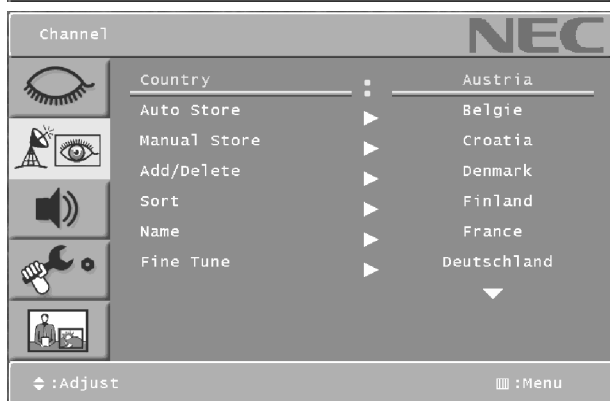
Press [MENU] button to return.

TV channel

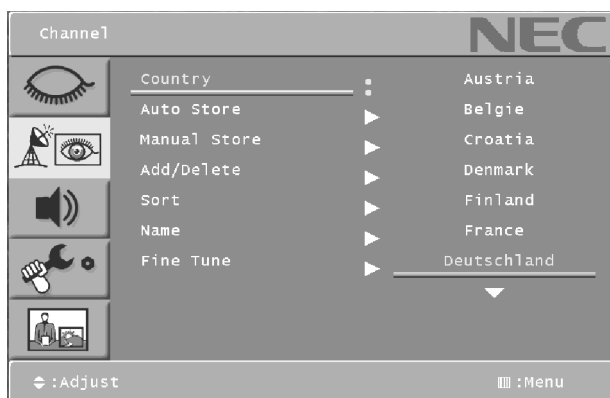
Country



- ✎ Press [MENU] button to display the main OSD menu.
- ✎ Select the Channel main menu.
- ✎ Press [ENTER] / [▶] to enter the sub menu.



- ✎ Select Country and press [ENTER] / [▶] button to enter the sub menu. Then the Channel popup window appears.
- ✎ Select the country with [▲] or [▼] button and press [MENU] / [◀] button.

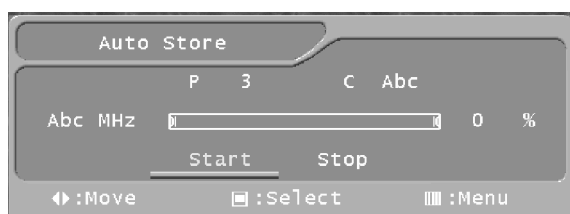


- ✎ Press [MENU] button to return.

Auto Store

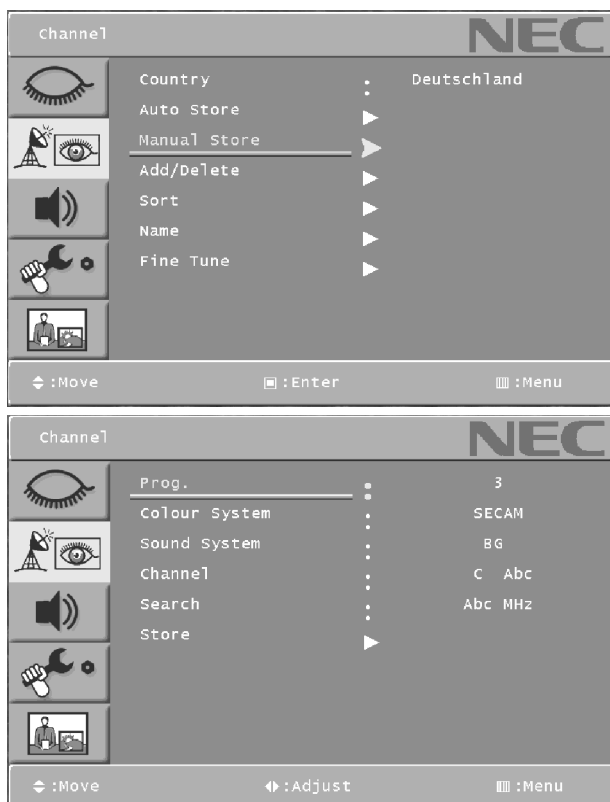


- ✎ Press [MENU] button to display the main OSD menu.
- ✎ Select the Channel main menu with [▲] / [▼] button on the remote control.
- ✎ Press [ENTER] / [▶] to enter the sub menu.
- ✎ Select Auto Store with [▲] / [▼] button and press [ENTER] / [▶] button.



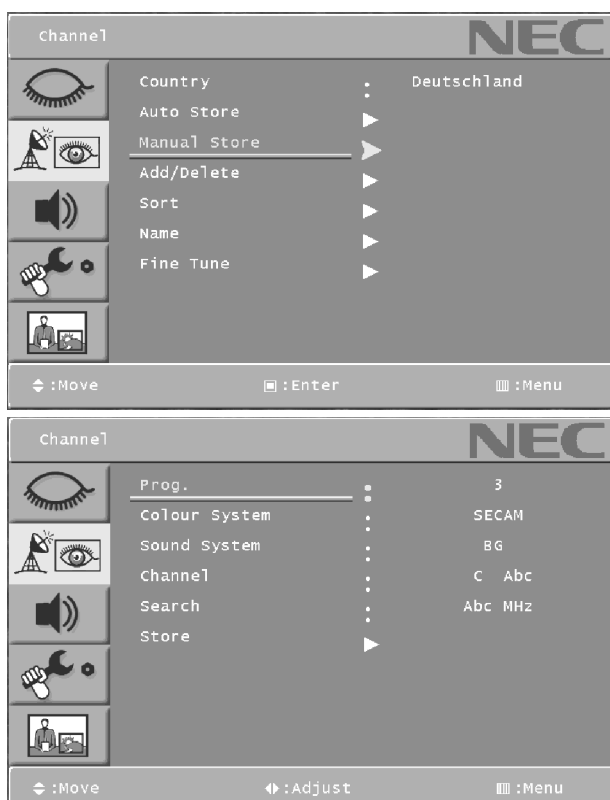
- ☞ Then you can see the tuning bar. Plasma TV will execute auto program searching. While searching channel after selecting Start button with [◀] / [▶], you can also stop channel searching if you select Stop button.
- ☞ Press [MENU] button to return.

Manual Store



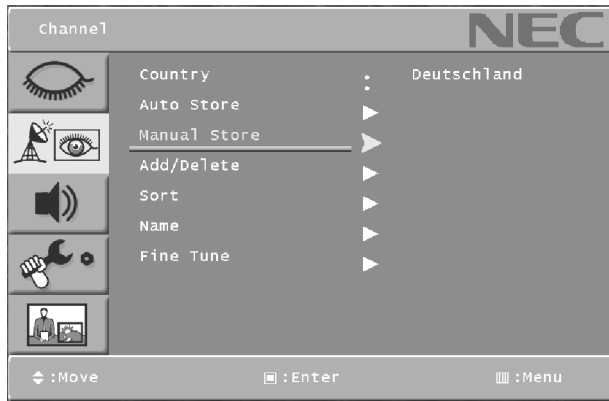
- ☞ Press [MENU] button to display the main OSD menu.
- ☞ Select the Channel main menu with [▲] / [▼] button on the remote control.
- ☞ Press [ENTER] / [▶] to enter the sub menu.
- ☞ Select Manual Store and press [ENTER] / [▶] to enter the sub menu.

Manual Store - Prog.

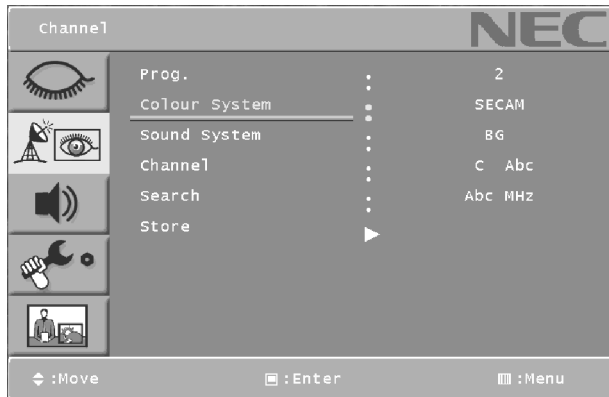


- ☞ Select the Prog. menu with [▲] / [▼] button on the remote control and press [ENTER] / [▶] to enter the sub menu.
- ☞ Select the programme with [◀] or [▶] button and press [MENU] button.

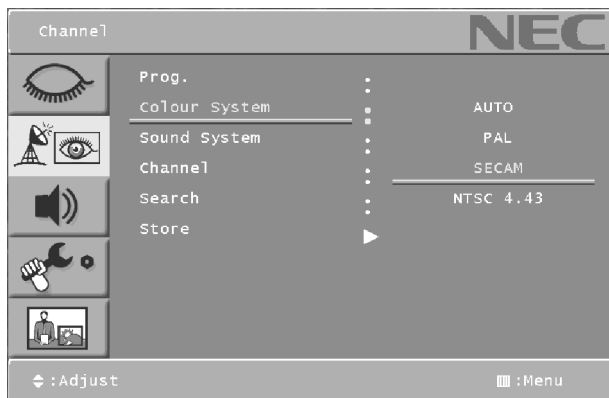
Manual Store - Colour System



- ✎ Press [MENU] button to display the main OSD menu.
- ✎ Select the Channel main menu with [▲]/[▼] button on the remote control and press [ENTER] / [▶] to enter the sub menu.
- ✎ Press [ENTER] / [▶] to enter the sub menu.
- ✎ Select the Manual Store menu with [▲]/[▼] button on the remote control.
- ✎ Press [ENTER] / [▶] to enter the sub menu.

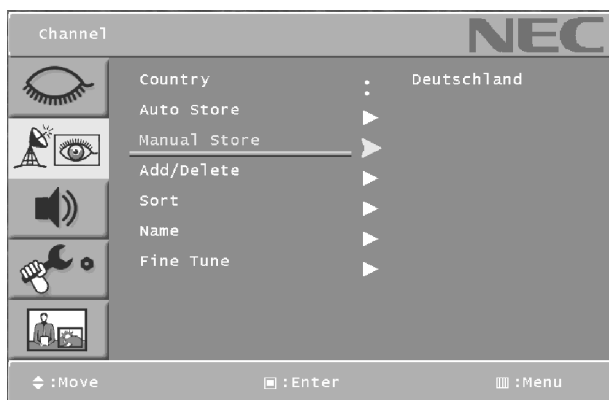


- ✎ Select the Colour System menu with [▲]/[▼] button on the remote control. Then the channel popup window appears.
- ✎ Press [ENTER] / [▶] to enter the sub menu.

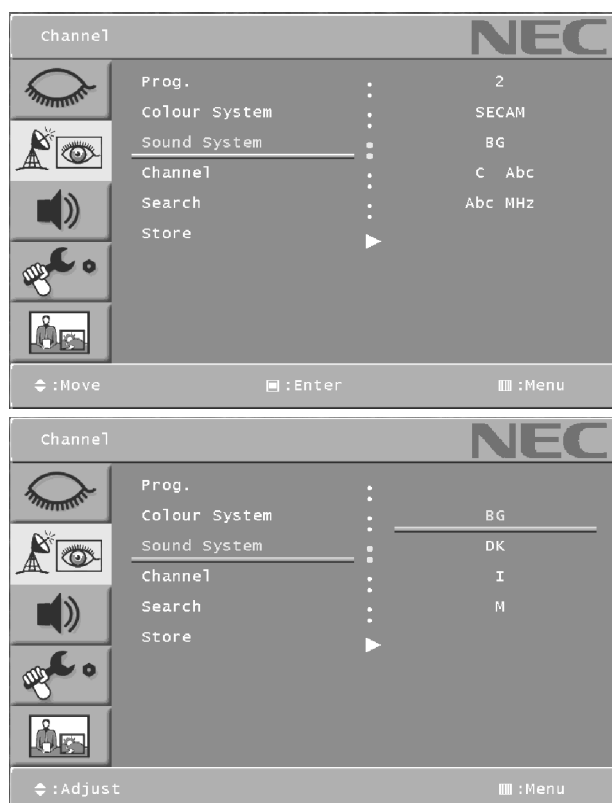


- ✎ Select the colour system with [▲] or [▼] button and press [MENU] / [◀] button.

