

miroWINTOOLS

The miroWINTOOLS are software tools which allow you, among other things, to configure your graphics system to your liking.

miro offers you the following miroWINTOOLS*:



[miroTINT CONTROL](#)



[miroSIZE CALIBRATION](#)



[miroSCOPE](#)



[miroPINBOARD](#)



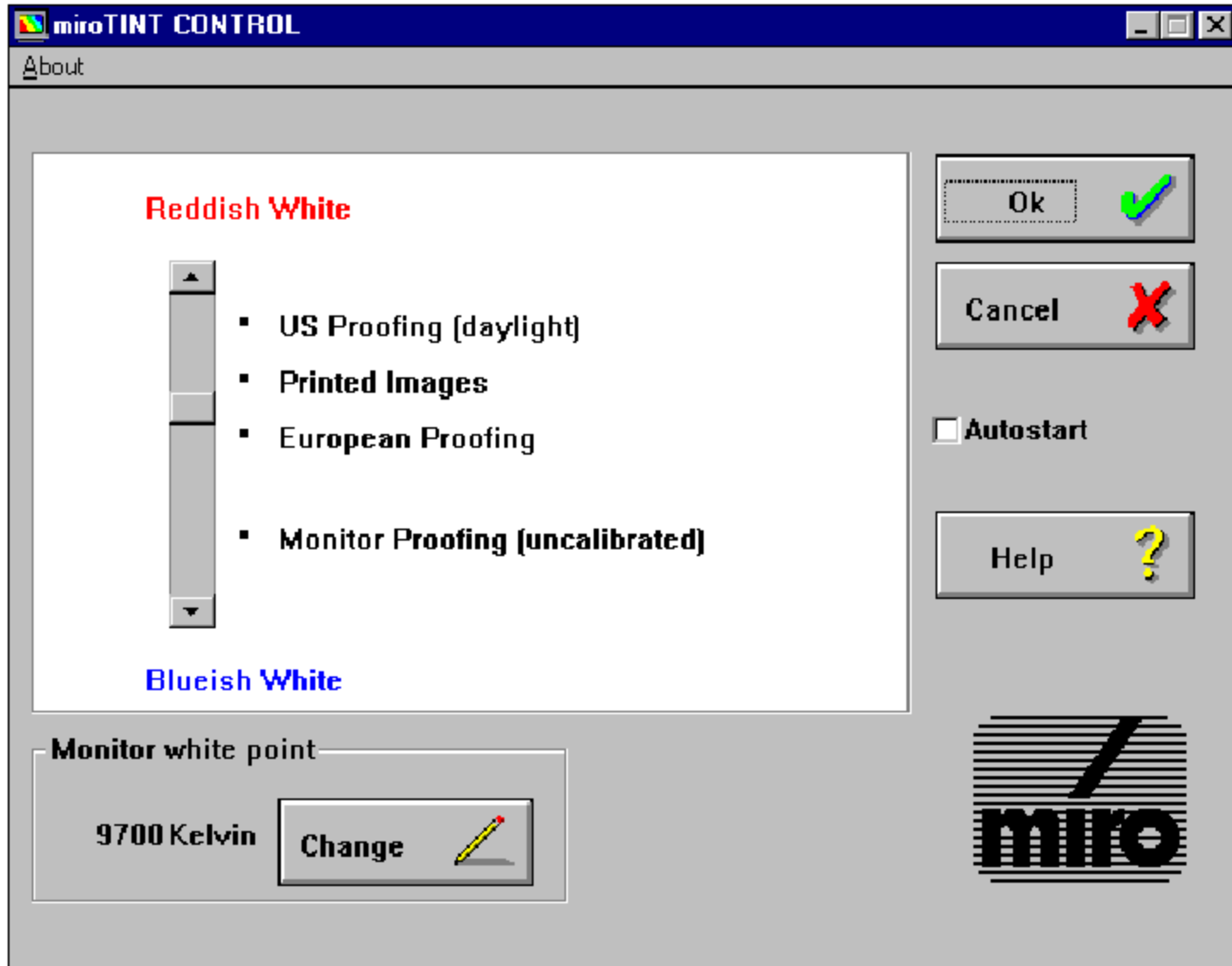
[miroSCREEN-Adjust](#)

