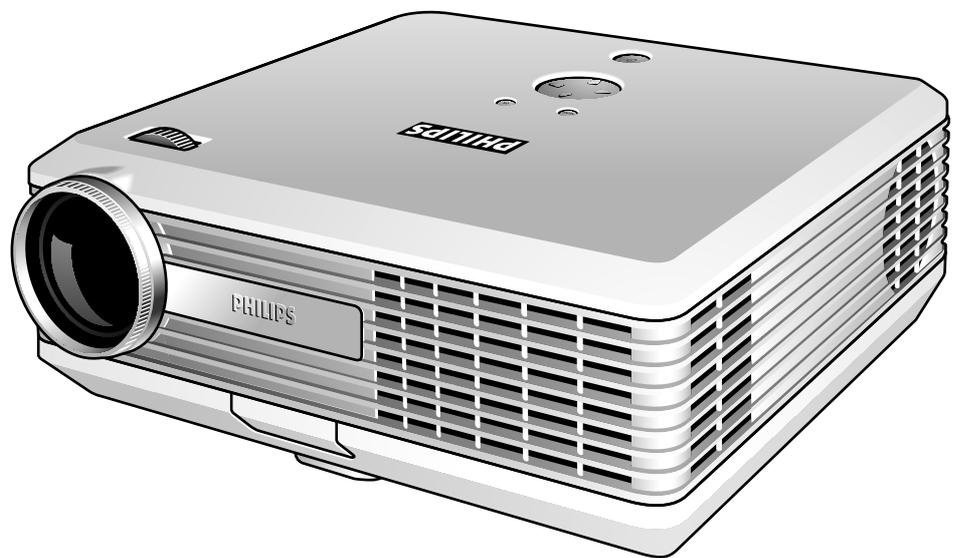


Philips multimedia projector *bCool XG1*



English User guide

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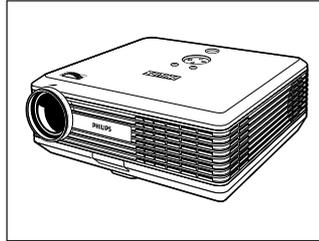
1. Introduction



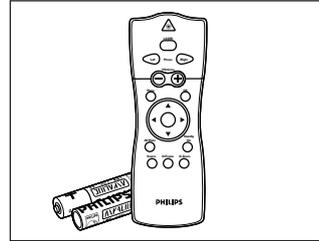
Congratulations on your purchase of one of the most sophisticated and reliable products on the market today. We are sure that, used properly, it will bring you years of enjoyment. You will want to keep this manual handy, as it is a convenient source of information about your projector. For your own protection and prolonged operation of your projector, please read the enclosed Safety Sheet.

Packaging contents

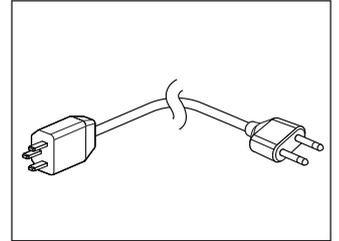
Please confirm that the following items are packed in the projector box. They are provided to help you use or set up your projector.



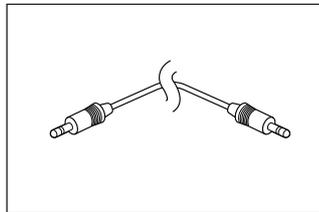
Projector - Lens cap



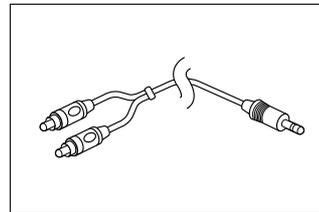
**Laser pointer remote control + batteries
2 x Alkaline 1.5 V**



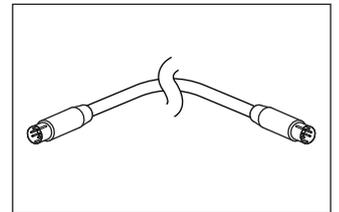
Mains Lead



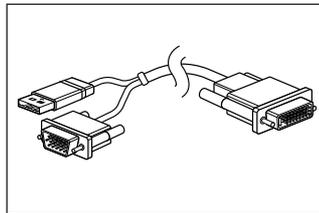
Audio minijack to minijack cable



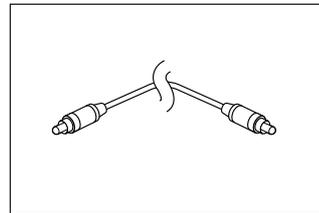
Audio minijack to RCA cable



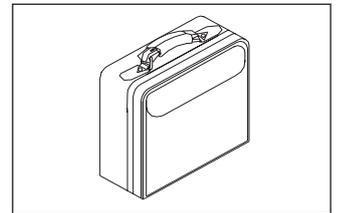
S-Video cable



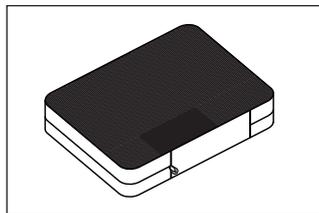
**VESA M1-A to VGA/
USB cable**



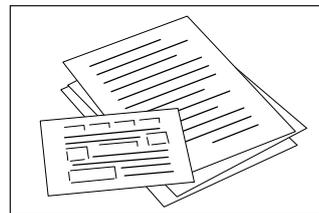
Composite Video cable



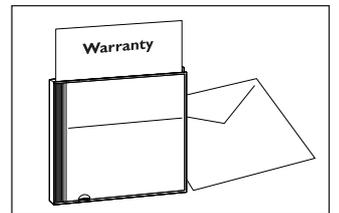
Softbag



Cable pouch



**Quick set up Card and
Safety Sheet**



Cd-rom (with Projection Assistant, Warranty card, SecurityMax, User Guide, Spec. sheet and more.)

Optional accessories

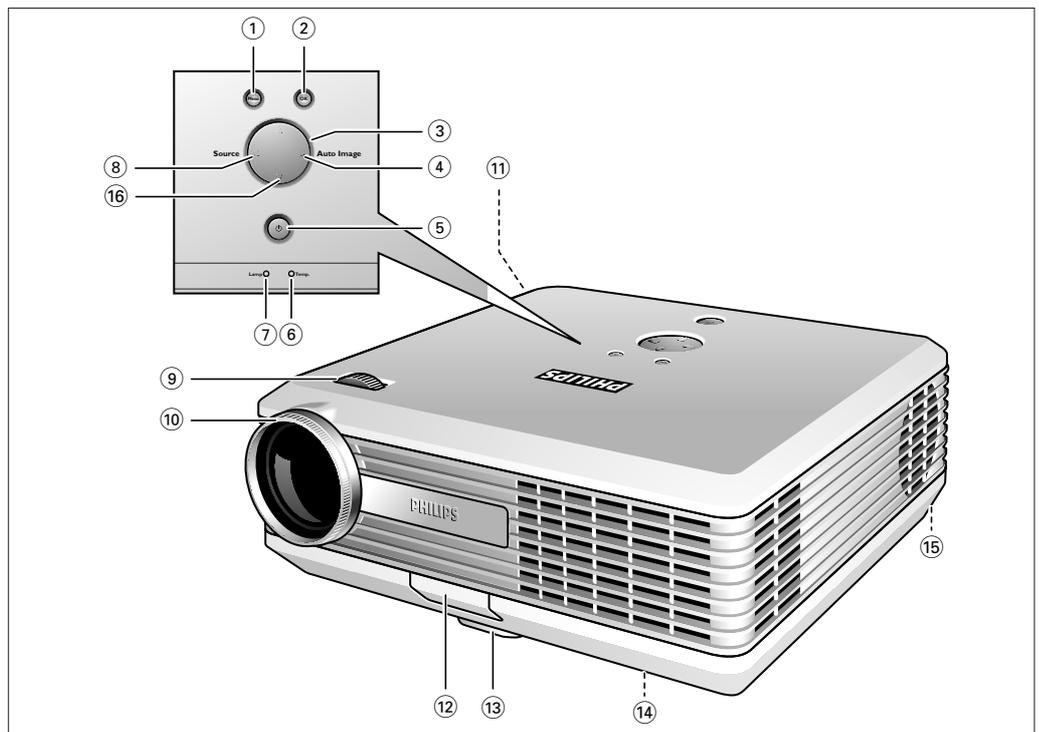
The following accessories are available via the dealer from which you purchased your Philips projector:

- LCA3125/00 - 180W replacement lamp - 8670 931 25009
- LCA2218/00 - Ceiling mount - 8670 922 18009
- LCA5317/00 - RCA/M1 component video adaptor cable - 8670 953 17009
- LCA5318/00 - DVI + USB/M1 adaptor cable - 8670 953 17009

Service accessories

The following accessories are available via our Service organisation only:

- Laser pointer remote Control - 3139 228 62631
- Compact remote control - 3139 228 62641
- User Guide (Cd-rom) - 3122 435 91181



Menu ① To activate and deactivate the menu.