Manual Store - Sound System



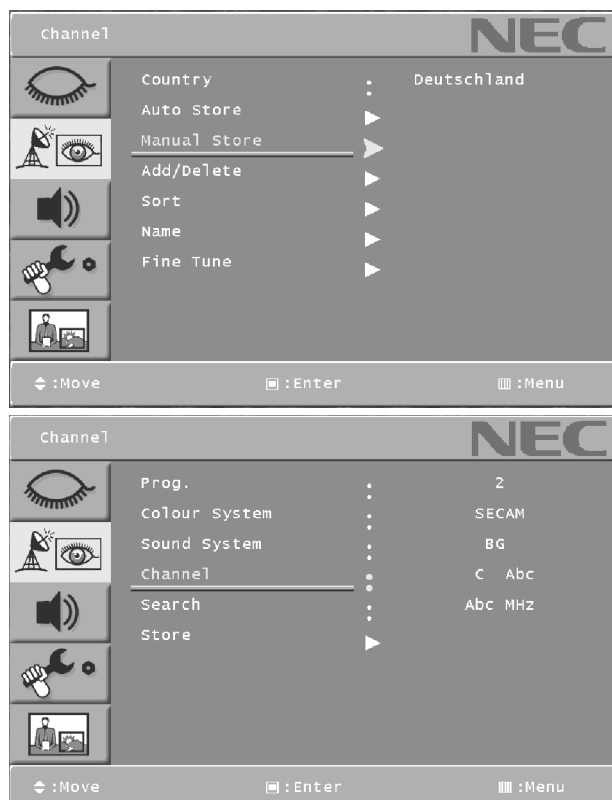
- ✎ Press [MENU] button to display the main OSD menu.
- ✎ Select the Channel main menu with [▲] or [▼] button on the remote control and press [ENTER] / [▶] to enter the sub menu.
- ✎ Select the Manual Store menu with [▲] or [▼] button on the remote control.
- ✎ Press [ENTER] / [▶] to enter the sub menu.



- ☞ Select the Sound System menu with [▲] or [▼] button on the remote control. Press [ENTER] / [▶] to enter the sub menu. Then the channel popup window appears.

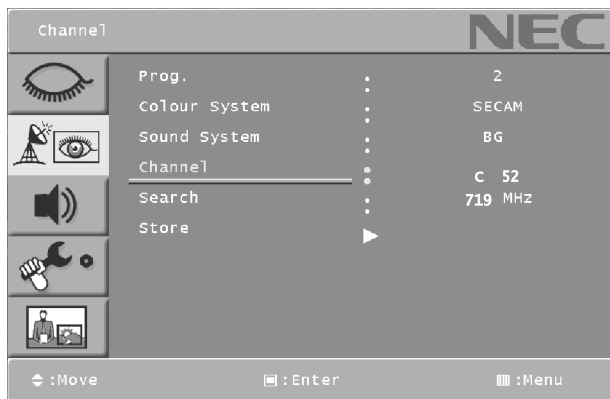
- ☞ Select the sound system with [▲] or [▼] button on the remote control and press [MENU] / [◀] button.

Manual Store - Channel



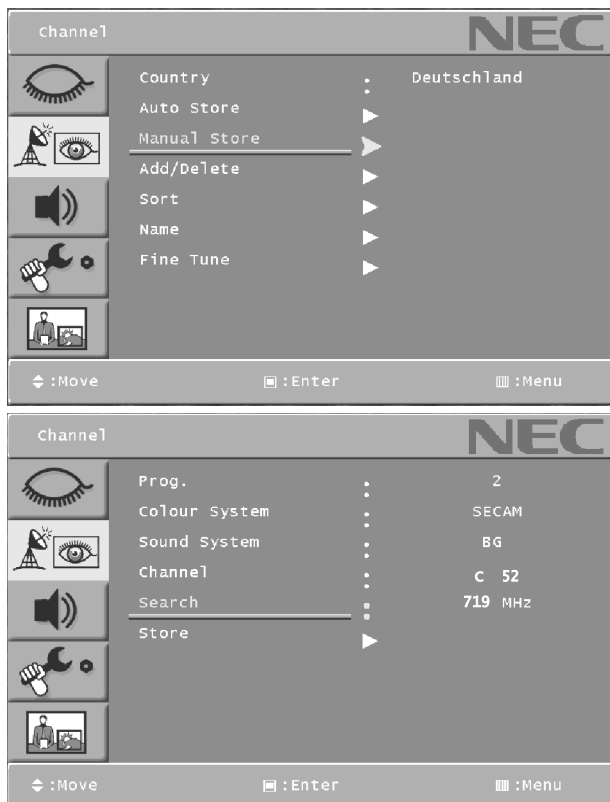
- ☞ Press [MENU] button to display the main OSD menu.
- ☞ Select the Channel main menu with [▲] or [▼] button on the remote control and press [ENTER] / [▶] to enter the sub menu.
- ☞ Select the Manual Store menu with [▲] or [▼] button on the remote control.
- ☞ Press [ENTER] / [▶] to enter the sub menu.

- ☞ Select the Channel menu with [▲] or [▼] button on the remote control.
- ☞ Press [ENTER] / [▶] to enter the sub menu.



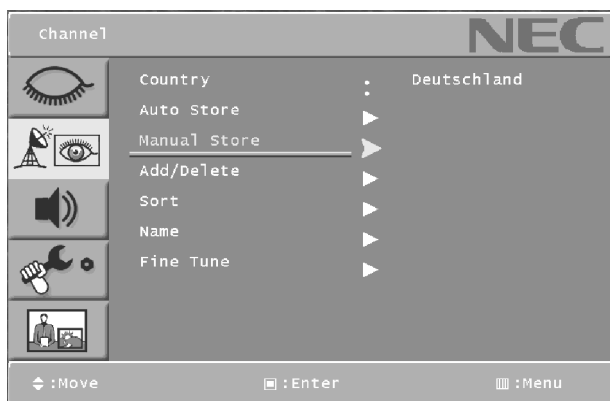
- ☞ You can select the Channel [▲] or [▼] button on the remote control.
- ☞ Press [MENU] button to return.

Manual Store - Search

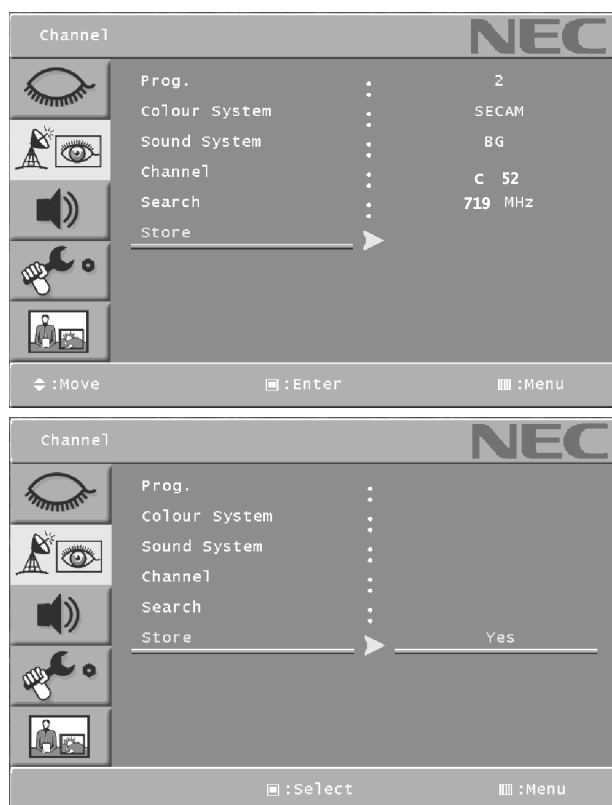


- ☞ Press [MENU] button to display the main OSD menu.
- ☞ Select the Channel main menu with [▲] or [▼] button on the remote control and press [ENTER] / [▶] to enter the sub menu.
- ☞ Select the Manual Store menu with [▲] or [▼] button on the remote control.
- ☞ Press [ENTER] / [▶] to enter the sub menu.
- ☞ Select the Search menu with [▲] or [▼] button on the remote control.
- ☞ Press [ENTER] / [▶] to enter the sub menu.
- ☞ You can start the Search with [▲] or [▼] button on the remote control.
- ☞ Press [MENU] button to return.

Manual Store - Store

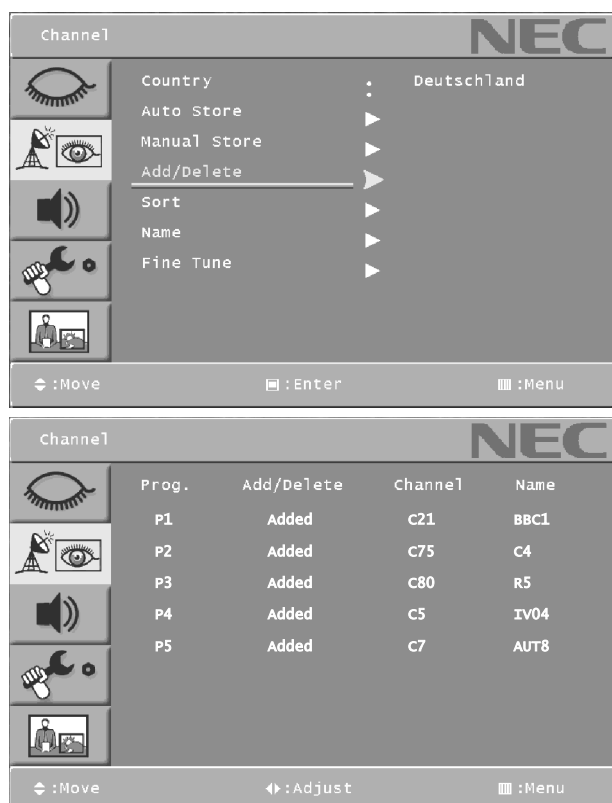


- ☞ Press [MENU] button to display the main OSD menu.
- ☞ Select the Channel main menu with [▲] or [▼] button on the remote control and press [ENTER] / [▶] to enter the sub menu.
- ☞ Select the Manual Store menu with [▲] or [▼] button on the remote control.
- ☞ Press [ENTER] / [▶] to enter the sub menu.



- ✎ Select the Store menu with [▲] or [▼] button on the remote control.
- ✎ Press [ENTER] / [▶] to enter the sub menu.
- ✎ Press [ENTER] to Store.

Add / Delete

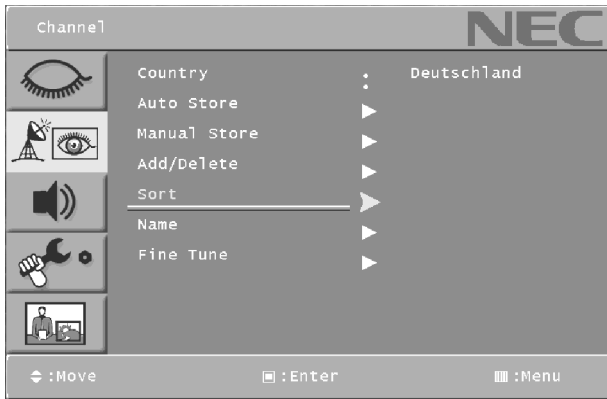


- ✎ Press [MENU] button to display the main OSD menu.
- ✎ Select the Channel main menu with [▲] or [▼] button on the remote control and press [ENTER] / [▶] to enter the sub menu.
- ✎ Select the Add/Delete menu with [▲] or [▼] button on the remote control.
- ✎ Press [ENTER] / [▶] to enter the sub menu. Then you can see the favorite program list.
- ✎ You can select a program with [▲] or [▼] button on the remote control.

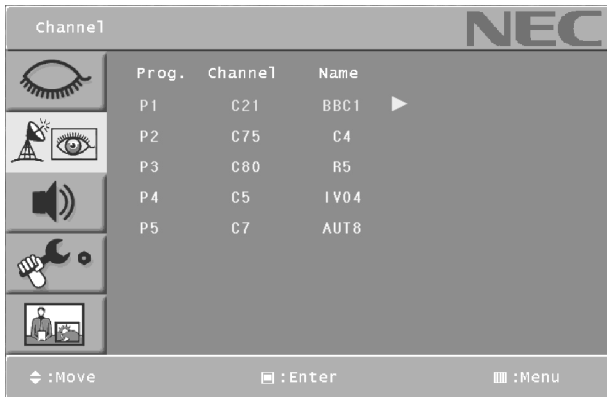
To edit the list
You can ADDED or ERASED the programs in the list.