* Some miroWINTOOLS are not available for all miro graphics boards.



miroTINT CONTROL

miroTINT CONTROL changes the monitor's tint.



miroTINT CONTROL offers the following settings:

[Slider](#)

[Presettings](#)

[Color temperature of the monitor's white point](#)

[Change](#)

[Further buttons](#)

[Explanations](#)

Slider

The slider adjusts the monitor's tint continuously (color temperature) between a bluish and a reddish white.

Presettings

The presettings listed on the right hand side of the slider are reference points for controlling the tint and can be directly clicked. The selected presetting appears green.

US Proofing (Daylight) corresponds to alternate daylight.

Printed Images corresponds to the color temperature used in the photo reproduction of color images.

European Proofing corresponds to the color temperature often used for European color proofing boxes.

Monitor Proofing corresponds to the color temperature computer monitors are usually adjusted to, thus allowing for a brilliant color representation.

Color temperature of the monitor's white point

Here the color temperature of the monitor's white point is given, which is usually factory-set to 9300 K. If your monitor has another white point click *Change*.

Change

After clicking Change a dialog box appears. Here you can specify the monitor's white point to a value between 5500 K and 10.000 K. To quit this dialog box click *OK*.

Further buttons

OK

Clicking *OK*, shrinks miroTINT CONTROL to an icon. The current settings remain active.

Cancel

By clicking *Cancel* the last setting made in miroTINT CONTROL is cancelled. miroTINT CONTROL is shrunked to an icon.

Autostart

When checking the Autostart check box the settings are activated every time Windows is started.

System menu

miroTINT CONTROL can be closed using the system menu (top left window corner). When closing the tool the settings are not active anymore.

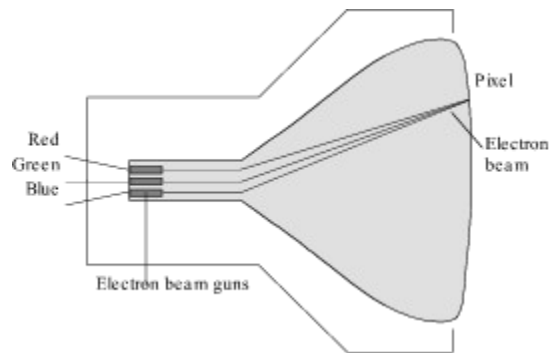
The miroTINT CONTROL settings are only active as long as the tool is opened.

Explanations

How is a color image created on your monitor?

The inside of a color monitor CRT is coated with a fluorescent coating consisting of different phosphor substances (red, green, and blue).

Three electron guns generate electron beams controlling one color (red, green, and blue). The electron beams scan the screen line by line, when hitting the phosphors they emit light.



Switching the electron beam on and off creates a dot matrix which creates a monitor image. The individual dots are called pixels (=picture element). Each pixel has a red, a green, and a blue phosphor, a so-called triple. If all three phosphors are illuminated with equal intensity, the pixel appears white.

[What is the white point?](#)

[What is color temperature?](#)

What is the white point?

White is created when the red, green and blue pixel areas are illuminated with equal intensity.

Due to internal monitor tolerances and the phosphor used for the picture tube a pure »white« input signal of the monitor ($R = G = B = 100\%$) does not result in a white image. The light intensity of blue may for example be weaker as the intensity of red and white thus appears reddish.

Also the spectral components of daylight are not constant. At different places on earth and at different daytimes the daylight may be more toward red or toward blue.

Instead of describing the monitor's white point using the intensities of the primary colors (red, green and blue) (e.g. $R = G = 100\%$; $B = 95\%$), the color shift is described as color temperature. Thus the white point is described as single number without specifying all components individually.

What is color temperature?