OK ② To confirm actions in the menu when the menu is on screen.

Cursor Control ③ When the menu is active the Cursor Control controls the menu cursor to navigate through the OSD menu. The cursor control works with up/down and left/right button operation.

Auto Image ④ To automatically adjust frequency, tracking, horizontal and vertical position. With most signal sources, Auto Image provides the best results

Standby/Standby indicator ⑤ To switch the projector in or out of the Power/Standby mode.
The Standby indicator (text on button/ring around button):

In Power on mode:

- blinks green when the projector is warming up;
- lights up green when the projector is in Power On mode;

In Power off mode:

- lights up red when the projector is in Standby mode;
- blinks red when the projector is cooling down.

Temperature indicator ⑥ Lights up red in case of temperature error.

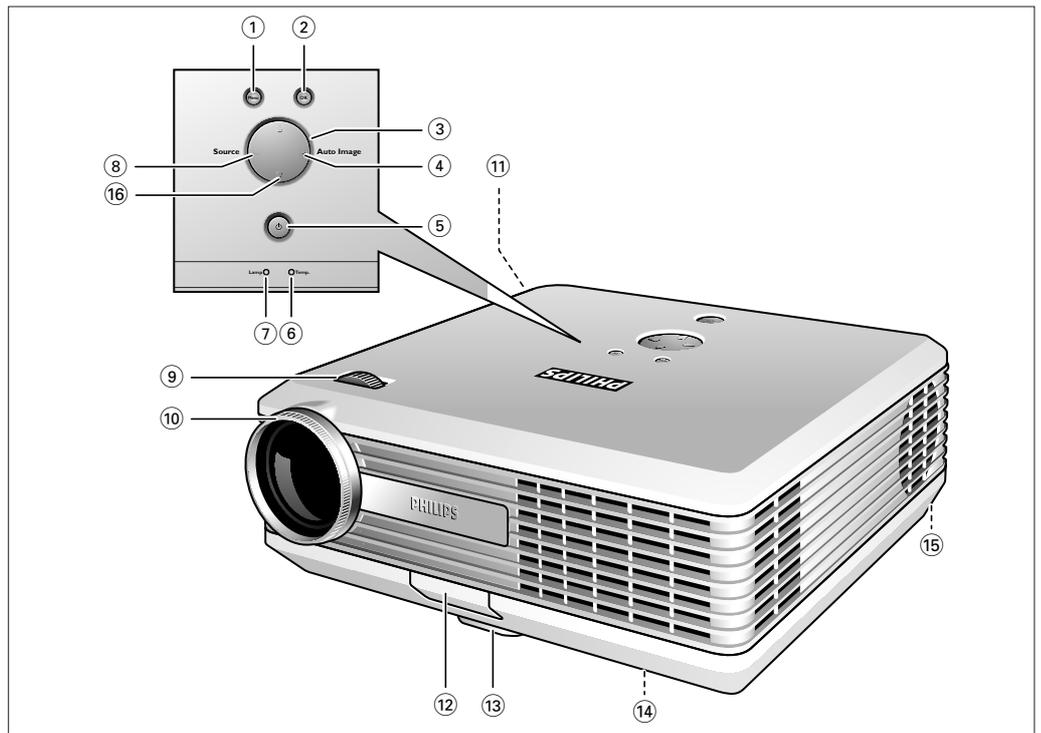
Lamp indicator ⑦

- Fast blinks red (0.5 sec On, 0.5 sec Off) when lamp start has failed.
- Fast blinks red (1 sec On, 1 sec Off) in case of fan error.

Source ⑧ To select the current projection source (Auto, Computer, DVI, YPbPr, YCbCr, RGBS, S-Video or Video). The button toggles between the seven signals.

Zoomring ⑨ To adjust the size of the projected image.

Focus ring ⑩ To adjust the focus of the projected image.



Mains inlet socket ⑪ To connect the projector to the mains.

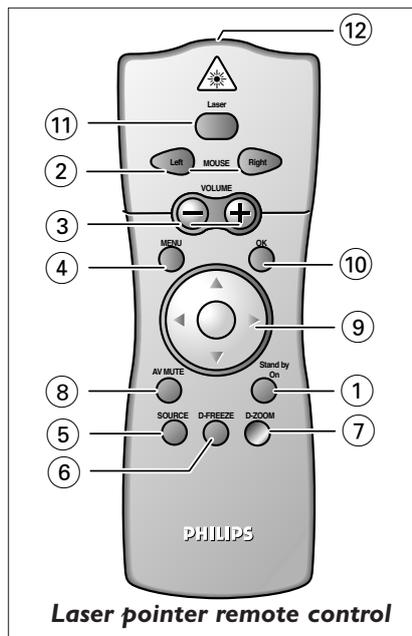
Elevator button ⑫

Elevator foot ⑬ To adjust the vertical angle of the projector.

Lamp compartment ⑭

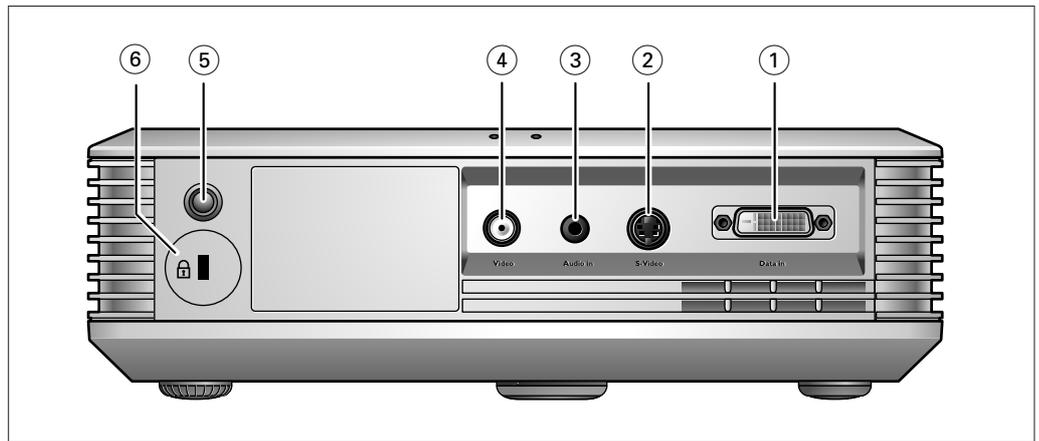
Horizontal adjuster ⑮ To adjust a possible oblique displayed picture.

▽ **Keystone corrections keys** △ ⑯ To correct picture distortion of the vertical keystone type by internal scaling.