To edit the program in the list
If you want to edit a program, press [ENTER] button. Then you can select a field with [▲] or [▼] button. Adjust the field with [◀] / [▶] button. To return, press [MENU] button.

Sort

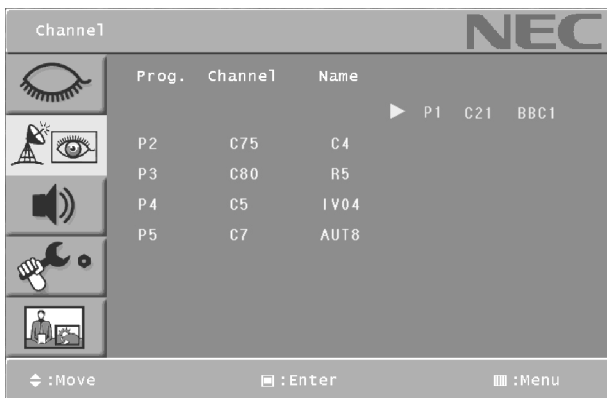


- Press [MENU] button to display the main OSD menu.
- Select the Channel main menu with [▲] or [▼] button on the remote control and press [ENTER] / [▶] to enter the sub menu.
- Select the Sort menu with [▲] or [▼] button on the remote control.



- Press [ENTER] / [▶] to enter the sub menu. Then you can see the sort program list.

Notice: You can't see the sort program list on this picture since this picture isn't a real operating mode but a design mode.



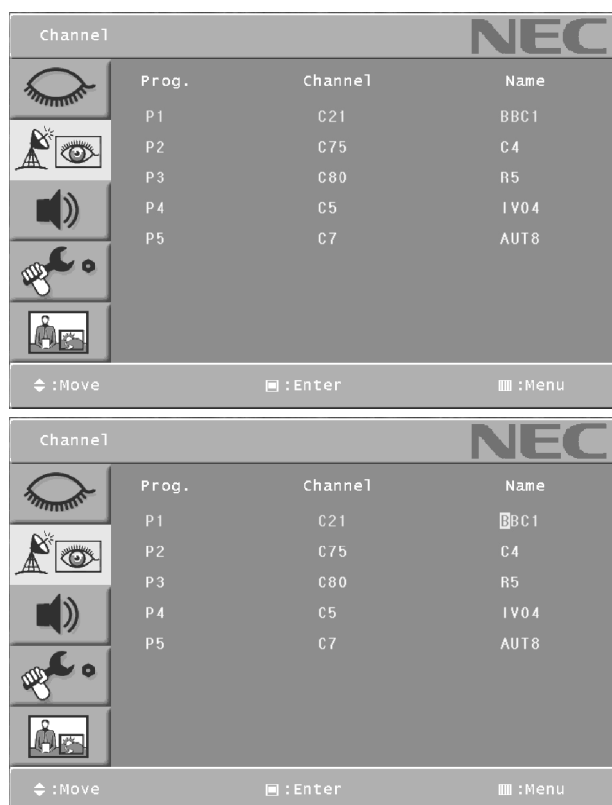
- You can select a program with [▲] or [▼] button on the remote control.

To sort the program in the list
If you want to sort a program, press [ENTER] button. Then you can select a field with [▲] or [▼] button. Press [ENTER] button on the field to sort. Adjust the field with [▲] or [▼] button. To return, press [ENTER] button.

Name



- Press [MENU] button to display the main OSD menu.
- Select the Channel main menu with [▲] or [▼] button on the remote control and press [ENTER] / [▶] to enter the sub menu.
- Select the Name menu with [▲] or [▼] button on the remote control.

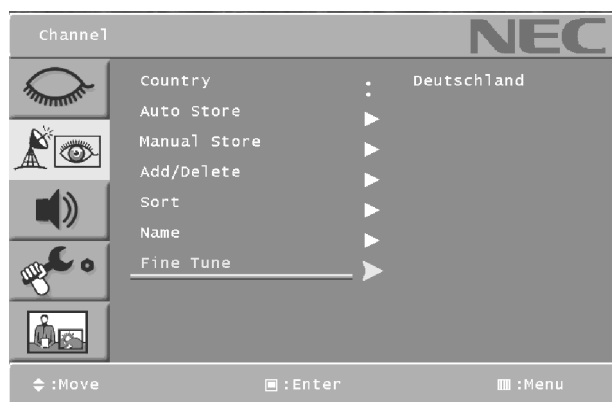


- Press [ENTER] / [▶] to enter the sub menu. Then you can see the Name program list.
- You can change a program Name if you want to change the name of the program.

To change the program name in the list
If you want to change a program name, press [ENTER] button. Then you can select a field with [◀] / [▶] button. Press [ENTER] button on the field to change. Adjust the field with [▲] or [▼] button. To return, press [MENU] button.

Fine Tune

The Fine Tuning function lets you manually adjust the PDP's tuner if you are difficult to tune analog Channels.



- Press [MENU] button to display the main OSD menu.
- Select the Channel main menu with [▲] or [▼] button on the remote control and press [ENTER] / [▶] to enter the sub menu.
- Select Fine Tune with [▲] or [▼] button and press [ENTER] / [▶] button. Then you can see the adjust bar.

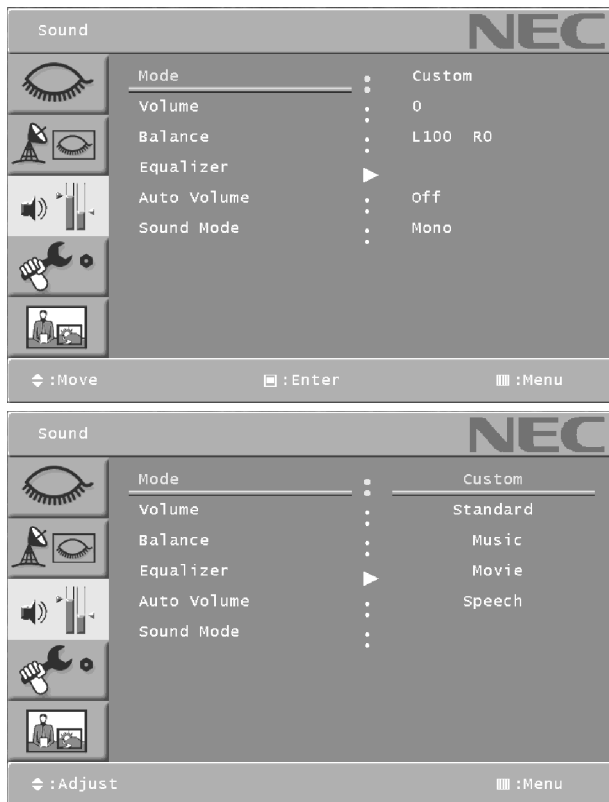


- Adjust the fine tune with [◀] / [▶] button.
- Press [MENU] button to return.

TV Sound

Mode

Your Plasma-TV has four automatic sound settings ("Standard", "Music", "Movie", "Speech") that are preset at the factory. You can active either Standard, Movie, Music or News by pressing [SSM] button on the remote control (or by making a selection from the menu) or you can select "Custom" which automatically recalls your personalized sound settings.



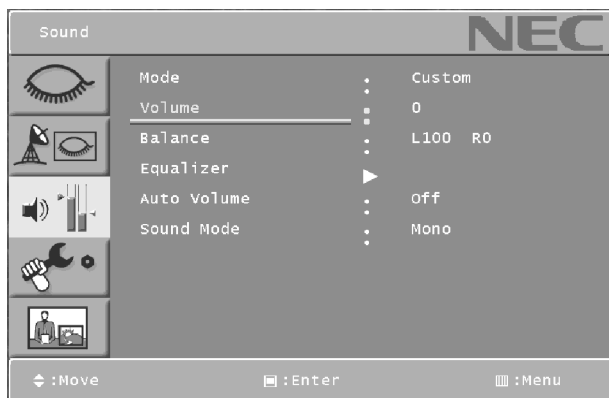
- ✎ Press [MENU] button to display the main OSD menu.
- ✎ Select the Sound main menu with [▲] or [▼] button on the remote control.
- ✎ Press [ENTER] / [▶] to enter the sub menu.

- ✎ Select Mode and press [ENTER] / [▶] button to enter the sub menu. Then the sound popup window appears.
- ✎ Select the Mode with [▲] or [▼] and press [MENU].

Quick way to select the sound Mode

- ✎ Press the [SSM] button on the remote control.
- ✎ As you press the button continuously, you can select the sound mode in the following sequence :
Custom → Standard → Music → Movie → Speech.

Startup Volume



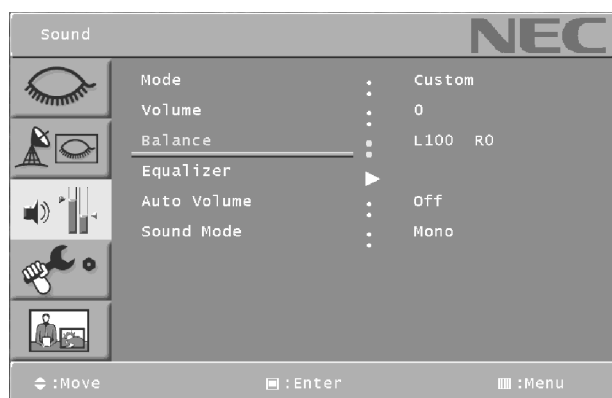
- ✎ Press [MENU] button to display the main OSD menu.
- ✎ Select the Sound main menu with [▲] or [▼] button on the remote control.
- ✎ Press [ENTER] / [▶] to enter the sub menu.



- ✎ Select Volume and press [ENTER] / [▶] button to enter the sub menu. Then you can see the Volume bar.
- ✎ Adjust the volume with [▶] / [◀] (VOL+ / VOL-) button.
- ✎ Press [MENU] button to return.

Balance

This control allows you to adjust the balance of the left and right speaker output.

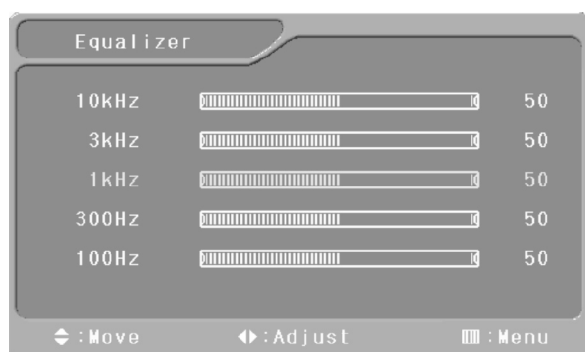
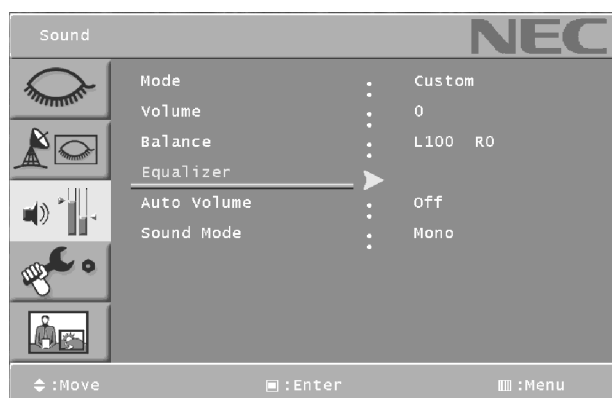


- ✎ Press [MENU] button to display the main OSD menu.
- ✎ Select the Sound main menu with [▲] or [▼] button on the remote control.
- ✎ Press [ENTER] / [▶] to enter the sub menu.

- ✎ Select Balance and press [ENTER] / [▶] button to enter the sub menu. Then you can see the Balance bar.
- ✎ Adjust the balance with [◀] / [▶] button.
- ✎ Then press [MENU] button.