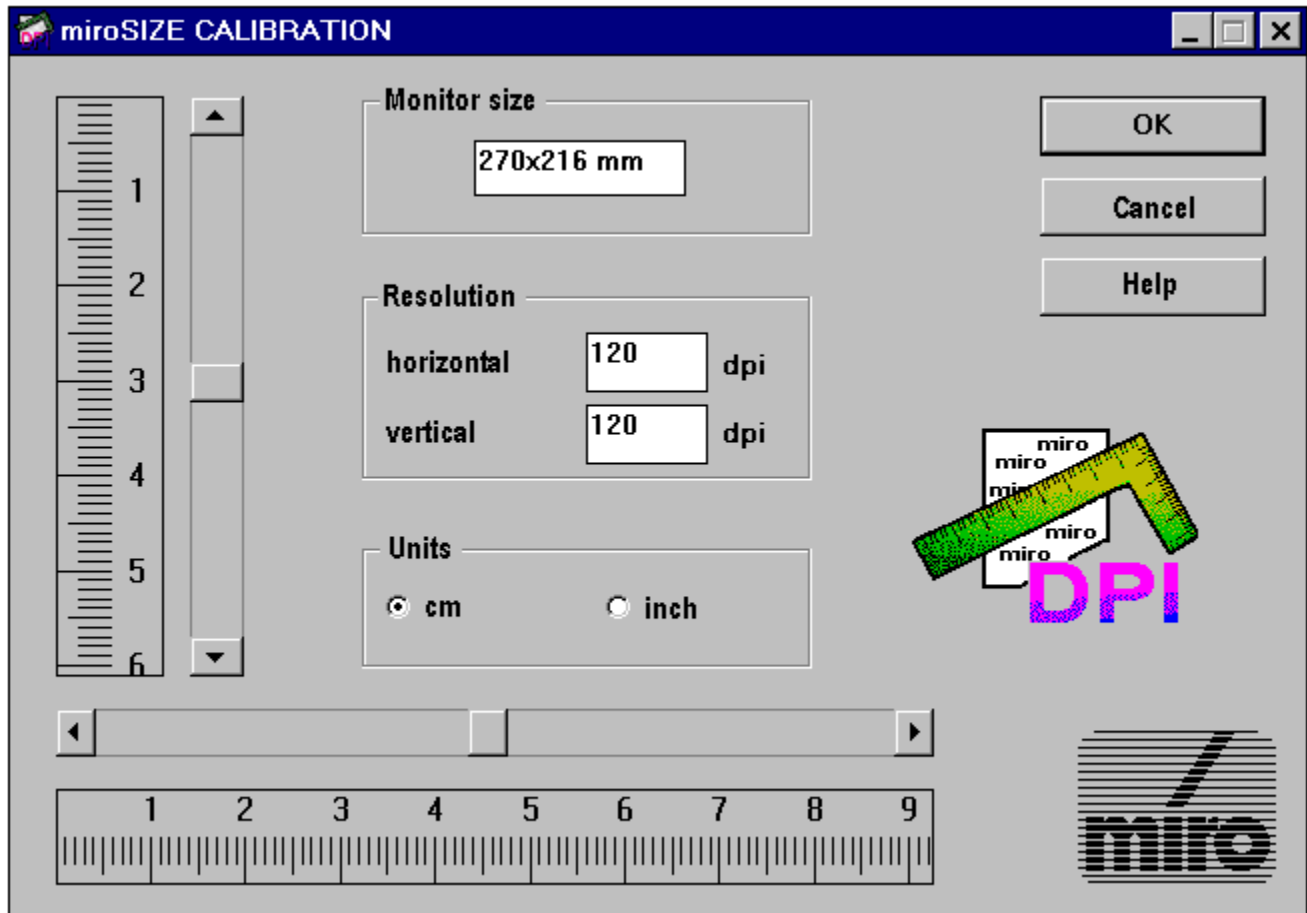
The term color temperature describes the relation between a color of a body and its temperature (for example white-hot iron is hotter than red-hot iron). The concept of color temperature is based on a «black radiator», the color of which changes in proportion to its temperature. The color temperature is given in Kelvins. A high color temperature results in a color more towards blue, while a low color temperature results in a color more towards red.