- Stand by On** ① To switch the projector in or out of the Power/Standby mode.
- Mouse Left/Right** ② Function as the Left and Right mouse keys of your pc when USB connection has been made.
- Volume +** ③ To adjust the volume.
- Menu** ④ To activate and de-activate the menu.
- Source** ⑤ To select the current projection source (Auto, Computer, DVI, YPbPr, YCbCr, RGBS, S-Video or Video). The button toggles between the seven signals.
- D(igital)-Freeze** ⑥ To capture a (moving) picture. The button toggles between the Freeze mode and the display situation.
- D(igital)-Zoom** ⑦ To magnify the size of the projected image. Use Cursor control to select the zoom centre and press D(igital)-Zoom to select the required zoom factor: 1 x, 4 x, 9 x or 16 x.
- A(udio)/V(ideo) Mute** ⑧ To mute the sound of the projector and to mute the picture.
- Cursor Control** ⑨ To manipulate the mouse cursor on the connected computer as long as the menu is not active. When the menu is active the Cursor Control controls the menu cursor to navigate through the OSD menu. The cursor control works with up/down and left/right button operation.
- Note** *The Cursor Control can only function as a mouse cursor when the projector is connected to the USB connector of the computer. Windows 98, Windows ME, Windows 2000 or Windows XP should be installed on the computer when you make the USB connection.*
- OK** ⑩ To confirm actions in the menu when the menu is on screen.
- Laser** ⑪ To activate the laser pointer to indicate items on the screen.
Note: The laser pointer sends out a laser beam. Do not look into this beam!
- Laser pointer** ⑫ Exit point of laser pointer.

Note *The maximum range of the remote control is approximately 7 m (± 25 feet).*

**Data source connections**

- Data in** ①
- Input socket to connect to the analog (VGA) Data out terminal of a computer.
 - Input socket to connect to the digital (DVI) Data out terminal of a computer.
 - In-/Output socket to connect a PC or Apple Macintosh computer equipped with a USB downlink connection. When USB connection is used the mouse cursor on the connected computer can be controlled via the projector remote control. Make sure Windows 98, Windows ME, Windows 2000 or Windows XP is installed on the computer.
 - Input socket to connect to DVD- and HDTV-video equipment
This socket can be connected to the following output sockets: YCbCr, YPbPr, RGBS (Composite sync), RGBHV).

Video source connections

- S-Video** ② Input socket to connect to the S-Video out socket of a S-VHS video recorder, a VCR, Laser Disc player, DVD player, video camera or TV with AV output socket.
This socket can be connected to a S-Video/S-VHS (Y/C) output socket.

- Video** ④ Input socket to connect to the Video out socket of a video recorder, Laser Disc player, video camera, DVD player, or TV with AV output socket.
This socket can be connected to CVBS output sockets.

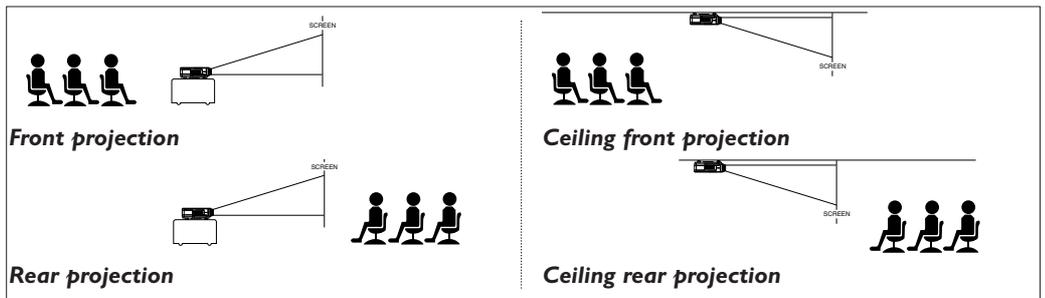
Other connections

- Audio in** ③ Input socket to connect to the Audio out terminal of a computer, video recorder, laser disc player, video camera or TV with A/V output socket.
- IR sensor** ⑤ To receive the signals from the remote control.
- Lock slit** ⑥ To insert an optional locking device (Kensington lock).

3. Set up

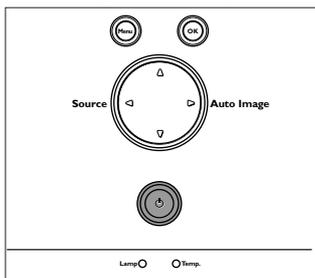


Positioning the projector and screen



- Place the projector on a stable, level surface, out of direct sunlight and away from sources of excessive dust, dirt, heat, water, moisture, vibration and strong magnetic fields.
- Allow sufficient cooling of the product by keeping all air inlets and outlets clear from obstructions.
- Position the projector in such way that the viewers cannot watch into the projector light beam.
- Choose a screen size suitable for the number of viewers and the size of the room.
- Picture quality is best when you sit directly in front of the projector screen.
- The projector can be used for both front projection, rear projection and ceiling projection applications. As default factory setting, the projector has been set up for front projection. You can change to rear or ceiling projection via the 'Mirror' function in the 'Setup' menu.
- For more information on the projection properties of the projector, check the Projection Assistant application on the Cd-rom.

Switching on the projector



- 1 Insert the mains lead into the projector's Mains inlet socket and connect it to the wall socket.
 - The Standby indicator lights up red, the projector is now in the Standby mode.
- 2 Remove the lens cap.
- 3 Press the Standby button on projector or remote control to switch on the projector.
 - The Standby indicator starts blinking green, the projector is now warming up.
 - When the projection lamp is on, the Standby indicator lights up green after the start-up screen appeared for several seconds.
- 4 Press the Standby button *twice* to switch the projector back into the Standby mode.
 - The Standby Warning screen will appear for 20 seconds.
 - The projector will now go into Standby mode.
- 5 To switch off the mains supply completely, disconnect the mains lead.

PHILIPS

Warning

If the projector is switched off you have to wait 1 minute before you can switch on the projector again.

Press stand-by key again to confirm.
Press OK key to remove this warning.

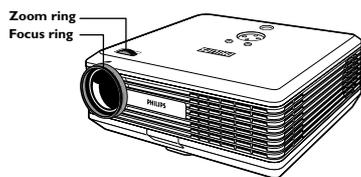
Notes

- Save energy! Please put the projector in the Standby position if you are not going to use the projector for more than 15 minutes.
- When no signal inputs are detected for 15 minutes, the projector automatically switches to Standby (Auto Standby). This setting can be changed in the Features menu
- Before disconnecting the mains lead, make sure that the cooling fan has stopped (about 1 minute after the projector has been switched to Standby).

3. Set up

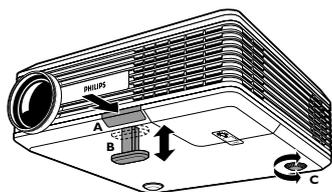


Adjusting the focus and size of the image



- Use the Zoom ring to adjust the size of the image.
- Use the Focus ring to adjust the focus of the image.

Adjusting the vertical and horizontal angle of the projector



To raise the projector

- 1 Press the Elevator button (A).
- 2 Raise the projector to the desired display angle, then release the button to lock the elevator foot (B) into position.
- 3 Use the horizontal adjuster (C) to fine-tune the display angle.

To lower the projector

- 1 Press the Elevator button (A).
- 2 Lower the projector to the desired display angle, then release the button to lock the elevator foot (B) into position.
- 3 Use the horizontal adjuster (C) to fine-tune the display angle.

Keystone correction



If projector and screen are not properly placed, the picture will be distorted, producing a keystone image (picture top width larger than picture bottom width or vice versa). When a keystone image occurs the 4:3 ratio will still be guaranteed. This is especially important when the projector is being used together with an 'intelligent whiteboard'.

'Keystone correction' allows you to correct picture distortion of the vertical keystone type by internal scaling.

- Use Keystone ▽ to widen the image.
- Use Keystone ▲ to narrow the image.

This correction function is also accessible through the 'Keystone' option in the 'Setup' menu of the On Screen Display (OSD) menu.

Moving/transporting the projector

Preparation

- 1 Press the Standby button *twice* to put the projector in Power/Standby.
 - The Standby indicator lights up red.
- 2 Wait until the cooling fan has stopped (about 1 minute after the projector has been put in Standby) and disconnect the mains lead and all other cables.
- 3 Put the lens cap back in place to prevent dust, dirt or other contamination from harming or damaging the front of the projector lens when moving the projector.

Never place the projector on the side where the connections are located.