Equalizer

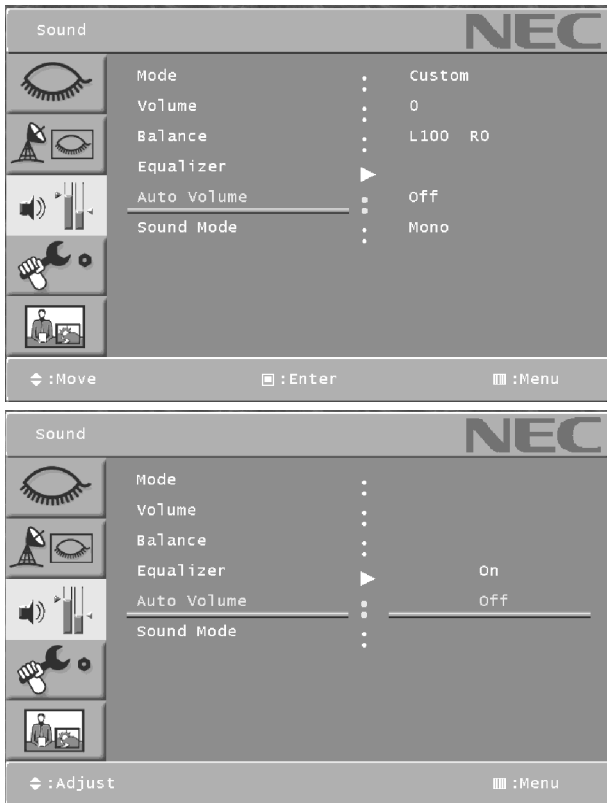
You can use the OSD menu to change the Treble, Bass and Balance according to your preference.



- ✎ Press [MENU] button to display the main OSD menu.
- ✎ Select the Sound main menu with [▲] or [▼] button on the remote control.
- ✎ Press [ENTER] / [▶] to enter the sub menu.

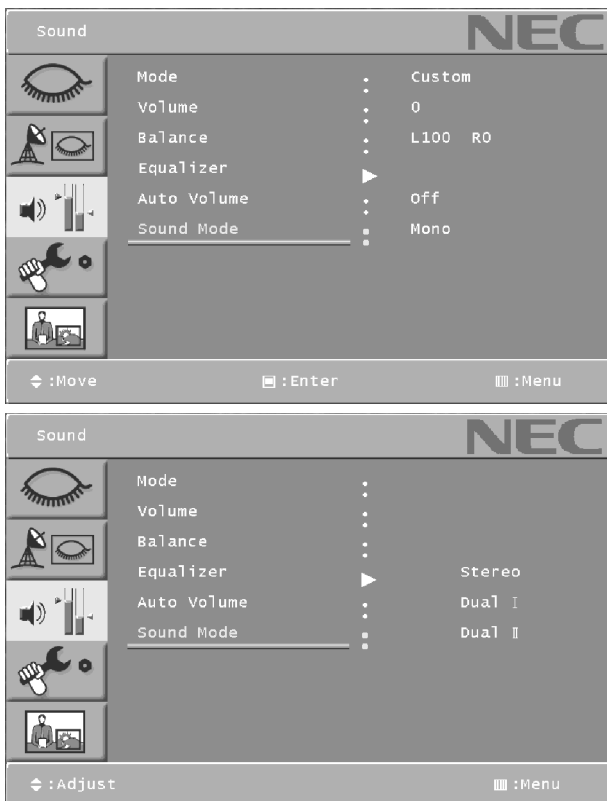
- ✎ Select Equalizer and press [ENTER] / [▶] button to enter the sub menu. Then you can see the Equalizer bar.
- ✎ Select a gain bar with [▲] or [▼] button on the remote control and adjust it with [◀] / [▶] button.
- ✎ Press [MENU] button on the remote control to exit equalizer. The result will be saved automatically.

Auto Volume



- Press [MENU] button to display the main OSD menu.
- Select the Sound main menu with [▲] or [▼] button on the remote control.
- Press [ENTER] / [▶] to enter the sub menu.
- Select Auto Volume and press [ENTER] / [▶] button to enter the sub menu. Then you will see a popup menu.
- You can select On / Off with [▲] or [▼] button and press [MENU] / [◀] button.

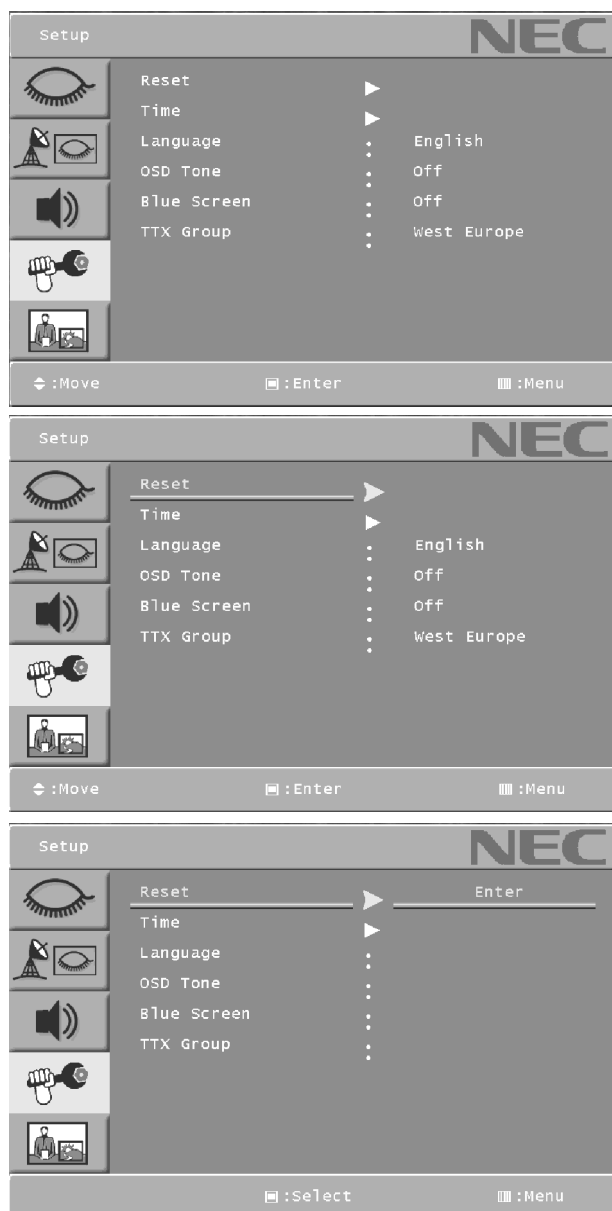
Sound Mode



- Press [MENU] button to display the main OSD menu.
- Select the Sound main menu with [▲] or [▼] button on the remote control.
- Press [ENTER] / [▶] to enter the sub menu.
- Select Sound Mode and press [ENTER] / [▶] button to enter the sub menu. Then you will see a popup menu.
- Select the sound mode with [▲] or [▼] button and press [MENU] / [◀] button.

Setup

Reset to factory defaults



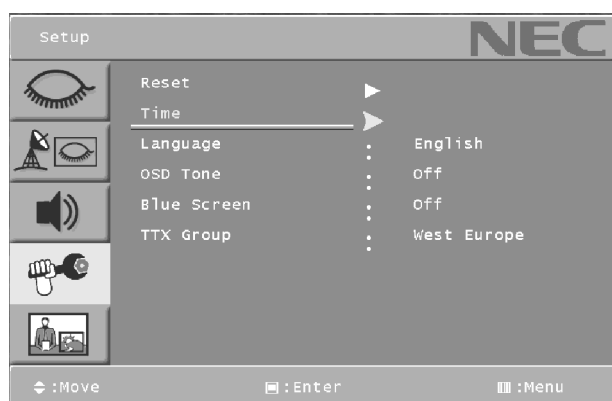
- ✎ Press [MENU] button to display the main OSD menu.
- ✎ Select the Setup main menu with [▲] or [▼] button on the remote control.
- ✎ Press [ENTER] / [▶] to enter the sub menu.

- ✎ Select Reset and press [ENTER] / [▶] button to enter the sub menu.

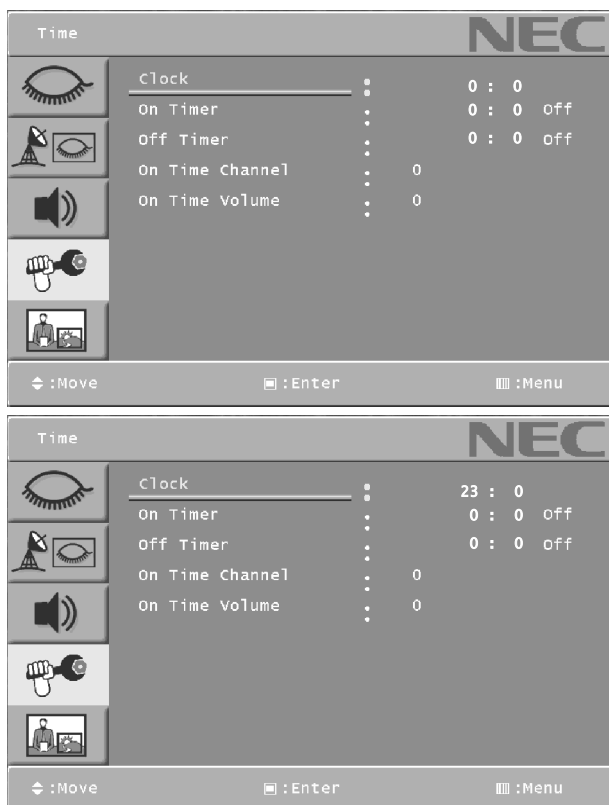
- ✎ If you want to reset your TV, press [ENTER] button. Then the system will reset.

Time - Clock

Set the current time.



- ✎ Press [MENU] button to display the main OSD menu.
- ✎ Select the Setup main menu with [▲] or [▼] button on the remote control.
- ✎ Press [ENTER] / [▶] to enter the sub menu.
- ✎ Select the Time menu with [▲] or [▼] button on the remote control.



- ☞ Select Clock and press [ENTER] / [▶] button to enter the sub menu. Then you will see the time menu.

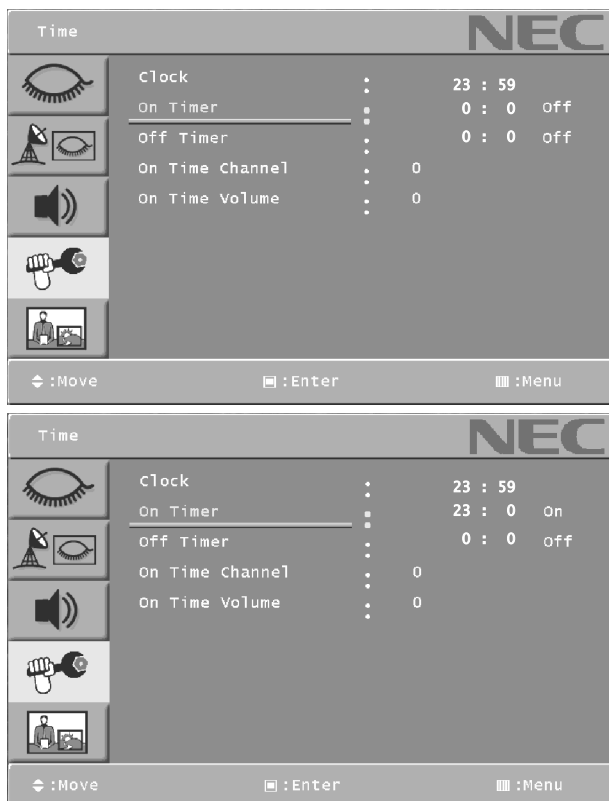
- ☞ Select Clock by pressing [▶] button.

- ☞ Move the cursor by pressing [◀] / [▶] button and adjust time by [▲] or [▼] button.

- ☞ Press [MENU] button to return.

Time - On Timer

This Plasma TV can be set to turn on automatically at specific time that you chose. Before using timer, you must set the Plasma-TV's Time as described previously.



- ☞ Press [MENU] button to display the main OSD menu.

- ☞ Select the Time main menu with [▲] or [▼] button on the remote control.

- ☞ Press [ENTER] / [▶] to enter the sub menu.