DPI miroSIZE CALIBRATION

miroSIZE CALIBRATION adjusts the dots per inch (DPI) on your monitor so that one inch or one centimeter on the monitor matches exactly one inch or one centimeter on the print-out.

miroSIZE CALIBRATION is especially useful when a true-to-scale display is necessary: DTP and CAD applications.



To adjust the DPI number on your monitor, do the following:

- Select the desired measurement unit (inch or centimeter).
- Hold a normal ruler beside the ruler in the dialog box to the left of the horizontal sliders. Adjust the ruler in the dialog box using the scroll bars so that it matches your ruler.
- Repeat this for the vertical ruler.
- Click OK.

While you adjust the rulers the values under *Resolution* and *Monitor size* change automatically.

The miroSIZE CALIBRATION settings are only valid for applications which are started after using miroSIZE CALIBRATION.

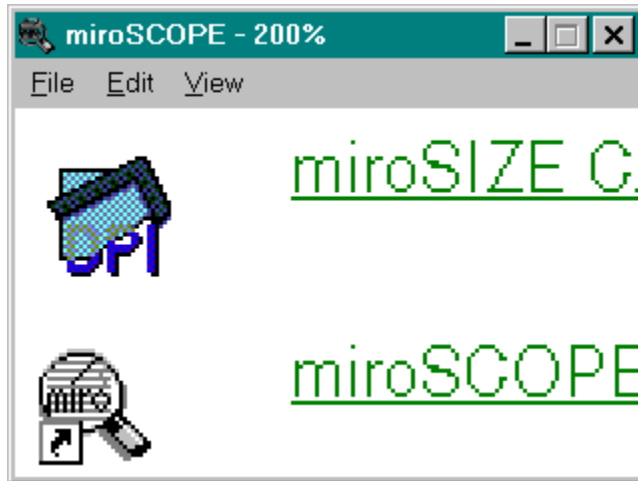
To activate the settings each time after Windows has been started:

- Drag the miroSIZE CALIBRATION icon into the Windows-Start-up group. In the Program Manager under *Properties...*, select *Run Minimized* for the miroSIZE CALIBRATION icon.

If the resolution has been changed, miroSIZE CALIBRATION has to be readjusted.

miroSCOPE

miroSCOPE is a kind of magnifying glass. miroSCOPE enlarges the area around the current cursor position. This function is especially useful if you want to view an enlarged section of an image when editing drawings and images. In addition, you can copy a zoomed detail into the Windows Clipboard. During the Windows driver installation the miroSCOPE program has been copied to the hard disk automatically and has been located in the miroWINTOOLS Program group.



If you move the cursor out of the miroSCOPE window, the miroSCOPE window shows the current cursor position. If the cursor is moved within the miroSCOPE window, the mouse cursor changes its shape and becomes a magnifying glass. Clicking the left mouse key magnifies the window content, clicking the right mouse key makes the windows contents smaller.

Using miroSCOPE

miroSCOPE offers the following menu items:

[File](#)

[Edit](#)

[View](#)

File

Save under

Saves the current miroSCOPE window content in the bitmap format.

Close

Closes miroSCOPE.

Edit

Copy

Copies the current window content into the Windows Clipboard. From the Clipboard you can paste the window content into other programs, e.g. Paintbrush.

Freeze

If you move the mouse cursor outside the miroSCOPE window, the window content moves constantly because it always shows the area around the current cursor position. If you want to avoid this,

- click the *Edit* menu and the *Freeze* command or press the <Strg> + <F> hotkey.

The miroSCOPE window content will not change until you click again on *Edit* and *Freeze* or if you press the <Strg> + <F> key combination again.

⇒ You can only enable the *Freeze* command, when miroSCOPE is enabled and located on top of all windows. When another program is active, you can use the [hotkey](#) instead of the *Freeze* command to freeze the area around the cursor in the miroSCOPE window.

Refresh

If you enabled the *Refresh* command, the *Refresh* command is available in the *Edit* menu. Usually, when you enabled the *Freeze* command the miroSCOPE window content does not change. As soon as you enable *Refresh*, the miroSCOPE window will display the current area around the cursor. The window content will not change until you select *Refresh* again or if you disable the *Freeze* command.