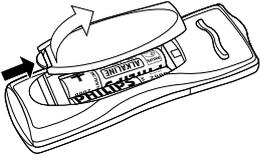
Moving/transporting the projector

The projector contains many glass and precision parts. If you need to transport the projector, please follow these packing instructions to prevent accidental damage to the projector.

- When you are hand-carrying the projector, be sure to use a carrying case like the softbag, supplied.
- When shipping the projector, use the original packaging material if possible. If you do not have the original packaging, use equivalent materials, placing plenty of cushioning around the projector.
- When transporting the projector as freight or checked luggage, first put it in the softbag supplied, then pack it in a firm box, using cushioning around the case.

3. Set up

Inserting the batteries in the remote control



- 1 Push and slide the lid in the direction of the arrow.
- 2 Install two Alkaline batteries as indicated inside the battery compartment.
- 3 Replace the lid and snap it into place.

Note *The maximum range of the remote control is approximately 7 m (± 25 feet).*

General information

Computer input

The computer input is suitable for both Apple Macintosh computers (Power Book and Power Mac) as well as for IBM compatible PCs. The projector is Microsoft (R), Windows (R) 95/98/ME/2000/XP compatible and accepts input signals from all computers that meet following specifications:

- Multi scan VGA-SXGA
- Horizontal scan rate: 15-100 kHz
- Vertical refresh rate: 43-100 Hz
- Bandwidth: 140 MHz
- Display Data Channel DDC: 2B

Analog (VGA) connection

The data (VGA) output of IBM compatible PCs can be connected directly to the Data in socket of the projector using the VESA M1-A to VGA/USB cable supplied. When connecting the projector to a Macintosh computer equipped with a 2 row, 15 pin connector a VGA/MAC adaptor (available at your PC store) is required. If your computer is equipped with a 3 row connector no adaptor is needed.

Digital (DVI) connection

The Data in socket also allows digital connection to your computer, resulting in the highest possible picture quality. For this an optional VGA/DVI adaptor is required.

USB connection (Universal Serial Bus)

The VESA M1-A to VGA/USB cable supplied, allows you to connect the projector to computers equipped with a USB interface, resulting in real hot plug and play presentation.

Mouse control:

By connecting the projector to the USB (downstream) port of the computer, the mouse function on the Remote Control automatically gets installed.

You can now manipulate the mouse cursor on the computer and on the screen, using Cursor Control on the remote control. The Mouse Left/Right keys on the remote control function as Left and Right mouse keys of your pc.

Theft deterrence

The SecurityMax™ application, supplied on the CD-ROM, allows you take a number of precautions against unauthorized use of your projector. Once the application is installed, you can, for example, set your own code protected personal start-up screen and shutdown timer which make theft unattractive to any potential thief. You only need to run the Security Max™ software on the pc that is connected to your projector via the Data in socket. For this see the 'Security Max' user guide on the CD-ROM.

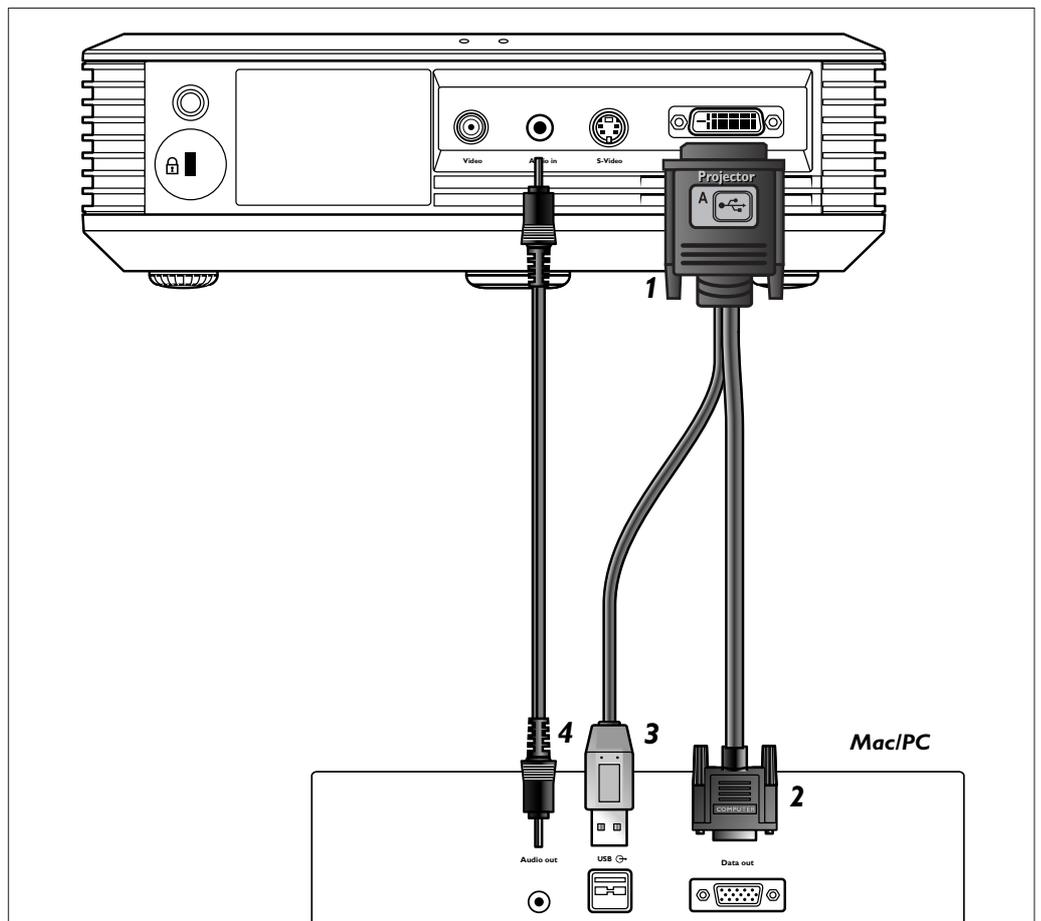
Note *Based on the specific hardware and software configuration available, Apple Macintosh computer users could experience incomplete or erratic USB -functionality. These problems are not related to the performance of your projector.*

Video input

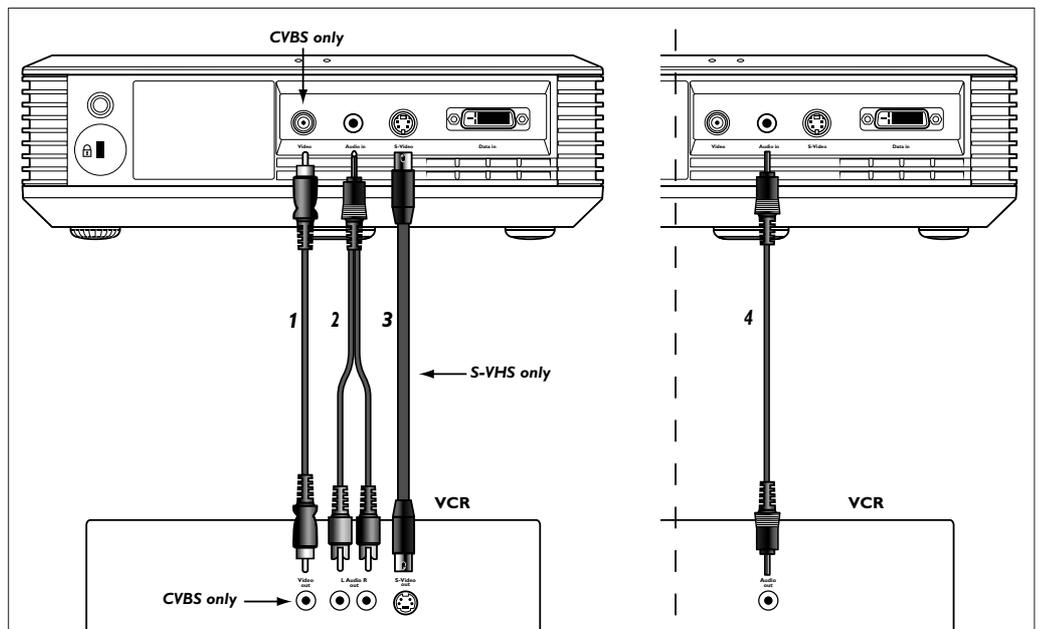
The projector accepts the input signal of all major video formats, including NTSC 3.58, 4.43, PAL B, G, D, H, I, N, M, SECAM and HDTV (480i/P, 576P, 720P, 1080i) signals. The projector will recognize these standards and adapt to them automatically. With the 'Picture format' feature you can select one of five picture format options 4:3, 16:9, letter box, pan & scan or 4:3 original screen.