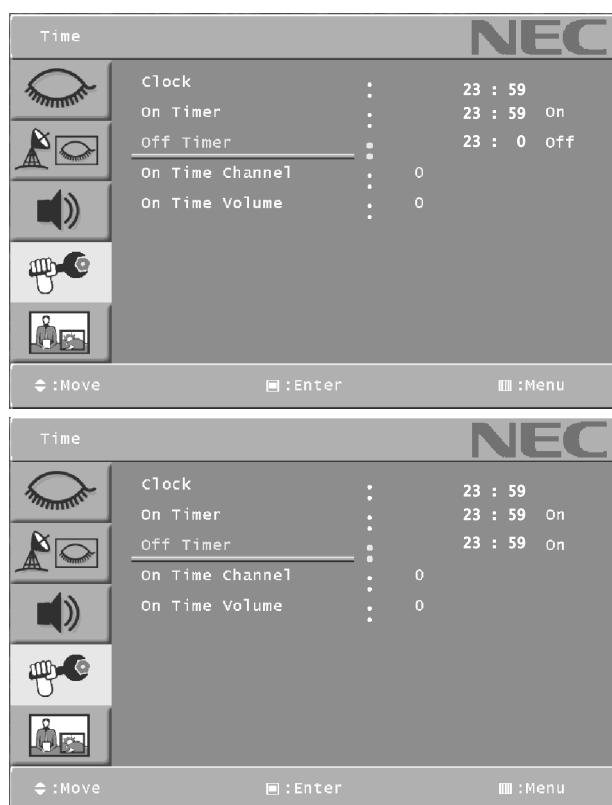
- ☞ Move the cursor by pressing [◀] / [▶] button and adjust on time by [▲] or [▼] button.

- ☞ Press [MENU] button to return.

Notice: You can't see the real time on this picture since this picture isn't a real operating mode but a design mode. In a real mode, you can see the real clock time.

Time - Off Timer

This Plasma-TV can be set to turn off automatically at specific time that you chose. Before using timer, you must set the Plasma-TV's Time as described previously.



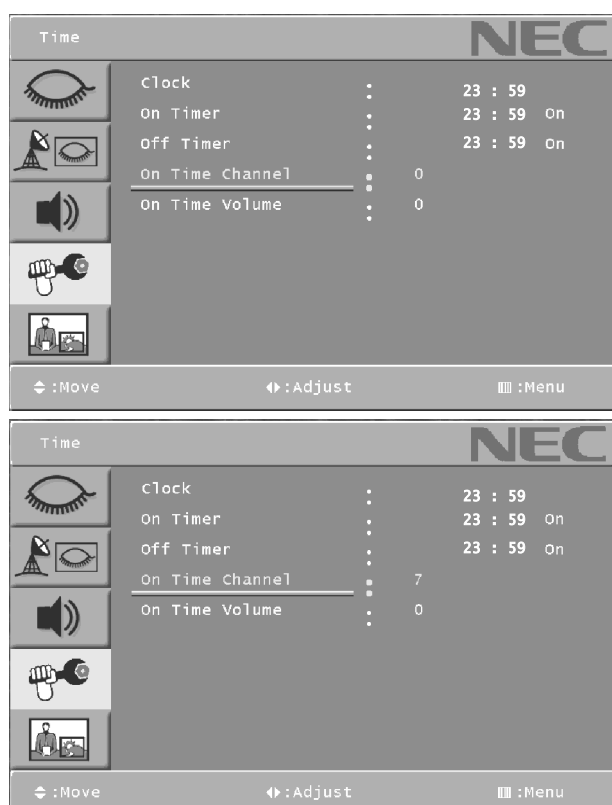
- Press [MENU] button to display the main OSD menu.
- Select the Time main menu with [▲] or [▼] button on the remote control.
- Press [ENTER] / [▶] to enter the sub menu.

- Move the cursor by pressing [◀] / [▶] button and adjust on time by [▲] or [▼] button.
- Press [MENU] button to return.

Notice: You can't see the real time on this picture since this picture isn't a real operating mode but a design mode. In a real mode, you can see the real clock time.

Time - On Timer Channel

Set the channel when Plasma-TV power turns on automatically.
- Available only when the Time is set and On Time is ON.



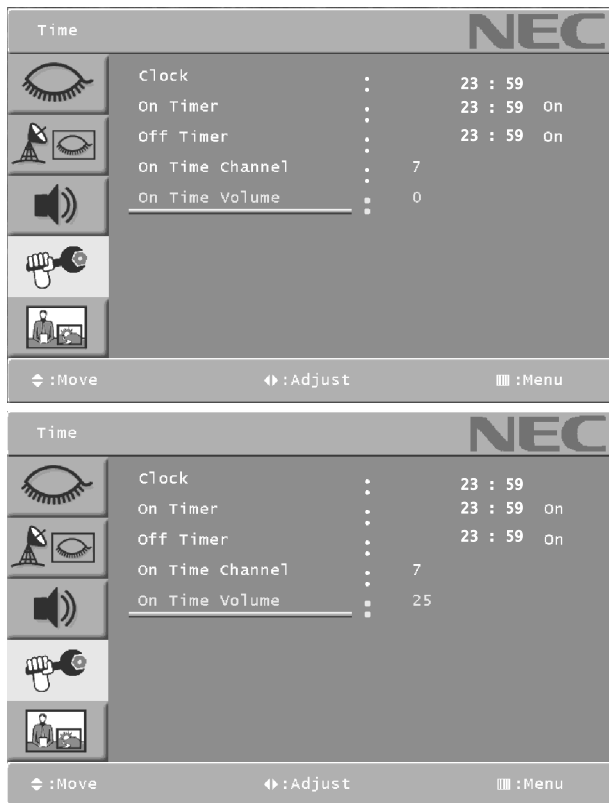
- Press [MENU] button to display the main OSD menu.
- Select the Time main menu with [▲] or [▼] button on the remote control.
- Press [ENTER] / [▶] to enter the sub menu.
- Select On Time Channel.

- Adjust the channel with [◀] / [▶] button.
- Press [MENU] button to return.

Time - On Timer Volume

Set the sound volume level when Plasma-TV power on automatically.

- Available only when the Time is set and On Time is ON.



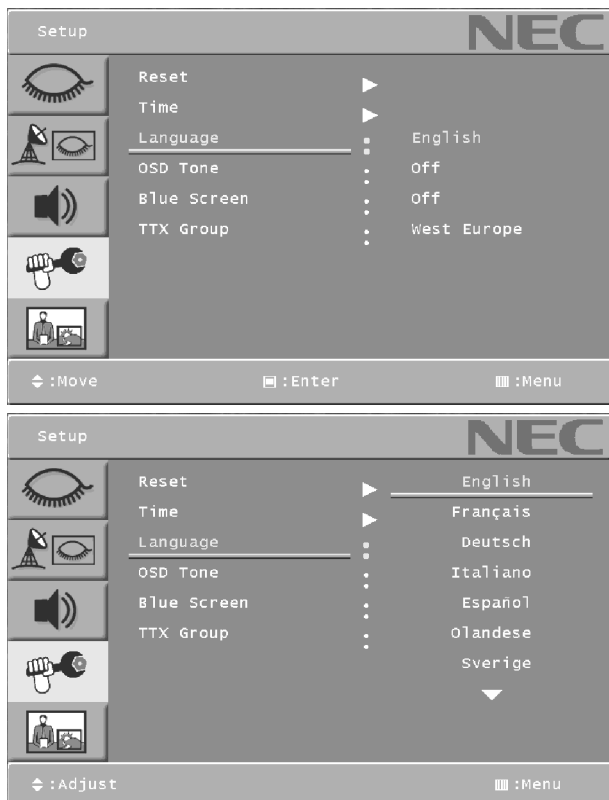
- Press [MENU] button to display the main OSD menu.
- Select the Time main menu with [▲] or [▼] button on the remote control.
- Press [ENTER] / [▶] to enter the sub menu.
- Select On Time Volume.

- Adjust the sound volume level with [◀] / [▶] button.
- Press [MENU] button to return.

Language

Set the language to use in OSD.

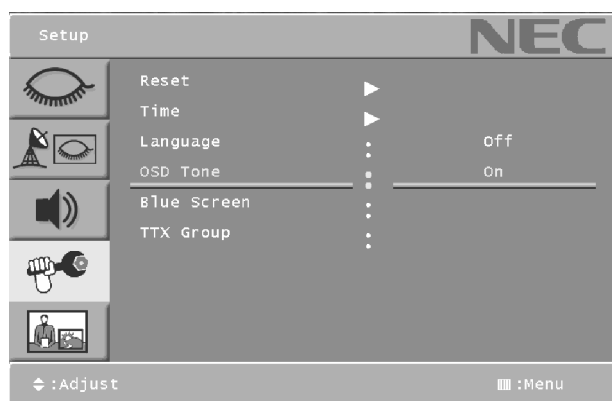
Supported languages are English, Français, German, Italiano, Español, Português, Nederland, Sverige, . . .



- Press [MENU] button to display the main OSD menu.
- Select the Setup main menu with [▲] or [▼] button on the remote control.
- Press [ENTER] / [▶] to enter the sub menu.

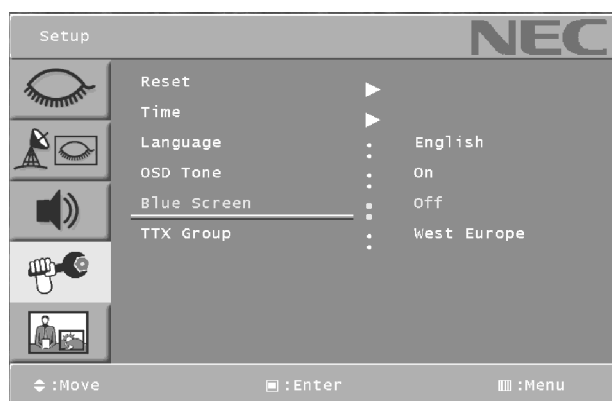
- Select Language and press [ENTER] / [▶] button to enter the sub menu. Then you will see the popup menu.
- Select the language with [▲] or [▼] button and press [MENU] / [◀] button.

OSD Tone



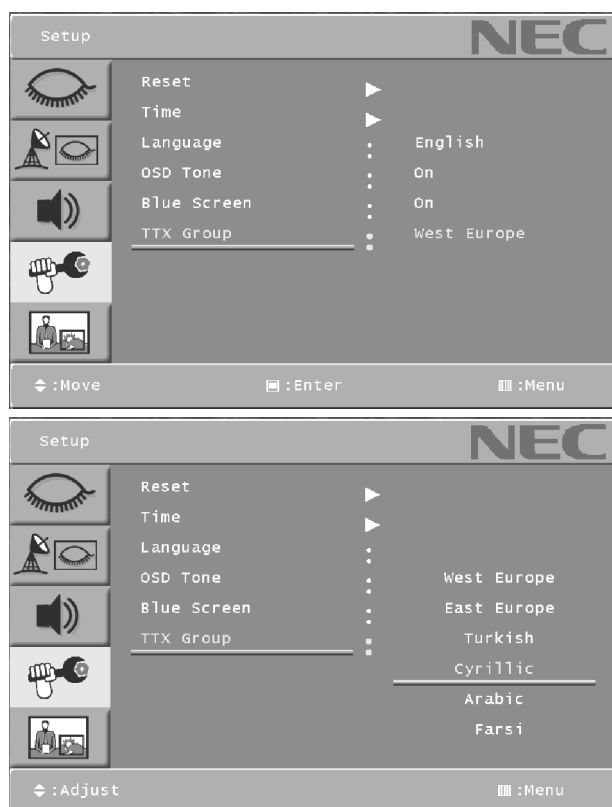
- ✎ Press [MENU] button to display the main OSD menu.
- ✎ Select the Setup main menu with [▲] or [▼] button on the remote control.
- ✎ Press [ENTER] / [▶] to enter the sub menu.
- ✎ Select OSD Tone and press [ENTER] / [▶] button to enter the sub menu. Then you will see the popup menu.
- ✎ Select the On / Off with [▲] or [▼] button and press [MENU] / [◀] button.

Blue Screen



- ✎ Press [MENU] button to display the main OSD menu.
- ✎ Select the Setup main menu with [▲] or [▼] button on the remote control.
- ✎ Press [ENTER] / [▶] to enter the sub menu.
- ✎ Select Blue Screen and press [ENTER] / [▶] button to enter the sub menu. Then you will see the popup menu.
- ✎ Select the On / Off with [▲] or [▼] button and press [MENU] / [◀] button.