The hotkey for the *Refresh* command is <Ctrl> + <R>.

View

Configuration

Refresh rate

Adjusts how often the zoomed miroSCOPE window content will be refreshed. The minimum value is 50 milliseconds which refreshes the image 20 times per seconds. The maximum value is 2,000 milliseconds. We recommend the default value 100 milliseconds.

Zoom factor

Adjusts the zoom factor. The higher the zoom factor, the more will the area around the current cursor position be enlarged. The minimum zoom factor is 50, the maximum is 1,600.

Hotkey

Selects the hotkey you can use for freezing the current part of the desktop in the miroSCOPE window. To disable the zoom function, use the same hotkey. To disable the hotkey function, click *Off*.

Saving window position

If you enable the *Store window position* command, miroSCOPE will be located at exactly the position on the screen where you have saved it before.

Always on top

When enabling *Always on top* the miroSCOPE window will be always on top even if another application is active. When *Always on top* is enabled, the *Freeze* command from the [Edit](#) menu is always available.



miroPINBOARD

miroPINBOARD is a tool which allows to change the monitor resolution under Windows «on line» without having to restart Windows. For the miroTWINFACE mode (dual-screen configuration) miroPINBOARD offers special options.

miroPINBOARD consists of a control panel which has a different number of buttons depending on the system configuration. You can configure the miroPINBOARD control panel to your liking which means you can add or remove buttons. This control panel can be moved on the screen.

The following explains the functions of the individual buttons and the sub-menus.



[Configuration](#)



[Desktop size](#)



[Screen size](#) (single-screen configuration only)



[miroTWINFACE](#) (miroTWINFACE mode only)



[Fixing](#)



[Zoom](#)



[Video](#)



[TV](#)

Configuration

When clicking the first button a menu with the following menu items opens:

Configure...

When clicking *Configure...* a dialog box opens which allows to configure miroPINBOARD. The *Configuration* dialog box contains the following file cards:

[Information](#)

[Button order](#)

[Center](#)

[General](#)

[Resolution](#)

[Hotkeys](#)

[TV mode](#)

Always on top

When activation Always on top miroPINBOARD is always on top of all windows.

Help...

Opens Help.

Close

Closes miroPINBOARD.

miroTWINFACE mode only:

PINBOARD left

Positions miroPINBOARD on the left screen.

PINBOARD right

Positions miroPINBOARD on the right screen.

If you use the mouse cursor to point to the miroPINBOARD title bar and you click the left mouse key, the *Configuration* menu appears.

All miroPINBOARD *Configuration* dialog boxes include the *Help*, *OK*, *Cancel* and *Apply* buttons.

Help

Help on this dialog box.

OK

Uses the new settings are used and quits the dialog box.

Cancel

Rejects all settings and closes the dialog box.

Apply

Accepts the current settings. The dialog box remains open so that you can do further settings.

The Information tab

Displays information on the system.

Copy Info

Copies information to the Clipboard.

If you insert this information into a word processing program, you have all data of your system configuration available which you can give the miro support in case of problems.

The Button order tab

Changes the order of the buttons in the miroPINBOARD control panel.

Available functions

The list box contains all available functions and the corresponding buttons.

If you want to add an icon to the control panel, select the desired button, press the left mouse button and drag it to the desired position of the control panel. If you want to remove the button from the control panel, keep the left mouse button pressed and drag the button into the *Available functions* list box.

Visibility options for miroPINBOARD

Don't show disabled command buttons

If you enable the control panel, the buttons which are not available for the configuration, are not displayed.

The Center tab

Specifies the position of dialog boxes and windows.

Window positioning

Center dialog boxes automatically to screen

Centers dialog boxes automatically. Therefore they are always located in the visible screen area.

Center centered windows automatically

Centers program windows automatically. Therefore they are always located in the visible screen area.

Maximize only to visible screen

Zooms up windows only up to the visible screen area.

The General tab

General configuration of miroPINBOARD.