CAUTION

Always switch off projector and external equipment before making any connections.



- PC/Macintosh**
- 1** Connect connector **1** of the VESA M1-A to VGA/USB cable supplied, to the Data in socket of your projector.
 - 2** Connect connector **2**, to the Data (out) socket of the computer.
 - 3** Connect the USB connector (**3**) to the USB (downstream) socket of the computer:
 - You can now manipulate the mouse cursor on the computer and on the screen, using Cursor Control on the remote control. When using the USB connection, make sure Windows 98, Windows ME, Windows 2000 or Windows XP is installed on the computer.
 - The display settings of the computer will be changed to fit the capability of the projector.
 - If required you can connect the Audio out socket of the computer to the Audio in socket of the projector.
For this, use the Audio minijack to minijack cable (**4**) supplied.
 - Audio information from the Computer will then be played via the projector speaker.
 - When switching on, *first* switch on the projector and *then* the PC.



CVBS (Video)

- 1 Connect the Video (out) socket of a VCR, Laser Disc player, video camera or TV to the Video (in) socket of the projector.
For this, use the Composite video cable **(1)** supplied.
- 2 Connect the Audio out L/R sockets of the VCR, Laser Disc player, video camera or TV to the Audio in socket of the projector.
For this, use the Audio minijack to RCA cable **(2)** supplied.

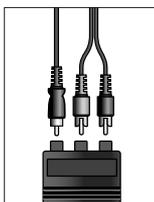
S-VHS (S-Video)

- 1 Connect the S-Video (out) socket of a S-VHS video recorder, Laser Disc player, video camera or TV to the S-Video (in) socket of the projector.
For this, use the S-video cable **(3)** supplied.
- 2 Connect the Audio out L/R sockets of the S-VHS video recorder, Laser Disc player, video camera or TV to the Audio in socket of the projector.
For this, use the Audio minijack to RCA cable **(2)** supplied.

If your video equipment has only a single audio output:

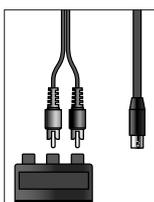
- Connect the Audio out socket of the video equipment to the Audio in socket of the projector, using the Audio minijack to minijack cable **(4)** supplied

Scart connection



Scart adapter

(not for USA version)



Scart adapter

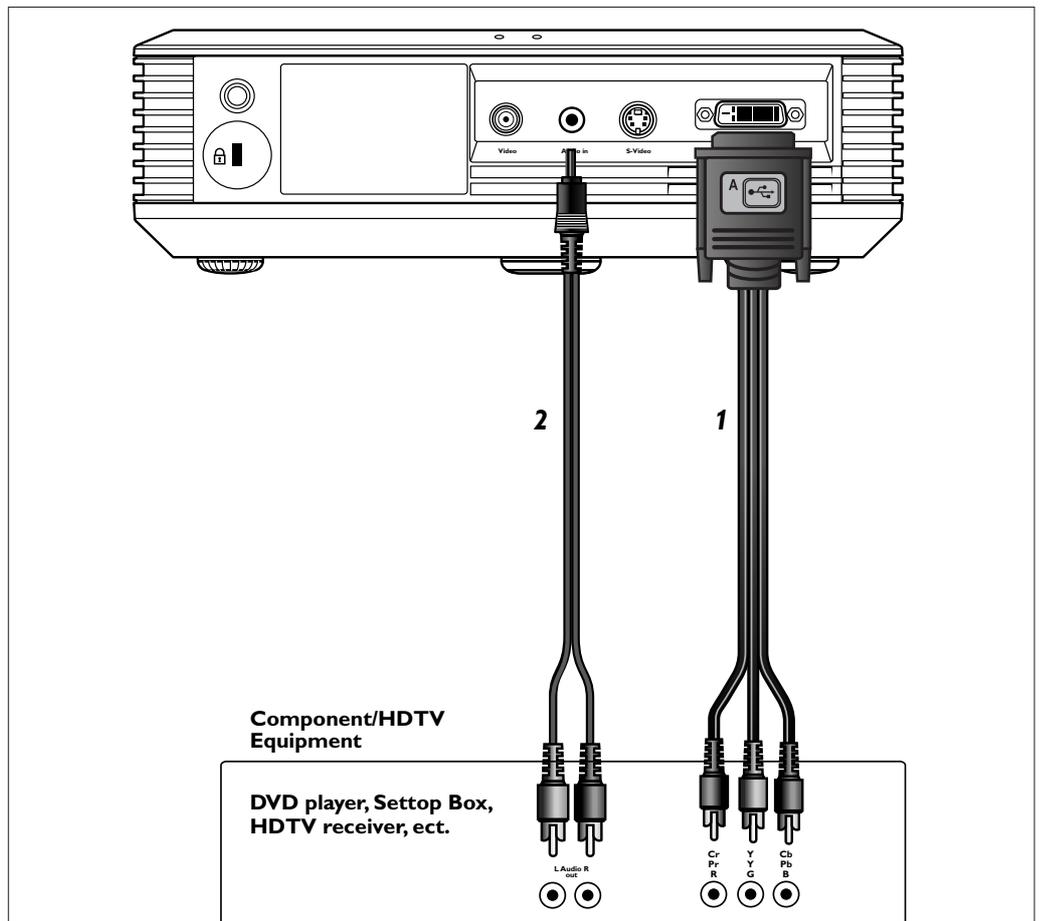
(not for USA version)

CVBS (Video)

- 1 Connect an optional Scart/RCA Audio Video adapter to the Scart connector of the VCR, Laser Disc player, video camera or TV.
- 2 Plug the Composite video cable supplied into both the adapter and the Video (in) socket of the projector.
- 3 Plug the Audio minijack to RCA cable supplied into both the adapter and the Audio in socket of the projector.

S-VHS (S-Video)

- 1 Plug the S-video cable supplied into the S-Video (out) socket of the VCR and the S-Video (in) socket of the projector.
- 2 Connect an optional Scart/RCA Audio Video adapter to the Scart connector of the VCR, Laser Disc player, video camera or TV.
- 3 Plug the Audio minijack to RCA cable supplied into both the adapter and the Audio in socket of the projector.

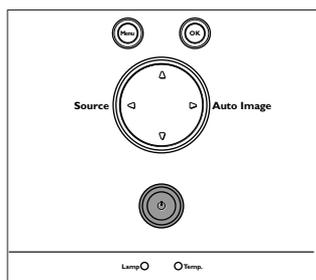


Component/HDTV YPbPr, YCbCr

- 1** Connect an optional RCA/M1 component video adaptor cable **(1)** to the Data in socket of the projector.
 - 2** Connect the plugs at the other end of the cable to the appropriate output sockets of your Component- or HDTV-video equipment (Pr,Y, Pb / Cr,Y, Cb).
- If required you can connect the Audio out L/R sockets of the Component- or HDTV-video equipment to the Audio in socket of the projector:
For this, use the Audio minijack to RCA cable **(2)** supplied.
 - Audio information from the Component- or HDTV-video equipment will be played via the projector speaker.

5. Operation

General



Note

- 1 Press the Standby button to switch on the projector.
 - The Standby indicator starts blinking green.