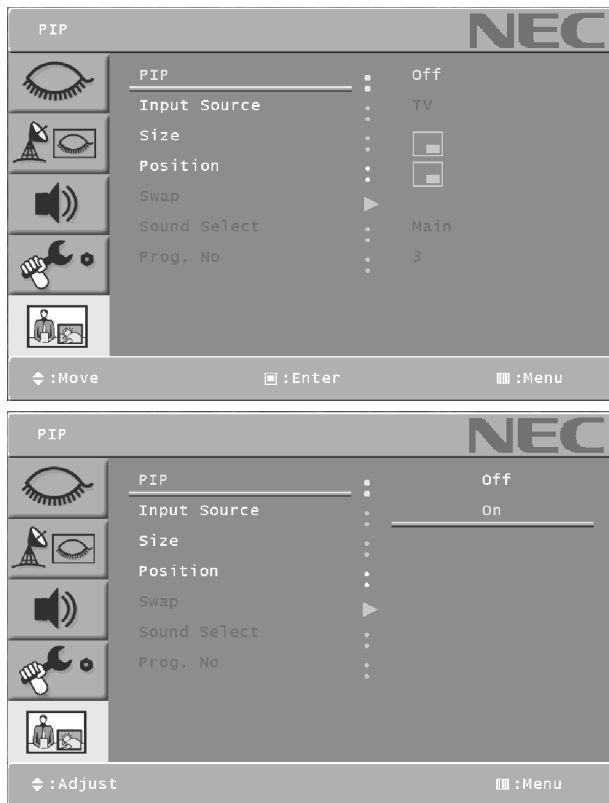
TTX Group



- ✎ Press [MENU] button to display the main OSD menu.
- ✎ Select the Setup main menu with [▲] or [▼] button on the remote control.
- ✎ Press [ENTER] / [▶] to enter the sub menu.
- ✎ Select TTX Group and press [ENTER] / [▶] button to enter the sub menu. Then you will see the popup menu.
- ✎ Select the TTX group with [▲] or [▼] button and press [MENU] / [◀] button.

PIP (Picture In Picture)

You can watch two programs or sources at the same time. And set up PIP size and position.

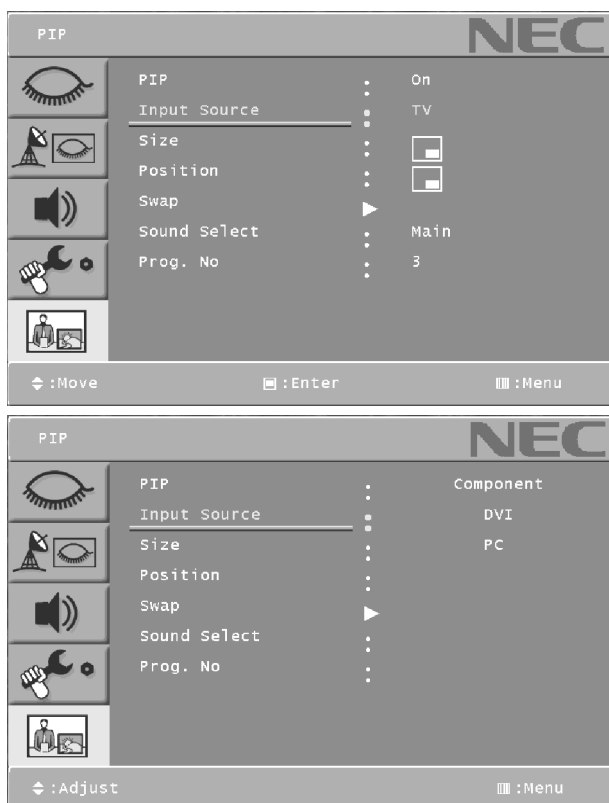


- ✎ Press [MENU] button to display the main OSD menu.
- ✎ Select the PIP main menu with [▲] or [▼] button on the remote control.
- ✎ Press [ENTER] / [▶] to enter the sub menu.

- ✎ Select PIP and press [ENTER] / [▶] button to enter the sub menu. Then you will see the popup menu.
- ✎ Select the On / Off with [▲] or [▼] button and press [MENU] / [◀] button.

PIP - Input Source

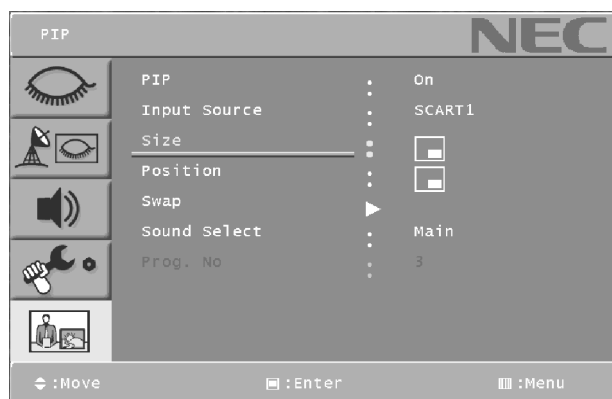
You can watch two programs or sources at the same time. And set up PIP size and position.



- ✎ Press [MENU] button to display the main OSD menu.
- ✎ Select the PIP main menu with [▲] or [▼] button on the remote control.
- ✎ Press [ENTER] / [▶] to enter the sub menu.

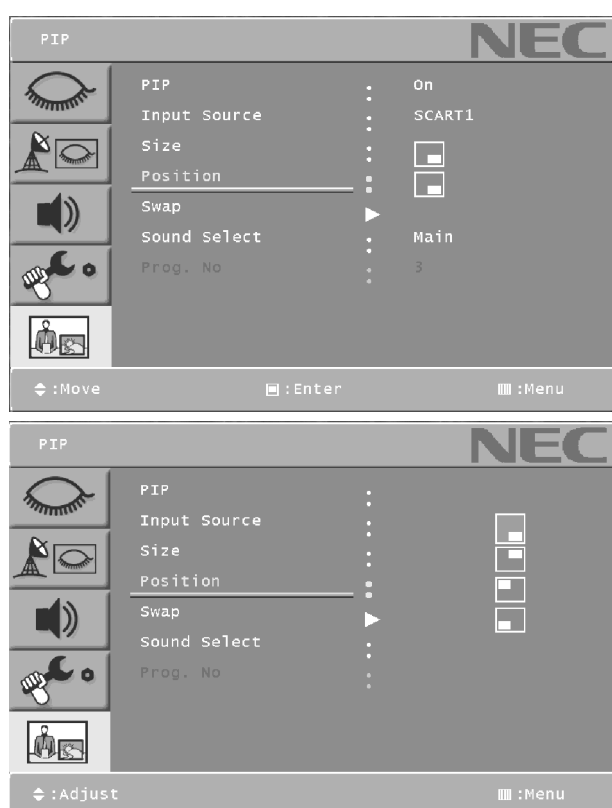
- ✎ Select Input Source and press [ENTER] / [▶] button to enter the sub menu. Then you will see the popup menu.
- ✎ Select the input source (Component / DVI / PC) with [▲] or [▼] button and press [MENU] / [◀] button.

PIP - Size



- Press [MENU] button to display the main OSD menu.
- Select the PIP main menu with [▲] or [▼] button on the remote control.
- Press [ENTER] / [▶] to enter the sub menu.
- Select Size and press [ENTER] / [▶] button to enter the sub menu. Then you will see the popup menu.
- Select the size with [▲] or [▼] button and press [MENU] / [◀] button.

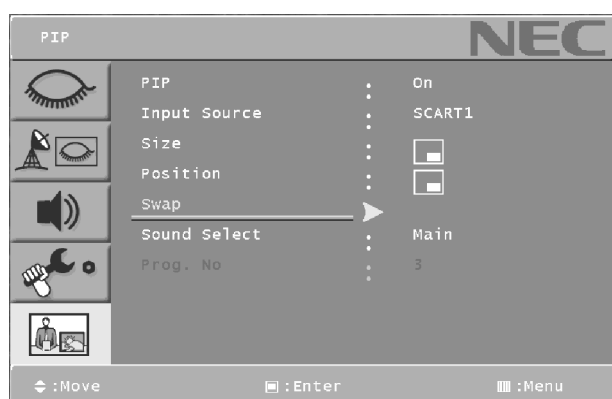
PIP - Position



- Press [MENU] button to display the main OSD menu.
- Select the PIP main menu with [▲] or [▼] button on the remote control.
- Press [ENTER] / [▶] to enter the sub menu.
- Select Position and press [ENTER] / [▶] button to enter the sub menu. Then you will see the popup menu.
- Select the PIP position with [▲] or [▼] button and press [MENU] / [◀] button.

PIP - Swap

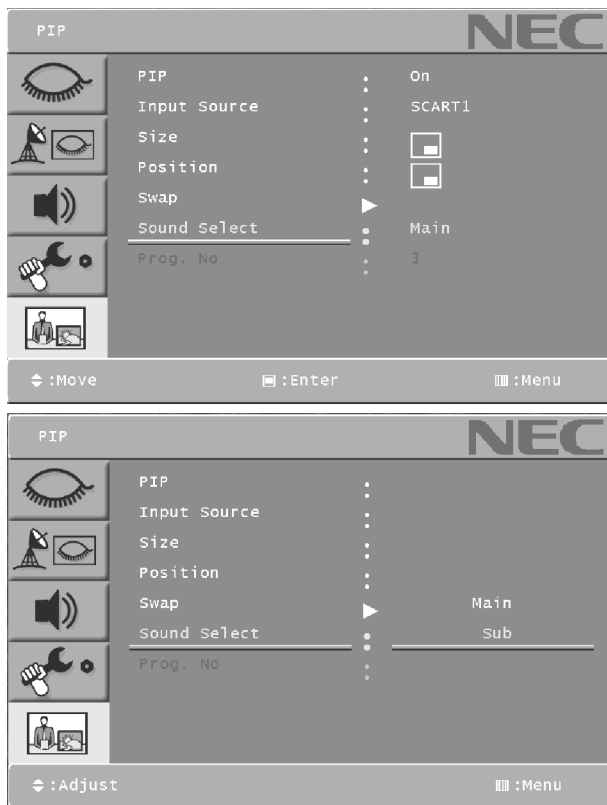
Using swap function, you can exchange two programs or sources at the same time.



- Press [MENU] button to display the main OSD menu.
- Select the PIP main menu with [▲] or [▼] button on the remote control.
- Press [ENTER] / [▶] to enter the sub menu.
- Select Swap and press [ENTER] button to swap two programs or sources that you want.
- Press [MENU] button to return.

PIP - Sound Select

Using Sound Select function, you can exchange the sound of two programs or sources at the same time.

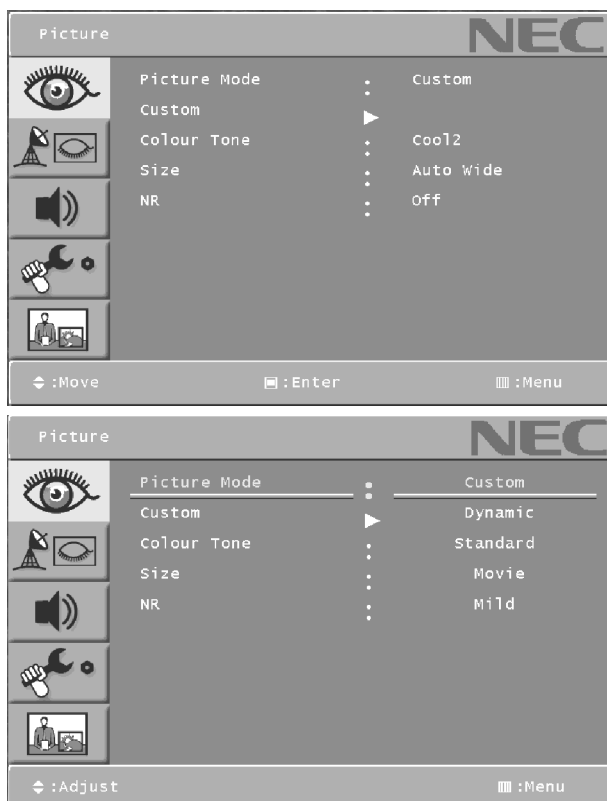


- ✎ Press [MENU] button to display the main OSD menu.
- ✎ Select the PIP main menu with [▲] or [▼] button on the remote control.
- ✎ Press [ENTER] / [▶] to enter the sub menu.