Save after closing

All selected elements will be enabled when starting miroPINBOARD the next time.

miroPINBOARD caption

Selecting another caption for the miroPINBOARD title bar. You will see either the desktop size or the screen resolution.

General options

Show bubble help

Shows the function of a button or an option when being touched by the mouse cursor.

Automatic start with Windows

Enables miroPINBOARD every time Windows is started. The WIN.INI file includes the corresponding entry. If the button is disabled, the entry is deleted from the WIN.INI file and the tool is not started automatically.

Current user:

Select a user-specific configuration.

The Resolution tab

New desktop resolution (*single-screen configuration only*)

Here you can set a customized resolution. Use the sliders to adjust the horizontal (*Resolution X*) and the vertical resolution (*Resolution Y*). Customized resolutions are included in the list of resolutions which opens when clicking the *Desktop size* button. This list can contain up to ten customized resolutions.

Lock X

Disables the x slider when changing the vertical resolution.

Valid screen resolutions

Lists all available screen resolutions.

Correct screen size to desktop size if possible

Enable this control panel if you want to change the desktop resolution and if you want the screen size to adapt to this change.

The Hotkeys tab

Allocates a hotkey or a key combination to all miroPINBOARD functions.

Function & Key

Select the desired hotkey in the first list box. You can also select key combinations using the Alt, Shift and Ctrl key.

In the list boxes at the bottom, select the miroPINBOARD function(s) and the parameters you want to enable with the hotkeys.

Add function

Adds functions, parameters, hotkeys and key combinations to the list.

Clear

Deletes the selected function in the list and disables the hotkey or the key combination.

Change

To change the parameters and hotkeys or key combinations, select the corresponding function in the list and click *Change*.

The TV mode tab

Selects the TV mode.

Desired TV timing

If a video encoder, a TV set and/or a VCR is connected to your micro graphics board, you can use this option to switch between the [TV overscan mode](#) and the [TV underscan mode](#).

Desired TV mode

Select the PAL (Europe) or the NTSC (USA) TV standard.

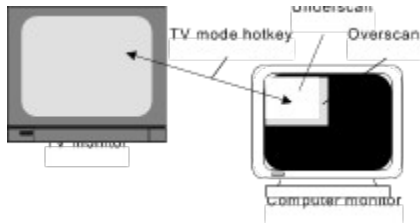
Disable security window

When clicking the TV button, you will be requested if a TV set is connected to your graphics board. If this is not the case, there might be no image after clicking the TV button.

Clicking this option disables this request.

TV overscan/TV underscan

On the TV monitor only a section of the computer image can be displayed. In the overscan mode (768 x 567 pixels) a larger image section is displayed than in the underscan mode (640 x 480 pixels). In the illustration below the computer monitor has a resolution of 1408 x 1024 pixels.



Some micro graphics boards allow to move the image section by moving the mouse cursor towards the screen border of the TV monitor.

The Desktop size button

When clicking this button, a menu appears from which you can choose standard or customized resolutions (see «The Configuration button», *Resolution*). The resolution changes immediately without having to restart Windows.

The Screen size button (single-screen configuration only)

Here you can set an image section, that means you can set a smaller resolution than the resolution currently selected. The actual resolution is then available as [virtual desktop](#) which can be moved by moving the cursor toward the image margin.

Virtual desktop

The virtual desktop is the space which can be used for the Windows desktop.

The minimum virtual desktop equals the current monitor resolution. The maximum desktop is determined by the video memory. How much video memory is left on your graphics board to display a virtual desktop depends on how many colors have been selected and which resolution has been set.

To move on the virtual desktop, just move the mouse cursor toward the screen border. Moving the mouse cursor toward the right border moves the desktop to the left. Moving the mouse cursor down moves the desktop upwards etc.

The miroTWINFACE button (miroTWINFACE mode only)

When clicking this buttons a menu with the following menu items opens:

Use both sides

Both screens are used.

Use only left

All windows appear on the left screen.

Use only right

All windows appear on the right screen.

Use cursor side

Windows which are opened or moved appear on the screen where the cursor is.