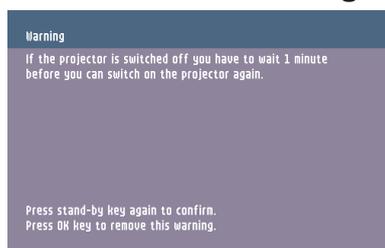
- When the projection lamp is on, the Standby indicator lights up green after the start-up screen appeared for several seconds.

- 2 Select the required source (Auto, Computer, DVI, YPbPr, YCbCr, RGBS, S-Video or Video) by pressing the Source button.

When only one input source is connected, this source will automatically be selected (Auto Source). When more input sources are connected, the source with the highest priority will be selected (Computer, DVI, YPbPr, YCbCr, RGBS, S-Video or Video). Source selection can be changed in the 'Setup' menu.

- 3 Switch on the computer or start video playback.
 - A feedback message appears on the screen, indicating the selected source.

Messages



General explanation

Messages are displayed in the centre of the screen. The problem is described in the header of the message display. Suggestion(s) to solve the problem are displayed in the lower part of the message display. These messages cannot be suppressed.

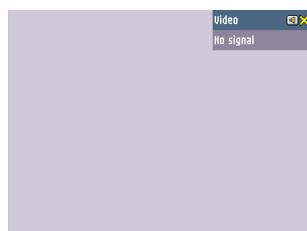
Feedback messages

Feedback messages are displayed in the top right corner of the screen. They are displayed when:

- a signal comes up or goes down;
- when an input source is changed;
- when A/V Mute is activated.

Some examples

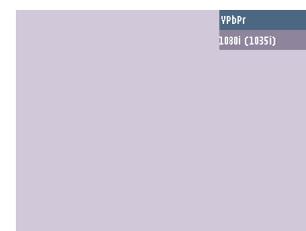
These messages will only be displayed when the menu option 'Feedback' is set to 'On' in the 'Setup' menu. All messages will be removed automatically after 4 seconds.



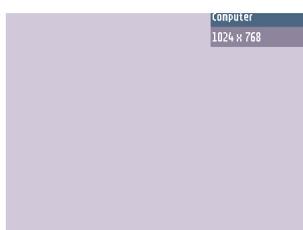
Video selected as source,



S-Video selected as source,



YcbCr selected as

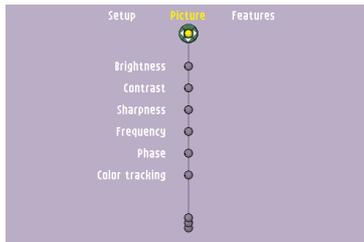
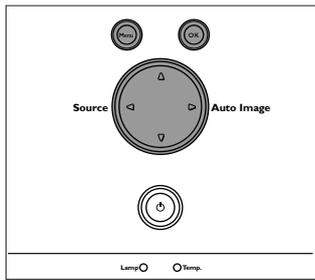


Computer selected as source

5. Operation

On Screen Display Menu >

Menu tree



All video and data adjustments and settings (except A/V Mute) are done via *On Screen Displays* and with help of Menu, OK and Cursor Control on the projector or the remote control. The projector is set to standard settings at the factory. However, you can adjust these settings to suit your own preferences.

The projector menu screens allow you to adjust the various projector settings (for both Computer and Video). For explanation and operation see next pages.

COMPUTER MODE

Main menu	Sub menu	Setting
Picture	Brightness	0 100
	Contrast	0 100
	Sharpness	0 4
	Frequency	500 2000
	Phase	0 31
	Color tracking	0 5
	Color temperature	5000K, 6500K, 7300K, 9300K
	Auto sync	OK

VIDEO/S-VIDEO MODE

Main menu	Sub menu	Setting
Picture	Brightness	0 100
	Contrast	0 100
	Sharpness	0 4
	Colour	0 100
	Tint	- 50 50
	Colour tracking	0 5
	Colour temperature	5000K, 6500K, 7300K, 9300K

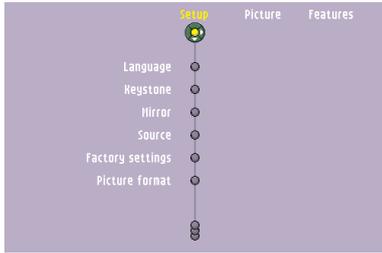


GENERAL ADJUSTMENTS/SETTINGS

Main menu	Sub menu	Setting
Features	PIP	Off On
	PIP location	OK
	Zoom	1x, 4x, 9x, 16x
	Freeze	Off On
	Child lock	Off On
	Sleep timer	0 min. 180 min.

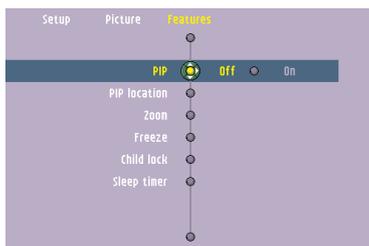
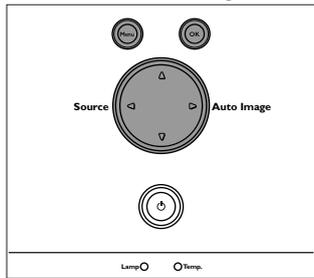


Menu tree **GENERAL ADJUSTMENTS/SETTINGS**



Main menu	Sub menu	Setting
Setup	Language	Eng.
		Deu.
		Esp.
		Fra.
		Ita.
		Ned.
		Por.
		Chi.
	Keystone	- 50 50
	Mirror	AB BA VB AV
	Source	Auto
		Computer
		DVI
		YPbPr
		YCbCr
RGBS		
Factory settings	OK	
	Picture format	4:3
		16:9
		Letter box
		Pan & Scan
Volume	0 23	
System information	Description	
Feedback	Off On	
Lamp counter	OK	
Smart Dimmer	Off On	

General explanation



1 Press Menu.

– The menu bar appears on the screen.

2 Use Cursor Control left and/or right to move the cursor to any other item in the menu bar.

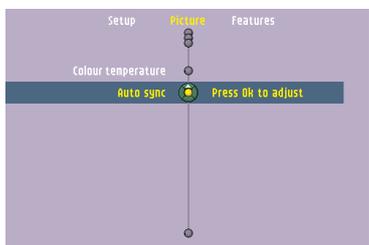
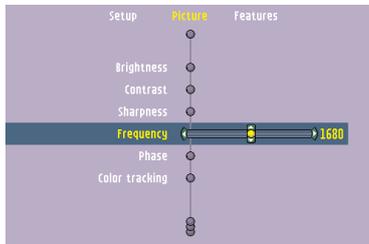
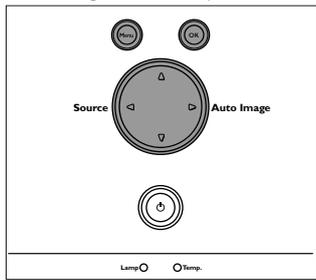
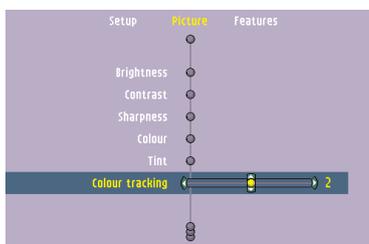
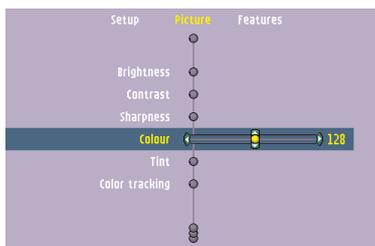
3 Use Cursor Control Down to enter sub menu.

4 Select the sub menu item to be adjusted using Cursor Control up and/or down. When more items are available than can be shown in one screen, move the cursor down to go to the next list of items. When you want to go back to the first list, move the cursor up.

5 Adjust the selected item, using Cursor Control left and/or right.

6 Select the next item to be adjusted in the sub menu and adjust as described above.

7 Press Menu to close the On Screen Display.

Computer adjustments**Video series adjustments**

For computer signal input, the following 'Picture' adjustments can be made.