- ✎ Select Sound Select and press [ENTER] / [▶] button to swap the sound of two programs or sources that you want.
- ✎ Press [MENU] button to return.

Picture PC

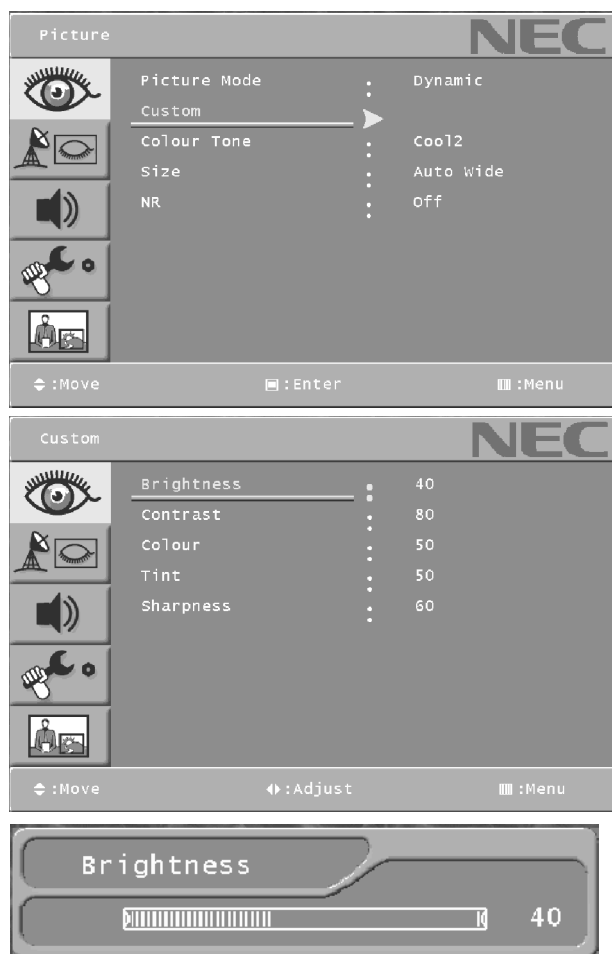
Picture Mode



- ✎ Press [MENU] button to display the main OSD menu.
- ✎ Select the Picture main menu.
- ✎ Press [ENTER] / [▶] to enter the sub menu.

- ✎ Select Picture Mode and press [ENTER] / [▶] button to enter the sub menu. Then the picture popup window appears.
- ✎ Select the picture mode with [▲] or [▼] button and press [MENU] / [◀] button.

Custom

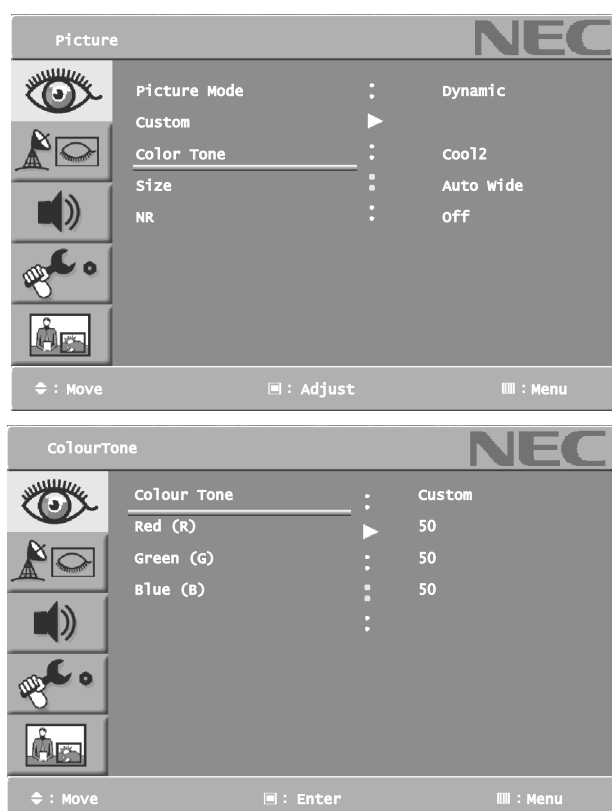


- ✎ Press [MENU] button to display the main OSD menu.
- ✎ Select the Picture main menu.
- ✎ Press [ENTER] / [▶] to enter the sub menu.

- ✎ Select Custom and press [ENTER] / [▶] button to enter the sub menu. Then the picture popup window appears.

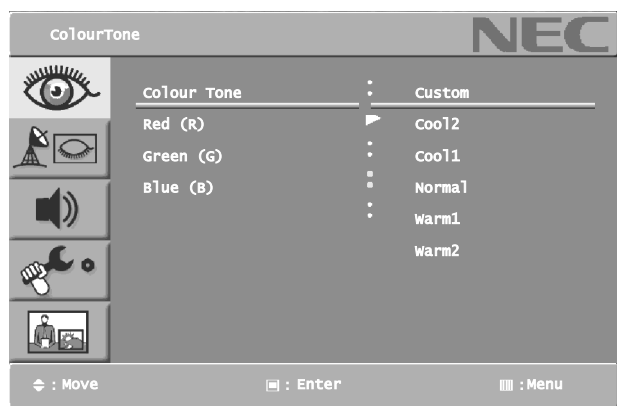
- ✎ You will see the picture setting bars. You can adjust each values of the custom setting, but the changed values are stored as in Custom mode.
- ✎ Press [MENU] button to return.

Colour Tone



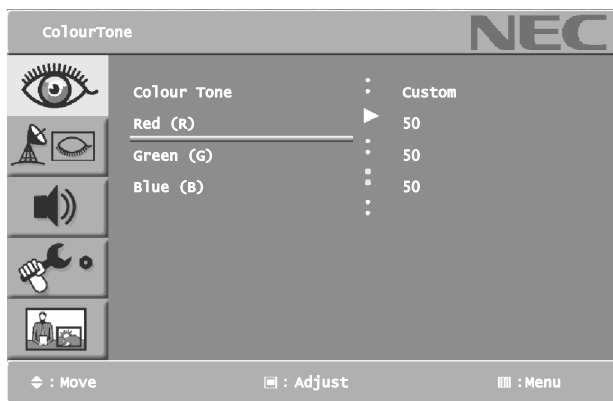
- ✎ Press [MENU] button to display the main OSD menu.
- ✎ Select the Picture main menu.
- ✎ Press [ENTER] / [▶] to enter the sub menu.

- ✎ Select Colour Tone and press [ENTER] / [▶] button to enter the sub menu. Then the picture popup window appears.

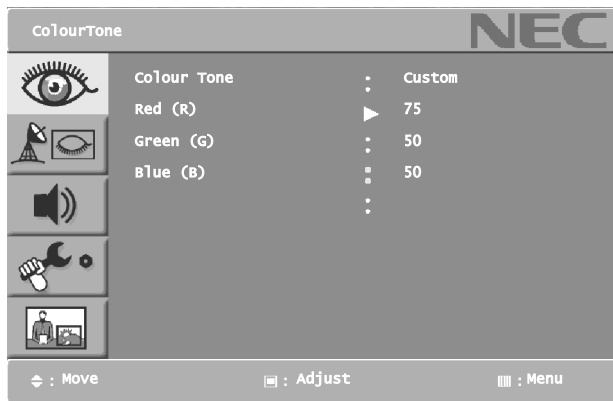
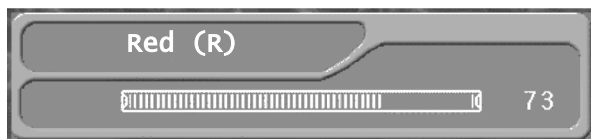


Select the colour tone with [▲] or [▼] button and press [MENU] button.

If you select Custom in the Colour Tone popup window on PC, you can select sub modes like as Red, Green, and Blue.

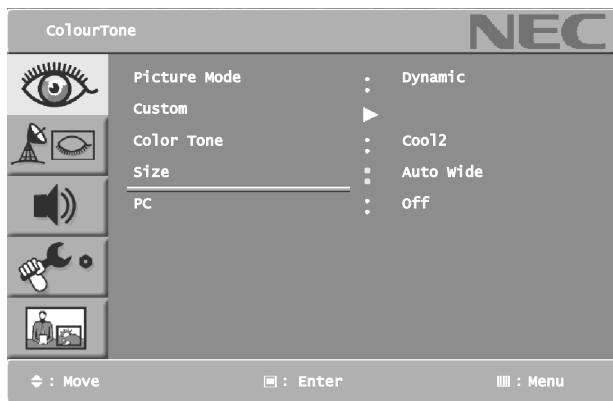


Select Red(R) and press [ENTER] / [▶] button to enter the sub menu. Then the setting bar appears.

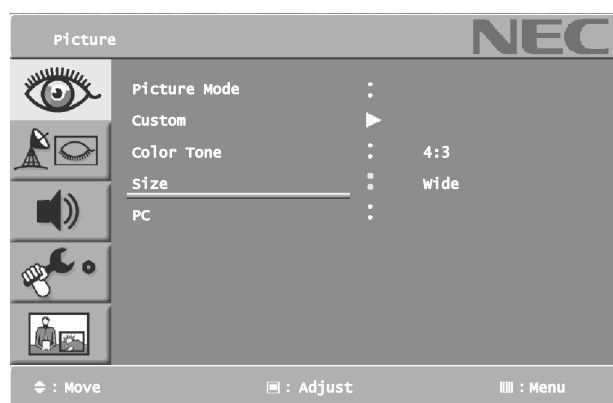


You can adjust each values of the Colour Tone setting.
Press [MENU] button to return.

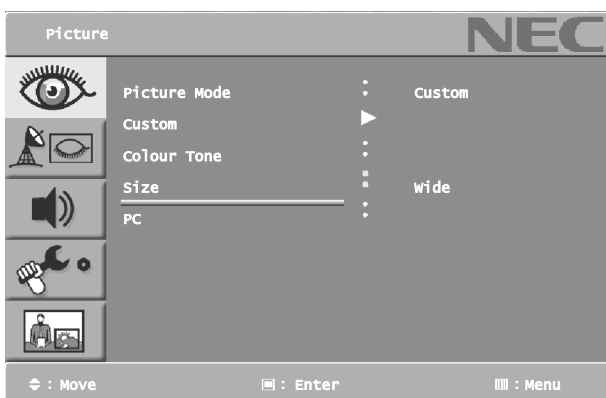
Size



Press [MENU] button to display the main OSD menu.
Select the Picture main menu.
Press [ENTER] / [▶] to enter the sub menu.

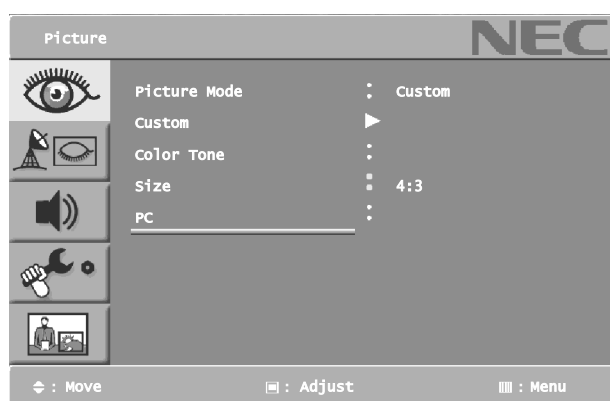


- ✎ Select Size and press [MENU] button to enter the sub menu. Then the picture popup window appears.
- ✎ Select the size (4:3 / Wide) with [▲] or [▼] button and press [MENU] / [◀] button.