The Fixing button

Fixes the workspace selected using the *Screen size* button. The virtual workspace remains. If you want to move the image section, press the button again and the workspace is no longer fixed.

The Bit depth switching button

When clicking this buttons a menu appears. This menu allows you to change the number of colors without having to restart Windows.

Use this menu to select another bit depth.

The Zoom button

Enlarges the workspace by a factor of 2. Clicking this button again, switches the zoom function off again.

miroCRYSTAL DIP

If you have a *miroCRYSTAL DIP* board installed in your computer, use this button to call a menu.

Use the *Increase zoom* button to enlarge the monitor image with a zoom factor of up to 4 or use the *Decrease zoom* button to make the image smaller.

The Video button

Enables a new timing which is especially suited for the display of video.

This button operates as a toggle that is you can switch the best video display mode on or off. If it is enabled, the button shows a video camera. If it is disabled, it shows a monitor.

The TV button

Enables a TV compatible timing.

When clicking this button, you are requested if a TV monitor is connected. You can disable this request (see «The Configuration button», The TV mode tab).

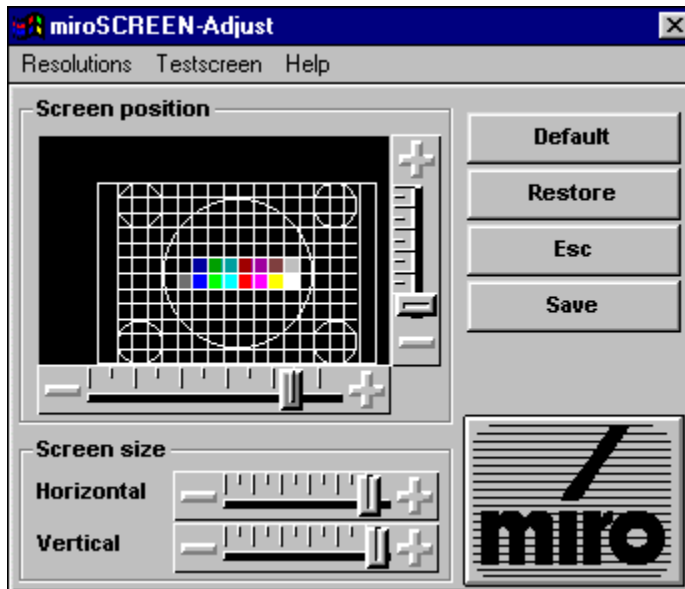


miroSCREEN-Adjust

The miroSCREEN-Adjust tool adjusts the monitor image size and position. In the miroTWINFACE operation the monitor image can be adjusted on both monitors.

Using miroSCREEN-Adjust

After having started the program the following dialog box appears on the testscreen background.



The following sections explain the menu items and buttons:

[Resolutions](#)

[Testscreen](#)

[Screen position](#)

[Screen size](#)

[Further buttons](#)

Resolutions

Here you can set different resolutions for miroSCREEN-Adjust. You can only select lower resolutions than the current Windows resolution, the Windows resolution does not change and is restored when closing the tool. This option allows to adjust the monitor image for different Windows resolutions.

Testscreen

This menu item allows to select whether the background testscreen is displayed or not (*Hide*), you can also select the colors for the *Background* and the *Lines* and you can choose the palette for the bar (*Color bar, Rainbow, Gray scales*) and the start palette which miroSCREEN-Adjust loads by default each time it is started.

Screen position

Use the testscreen to set the screen position. Move the testscreen within the dialog box while holding down the left mouse key or use corresponding slider.

Screen size

Use the sliders to adjust the screen height and width.

With miroCRYSTAL 3D/TV and miroVIDEO 22SD/TV changes in the image size will not be saved by miroSCREEN-Adjust.

Further buttons

Default

When clicking on the Default button, the default setting is enabled.

Restore

When clicking the Restore button the setting that has been saved last for the current resolution is enabled.

Esc

Closes miroSCREEN-Adjust without saving the current settings.

Save

When clicking the Save button the current setting for the current resolution is saved.