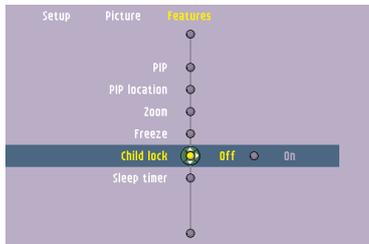
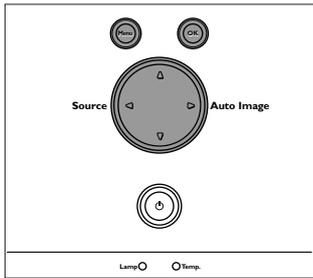
Picture adjustments

- Press Menu and select 'Picture' in the menu bar. The following 'Picture' adjustments can now be made according to the instructions under 'General explanation':
 - *Brightness*
adjusts brightness of the displayed picture;
 - *Contrast*
adjusts the overall contrast intensity;
 - *Sharpness*
controls the contour impression of the picture:
 - *Frequency*
changes the display data frequency to match the frequency of your computer's graphic card. If you experience a vertical flickering bar, use this function to make an adjustment.
 - *Phase*
minimises picture imperfections. When connecting the projector to your PC for the first time, be sure to adjust the phase control for optimal readability of the projected text;
 - *Colour tracking*
adjusts the degamma settings. Adjustment of the setting will change the colour performance of the display;
 - *Colour Temperature*
adjusts the colour temperature. The higher the temperature the cooler the screen will look. The lower the temperature the warmer the screen will look.
 - *Auto sync*
automatically adjusts frequency, tracking, horizontal and vertical position. With most signal sources, Auto sync provides the best results.

For YPbPr, YCbCr, RGBS, S-Video or Video signal input, the following 'Picture' adjustments can be made.

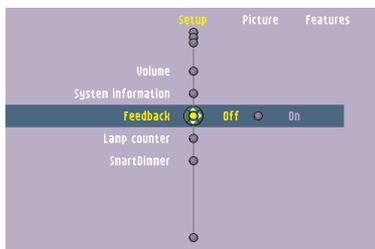
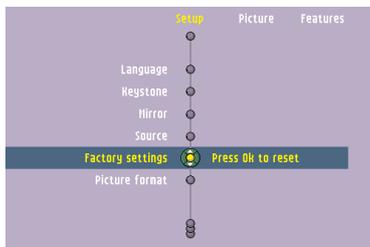
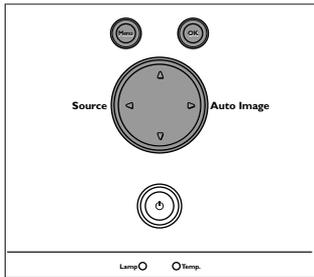
Picture adjustments

- Press Menu and select 'Picture' in the menu bar. The following 'Picture' adjustments can now be made according to the instructions under 'General explanation':
 - *Brightness*
adjusts brightness of the displayed picture;
 - *Contrast*
adjusts the overall contrast intensity;
 - *Sharpness*
controls the contour impression of the picture:
 - *Colour*
adjusts a video image from black and white to fully saturated colour;
 - *Tint*
adjusts the colour balance of red and green;
 - *Colour tracking*
adjusts the degamma settings. Adjustment of the setting will change the colour performance of the display;
 - *Colour Temperature*
adjusts the colour temperature. The higher the temperature the cooler the screen will look. The lower the temperature the warmer the screen will look.

General adjustments**Features adjustments**

Press Menu and select 'Features' in the menu bar. The following 'Features' adjustments can now be made according to the instructions under 'General explanation':

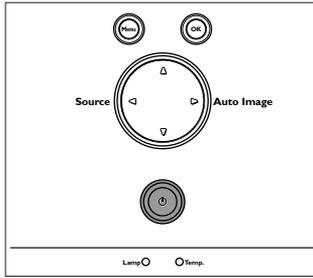
- *PIP (Picture In Picture)*
switches the PIP window on and off. PIP enables projection from a second source in the currently projected computer or component video picture. The currently projected computer or component video picture can also be used as input source.
Please note that the second source can only be displayed in the PIP window when the main screen is displaying a computer or component video source (or no source at all). Any invalid combination will result in a black PIP window for the main screen has priority.
- *PIP location*
selects the location of the PIP window in the main screen;
- *Zoom*
enlarges a part of the picture. Use Corsor control to select the zoom centre and select the required zoom factor: 1 x, 4 x, 9 x or 16 x.
- *Freeze*
captures a moving picture (still picture);
- *Child lock*
de-activates the control keypad of the projector;
- *Sleep timer*
switches Sleep timer mode off or selects the delay time after which the projector automatically switches to Standby.



Setup adjustments

- Press Menu and select Setup in the menu bar. The following Setup adjustments can now be made according to the instructions under 'General explanation':
 - *Language*
selects the required menu language;
 - *Keystone*
corrects picture distortion of the vertical keystone type by internal scaling;
 - *Mirror*
mirrors the picture for use of the projector in various positions with respect to the user(s) and the projection screen;
 - *Source*
selects the current projection source (Auto, Computer, DVI, YPbPr, YCbCr, RGBS, S-Video or Video). If you select 'Auto', the projector will always automatically search for available input signals.
 - *Factory settings*
resets all user settings to the default factory settings;
 - *Picture Format*
selects one of five picture format options (4:3, 16:9, letter box, pan & scan and 4:3 original).
Due to the scaling of the image when the picture format is changed, it might be possible that a part of the actual image is missing at the top or the bottom of the screen. With Cursor Control you can adjust the position of the projected image upwards or downwards.
 - *Volume*
adjusts the sound level;
 - *System information*
the System Information sub menu contains an overview of the most relevant projector settings, including information on the hardware and software configuration;
 - *Feedback*
To suppress OSD messages. Warning or error messages however are never suppressed.
 - *Lamp counter*
To show the operating time of the lamp, which can be reset after a new lamp has been installed;
 - *SmartDimmer*
switches on the power saving mode by reducing the lamp power from 180W to 150W. When SmartDimmer is switched on (150W), the audible (fan) noise will be reduced and gray scales in the picture are optimized. When SmartDimmer is switched off (180W), peak brightness in the picture is obtained. Default setting for data and component sources (Data in) is Off; default setting for video sources (Video, S-Video) is On.

Cleaning Caution



Switch off and disconnect the projector before cleaning.

- 1 Press the Standby button *twice* to switch off the projector.
 - The Standby indicator starts lights up red.
- 2 Wait until the cooling fan has stopped (about 1 minute after the projector has been put in Standby) and disconnect the mains lead and all other cables.

Cleaning the cabinet

- When the cabinet is dusty, clean it by gently wiping with a soft cloth.
- A chamois leather slightly moistened with water is sufficient for cleaning the housing.
- Do not use cleaning agents as they may harm the housing.

Cleaning the lens

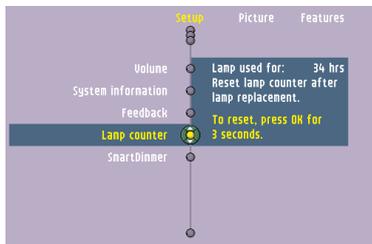
- When the lens is dirty or dusty, first blow the dust off and then gently wipe with a soft brush or lens cleaning paper. Never touch the lens with your fingers.
 - The lens is likely to become mouldy if left dirty.

Lamp

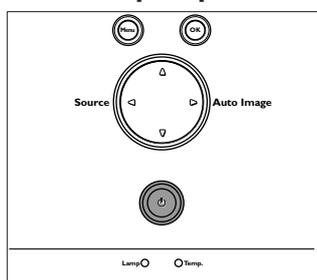
When operation time reaches the last 1400 hours of the average lamp life, the message 'Lamp life has almost exceeded' will be displayed on the screen. When operation time reaches 1500 hours, the message 'Lamp life has exceeded' will be displayed.

The lamp life remaining can be checked using the OSD menu.