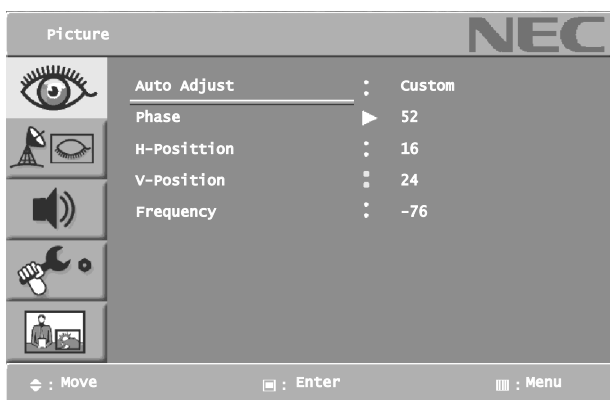


- ✎ Press [MENU] button to return.

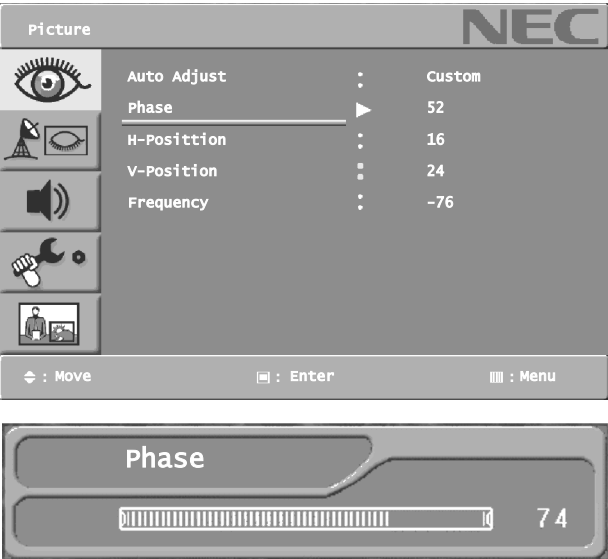
PC



- ✎ Press [MENU] button to display the main OSD menu.
- ✎ Select the Picture main menu.
- ✎ Press [ENTER] / [▶] to enter the sub menu.

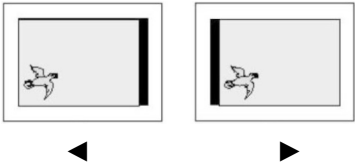


- ✎ Select PC and press [ENTER] / [▶] button to enter the sub menu. Then you will see the sub menu of PC.



You can adjust each values of the PC setting with [◀] / [▶] button.

H-Position



V-Position



Phase



Press [MENU] button to return.

Troubleshooting

The following table lists possible problems and methods for remedy. Please refer to this table prior to contacting a service representative.



If the troubleshooting information provided does not result in the fault being successfully resolved, switch OFF the unit via the mains switch and remove the mains plug from the socket. Never attempt to repair the unit yourself and under no circumstances should you remove the rear cover from the unit.

FAULTS	POSSIBLE CAUSES	POSSIBLE SOLUTION
No picture and no sound, although the mains plug is inserted and the unit is switched on.	• Mains switch in position "0" (OFF). • Display's mains plug is not inserted in the socket. • Defective mains cable.	• Set mains switch to position "I". • Insert the mains cable plug into the socket. • Call the service hotline.
Screen is dark.	• Contrast setting too low. • No input signal, wrong input selected.	• Adjust the brightness and/or contrast correctly (see Picture → Custom sub menu). • Check the connection cable; assign correct input to source.
Weak or excessive colours.	• Colour not set correctly. • Connection cable not correctly inserted.	• Adjust the colour using the Picture → Custom sub menu. • Connect the cable correctly.
The picture is cut off or off centre in PC mode.	• Picture position not set correctly.	• Correct the picture position. Use the function Picture → PC → Auto Adjust.
The picture is too large or too small.	• Picture format set wrongly.	• Press [ARC] button repeatedly until the picture is displayed as full screen.
The remote control is not working.	• The batteries are worn-out. • There is an obstruction between the remote control and the sensor. • The remote control is located outside of its operating range.	• Insert new batteries. • Remove the obstruction between the remote control and the sensor. • Use the remote control within the specified range.
The displayed picture is too dark.	• The picture quality is not set correctly	• Correct the picture brightness and contrast under the menu option Picture → Custom.
The picture is displayed, but there is no sound.	• Sound mute is switched on. • Volume set to minimum. • Loudspeakers not connected correctly.	• Press the [MUTE] button on the remote control. • Increase the volume. • Connect the loudspeakers correctly.
Individual letters are not displayed (PC mode).		• Set the phase position via the option Picture → PC → Phase. • Check the picture width setting. • Run Picture → PC → Auto Adjust.
Horizontal stripes with TV or video signals.	• Signal source has been set up before the display. • Video cable screening is inadequate.	• Always place the signal sources at the side of or behind the display. • Use only a high-grade signal cable with a high screening attenuation.
To restore all settings to their original status, select the option <Setup → Reset → Enter>!		

Technical specification

DISPLAY

Size / diagonal:	106.68 cm (42"), 16:9 format
Resolution:	852 x 480 pixels
Colours:	16.7 million colours
Viewing angle:	160° typical

VIDEO STANDARDS

Video:	PAL / SECAM / NTSC
TV tuner:	PAL (BG, I, DK, L) / SECAM (L/L'), 45 - 889 MHz (VHF, UHF, Hyperband)
PALplus, Cinescope:	Automatic format detection (Auto Wide)
Formats:	4:3, 16:9, 14:9, Panorama, Auto Wide, Zoom (120%)

FREQUENCY RANGE PC

Horizontal frequency:	20 - 82 kHz
Vertical frequency:	55 - 90 Hz
Clock frequency:	max. 165 MHz
Resolutions:	max. UXGA 1600 x 1200 @ 60 Hz
Formats:	4:3, 16:9

INPUTS / CONNECTIONS / SYNCHRONIZATION

PC	Video input:	RGB analogue and automatic sync detection
	Connector digital:	DVI-D
	Connector analogue:	D-SUB 15 (VGA)
Video	TV tuner:	IEC, 75 ohms input resistance
	SCART1:	CVBS input, Monitor out
	SCART2:	CVBS input, RGB, RF out
	CVBS:	1 x RCA
	Y/C (S-video):	MiniDIN (HOSIDEN)
	YUV:	3 x RCA
Audio	Integrated loudspeaker:	2 x 2 broadband
	Stereo input:	6 x RCA L/R 500 mVrms (YUV, CVBS/ YC, VGA/DVI-D), 2 x SCART 500 mVrms
	Stereo output:	2 x RCA (LINE OUT L/R)
Synchronization:	Sync on green (max. 1024 x 768), Separate H and V sync	
Operator control elements:	Mains switch, IR remote control (OSD menu), local operator control	

OPERATING CONDITIONS

Temperature:	+5 °C to +35 °C (in operation), -20 °C to +60 °C (storage)
Air humidity:	20 % to 80 % (non-condensating) @ 35 °C
Elevation:	max. 2.000 m (7.000 ft)

DATA MAIN CONNECTIONS

Voltage supply:	100 - 240 V ~
Mains frequency:	50 / 60 Hz
Power consumption:	280 W typical, under 5 W in stand-by mode

DIMENSIONS AND WEIGHT

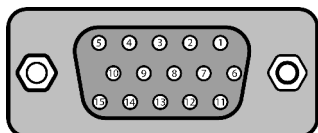
Display screen without stand H x W x D:	(642.8 mm x 1153.4 mm x 100.8 mm) ± 2 mm
Display screen with stand H x W x D:	(689.7 mm x 1153.4 mm x 216.5 mm) ± 2 mm
Weight display:	37.0 kg ± 10%
Weight stand:	3.5 kg ± 10%
Gewicht total:	40.5 kg ± 10%

Appendix

Supported timings (PC)

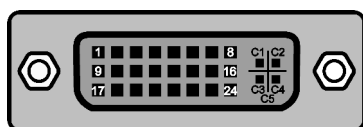
Resolution	H Frequency (kHz)	V Frequency (Hz)	Pixel Frequency (MHz)
640 x 400	37.861	85.08	31.5
640 x 350	31.469	70.087	25.175
640 x 350	37.861	85.08	31.5
640 x 480	31.469	59.94	25.175
640 x 480	35.000	66.667	30.24
640 x 480	34.940	69.884	28.513
640 x 480	37.861	72.809	29.765
640 x 480	37.500	75	31.5
640 x 480	43.269	85.008	36.0
640 x 480	45.540	90.0	37.889
720 x 400	31.469	70.087	28.322
720 x 400	37.927	85.039	35.5
800 x 600	35.156	56.25	36
800 x 600	37.879	60.317	40.0
800 x 600	43.764	70.02	45.513
800 x 600	48.077	72.188	50.0
800 x 600	46.875	75.0	49.5
800 x 600	53.674	85.061	56.25
800 x 600	56.880	90.0	60.065
832 x 624	49.726	74.551	57.284
1024 x 768	48.780	60.001	64.11
1024 x 768	48.363	60.004	65.0
1024 x 768	56.476	70.069	75.0
1024 x 768	57.703	72.039	78.476
1024 x 768	60.241	74.927	81.724
1024 x 768	60.030	75.029	78.75
1024 x 768	68.677	84.997	94.5
1024 x 768	72.810	90.0	100.187
1152 x 864	53.700	60.0	81.624
1152 x 864	62.932	69.924	96.663
1152 x 864	67.500	75.0	104.993
1152 x 870	68.681	75.062	100.0
1152 x 900	61.846	66.0	94.787
1152 x 900	72.713	76.047	105.561
1280 x 720	47.760	60.0	74.481
1280 x 720	52.500	70.0	89.040
1280 x 720	54.072	72.0	91.706
1280 x 720	56.400	75.0	95.654
1280 x 768	47.700	60.0	80.136
1280 x 768	60.150	75	102.977
1280 x 960	60.000	60.0	102.104
1280 x 960	59.640	60.0	102.104
1280 x 1024	63.337	59.978	108.18
1280 x 1024	63.981	60.02	108.0
1280 x 1024	64.754	60.06	108.992
1280 x 1024	63.600	60.0	108.883
1600 x 1200	75.000	60.0	162.00

Connecting pin assignment for VGA



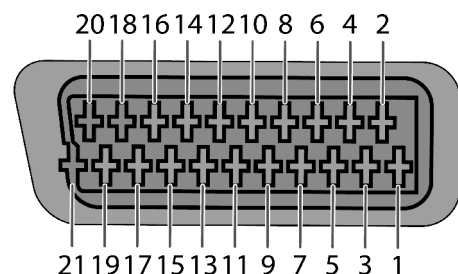
1 Red	6 GND (Red)	11 Not connected
2 Green	7 GND (Green)	12 DDC SDA
3 Blue	8 GND (Blue)	13 H-sync
4 Not connected	9 +5V	14 V-sync
5 Not connected	10 GND (Sync)	15 DDC SCL

Connecting pin assignment for DVI-D



1 TMDS Data 2-	11 TMDS Data 1/3	21 TMDS Data 5+
2 TMDS Data 2+	12 TMDS Data 3-	22 TMDS Clock Shield
3 TMDS Data 2/4	13 TMDS Data 3+	23 TMDS Clock +
4 TMDS Data 4-	14 +5V Power	24 TMDS Clock -
5 TMDS Data 4+	15 GND	C1 Not connected
6 DDC Clock	16 Hot Plug Detect	C2 Not connected
7 DDC Data	17 TMDS Data 0-	C3 Not connected
8 Not connected	18 TMDS Data 0+	C4 Not connected
9 TMDS Data 1-	19 TMDS Data 0/5	C5 Not connected
10 TMDS Data 1+	20 TMDS Data 5-	

Connecting pin assignments for SCART



SCART 1

1 Audio right output	8 Not connected	15 Not connected
2 Audio right input	9 GND	16 Not connected
3 Audio left output	10 Not connected	17 GND
4 GND (Common earth for audio)	11 Not connected	18 GND
5 GND	12 Not connected	19 CVBS output
6 Audio left input	13 GND	20 CVBS input
7 Not connected	14 GND	21 GND (Screening plug)

SCART 2

1 Audio right output	8 Switch input (5V to 12V)	15 Red input
2 Audio right input	9 GND (Green)	16 FB input (1V to 3V @75 Ohm)
3 Audio left output	10 Not connected	17 GND
4 GND (Common earth for audio)	11 Green input	18 GND (Red/Green/Blue)
5 GND (Blue)	12 Not connected	19 CVBS output
6 Audio left input	13 GND (Red)	20 CVBS input
7 Blue input	14 GND	21 GND (Screening plug)