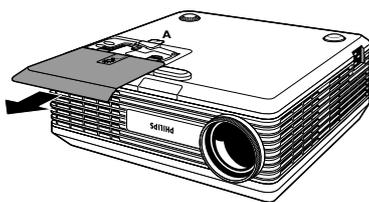
- 1 Press Menu.
- 2 Use Cursor Control to move the cursor to 'Setup'.
- 3 Use Cursor Control to select 'Lamp counter'.



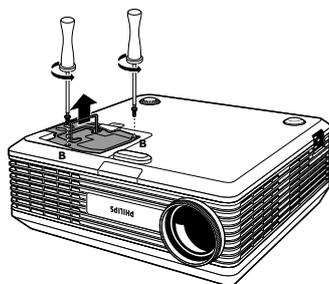
Lamp Replacement



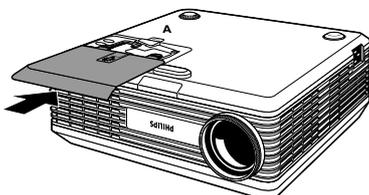
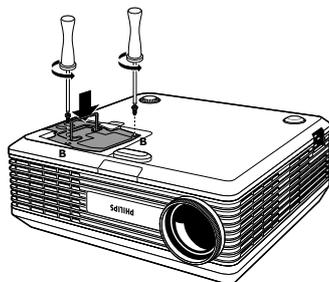
- 1 Switch off the projector and wait until the lamp has cooled down before disconnecting the projector. Remove the mains lead from both projector and wall socket.



- 2 Press tab A and remove the lamp door.

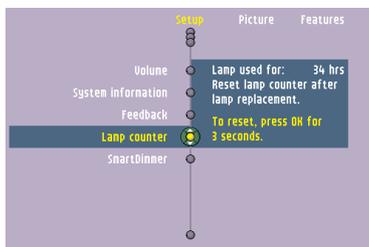
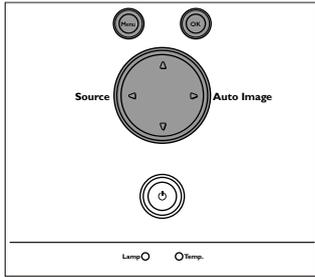


- 3 Unscrew the screws B.
- 4 Grasp the lamp holder handle and carefully pull the lamp holder out of the projector.
 - Do not tilt. If the inner tube is broken glass particles may fall out.
 - Keep lamp holder opening to your right. Do not touch lamp or point lamp holder opening at anyone.
- 5 Carefully remove the new lamp housing from its package.
 - Always use the same type of lamp: See 'Optional accessories' for the correct type of lamp for your projector.
 - Do not touch lamp or point lamp housing opening at anyone.
 - Do not drop, as the impact may cause the lamp to break.
- 6 Place the lamp holder in the guiding slots and insert into the lamp compartment.
- 7 Tighten screws B again.



- 8 Put the lamp door back in place and press tab A back in its original position.
- 9 Insert the mains lead into both the projector Mains inlet socket and the wall socket.
- 10 Press the Standby button to switch on the projector.
- 11 Reset the lamp life time (see 'Resetting the lamp life time').
- 12 Dispose of the old lamp in special chemical disposal bins.

Resetting the lamp life time



1 Press Menu.

– The menu bar appears on the screen.

2 Use cursor control to select 'Setup' in the menu bar.

3 Use cursor control to select 'Lamp counter' in the sub menu.

4 Press OK to reset the lamp counter.

5 If required, select another item you wish to adjust or press Menu to exit.

7. Troubleshooting



If a fault occurs, first check the points listed below before taking the projector for repair. If you are unable to remedy a problem by following these hints, consult your dealer or service organisation.

Warning

Under no circumstances should you try to repair the projector yourself as this could invalidate the guarantee.

Read as follows

Problem	
Image is not or incorrectly displayed	<ul style="list-style-type: none">– Possible cause• Solution
	General <ul style="list-style-type: none">– Mains lead is not correctly connected.<ul style="list-style-type: none">• Correctly connect mains lead.– Lamp holder cover is not closed correctly or the lamp holder is damaged.<ul style="list-style-type: none">• Close the cover correctly (see 'Lamp replacement' under 'Maintenance').– Signal cable not correctly connected.<ul style="list-style-type: none">• Connect signal cable correctly.– The projector is in Off position.<ul style="list-style-type: none">• Press Standby to switch on the projector.– A/V Mute active.<ul style="list-style-type: none">• Cancel A/V Mute.
	In Video series mode <ul style="list-style-type: none">– Keystoning is applied on a high resolution component signal.<ul style="list-style-type: none">• Decrease keystone until the image is correctly displayed. For this use the 'Keystone' option in the 'Setup' menu.
	In Data mode <ul style="list-style-type: none">– Partial, scrolling or incorrectly displayed image.<ul style="list-style-type: none">• Use the 'Autosync' option in the 'Picture' menu.– Input resolution is too high (and keystone correction is applied).<ul style="list-style-type: none">• If you wish to keep the keystone correction, decrease the input resolution until the image is correctly displayed. For this, refer to the User Guide or support information of the computer.• If you wish to keep the input resolution as it is, decrease keystone until the image is correctly displayed. For this, use 'Keystone correction' option in the 'Settings' menu.– Input resolution is too high (and no keystone correction is applied).<ul style="list-style-type: none">• Decrease the input resolution until the image is correctly displayed. For this, refer to the User Guide or support information of the computer.

Poor colour

- Adjust 'Brightness', 'Contrast' or 'Colour tracking' (see 'Picture adjustment' under 'Operation' - 'On Screen Display Menu').
 - Reset all projector settings in the 'Setup' menu ('Factory settings').
-

Image is blurred

- *Image is not focused.*
 - Adjust focus ring.
 - *Distance between projector and screen is not correct.*
 - Adjust the distance between the projector and the screen.
 - *Signal cable is not correctly connected.*
 - Connect signal cable correctly.
-

Picture rolls

- *Signal cable is not correctly connected.*
 - Connect signal cable correctly.
-

No sound

- *Audio cable is not correctly connected.*
 - Connect audio cable correctly.
 - *Volume is not adjusted properly.*
 - Adjust volume.
 - *(A/V-)Mute active.*
 - Cancel (A/V-)Mute.
-

The projector does not react to commands from the remote control

- *Distance is too great.*
 - Reduce distance.
 - *Batteries are exhausted.*
 - Replace batteries (see 'Inserting the batteries in the remote control').
 - *IR sensor is obstructed.*
 - Remove obstacle.
-

Indicators

Lamp indicator

- Red blinking (0.5sec. On, 0.5sec. Off): lamp start has failed.
 - Disconnect projector from the mains. Reconnect and restart. If this does not solve the problem, replace the lamp. See 'Maintenance.'
- Red blinking (1sec. On, 1sec. Off): the fans are locked.
 - The projector will automatically shut down. If this problem persists, contact service center.

Temp. (temperature) indicator

- Lights up red: temperature error.
 - Disconnect projector from the mains. Reconnect and restart. If this does not solve the problem, contact your service centre.

Standby indicator (text on Standby button/ring around Standby button)

- Lights up green: Power on mode.
- Green blinking: warming up in Power on mode.
- Lights up red: Standby mode.
- Red blinking: cooling down in Power off mode.

No reaction when pressing keys on local keyboard or remote control

- *'Childlock' active.*
- Switch off 'Childlock' in the 'Features' menu.

The mouse cursor does not react when using the cursor control on the remote control

- Check that the batteries are installed properly in the remote control and/or replace the batteries.
 - Check that the projector receives the signals from the remote control.
 - Check that the USB cable has been properly connected.
 - Check that both projector and computer are switched on.
 - Unplug the USB cable and then reconnect.
 - Connect another USB device (mouse, scanner; webcam, etc.) and see if it works. If it does not work there is a problem with the computer.
 - Also refer to the User Guide or support information of the computer.
-
- *'Windows' did not manage to install the driver correctly. In this case the 'Device manager' will contain a category 'Other devices.'*
 - Disconnect the projector.
 - Remove all items listed under 'Other devices' in the 'Device manager'.
 - Restart the computer.
 - Reconnect the projector.