

## miroWINTOOLS

The miroWINTOOLS are software tools which allow you, among other things, to configure your graphics system to your liking: Using the miroWINTOOLS, you can select your monitor, enable the Powersave function, set the resolution and the number of colors, fine-adjust the monitor's tint, the DPI number, and the image position, set up a virtual desktop, and configure the graphics driver individually.

The miroWINTOOLS also offer zoom functions which you can use to zoom into parts of the monitor image and to scale videos although they have a fixed window size.

miro offers you the following miroWINTOOLS\*:



[miroSUPERSCREEN](#)

[miroPOWERSAVE](#)



[miroMONITOR SELECT \(DDC\)](#)



[miroTINT CONTROL](#)



[miroSIZE CALIBRATION](#)



[miroSCOPE](#)



[miroPINBOARD](#)



[miroSCREEN-Adjust](#)



[miroDRIVER-Control](#)

Some miroWINTOOLS are not available for all miro graphics boards.

## **miroSUPERSCREEN**

**miroSUPERSCREEN** configures the Windows desktop for miro graphics boards. miroSUPERSCREEN is a permanent part of the miro driver installation. However, you can also start it individually anytime to do a separate configuration.

**miroSUPERSCREEN Desktop Configuration** configures the resolution, number of colors, selects the screen fonts, and enables miroTWINFACE.

⇒ Not all miro graphics boards can utilize the complete range of miroSUPERSCREEN functions. The functions which are not supported are dimmed and cannot be selected.

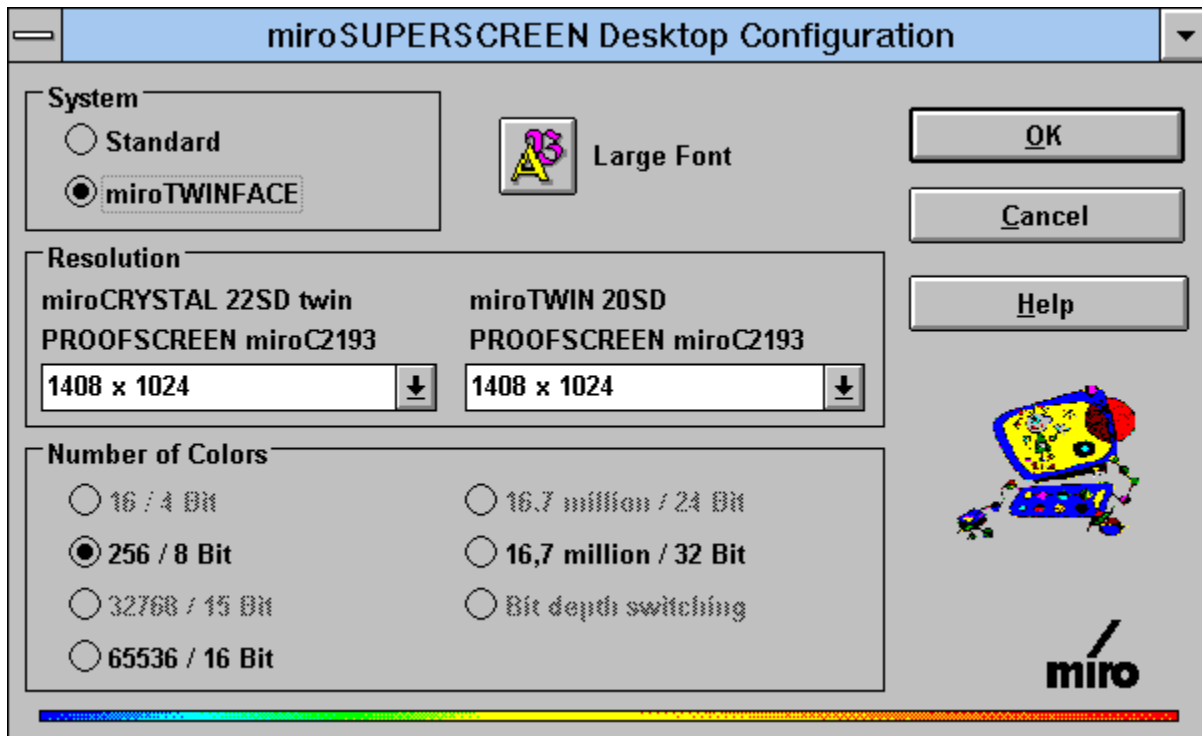
### Installation

miroSUPERSCREEN is installed with the mirowin disks. After successfully completing the installation the icon for miroSUPERSCREEN appears in the miroWINTOOLS Program Group.

### miroSUPERSCREEN Desktop Configuration

To activate the miroSUPERSCREEN Desktop Configuration, double-click the icon.

The miroSUPERSCREEN window appears:



The window is subdivided into three groups.

[System](#)

[Resolution](#)

[Number of colors](#)

In addition, the [Large Fonts](#) button is available.

## **Large Fonts**

Here you can change the screen fonts for the Windows desktop. Usually high-resolution graphics systems use 8514/A fonts (*Large font*). In case you want to use smaller fonts, you can select VGA fonts (*Small font*).

To select the *Small font* option, VGA fonts must first be installed. This is always the case, if Windows has been installed once for VGA. If the *Large font* option cannot be selected, select a high-resolution video driver using Windows Setup. Then, you will be requested to install 8514/A fonts with the help of the Windows installation disks.

## **System**

Enter here what kind of Windows system you want to set up. The set-up determines which settings miroSUPERSCREEN has to offer.

Choose one of these set-ups:

### *Standard*

Windows for a single-screen solution.

### *miroTWINFACE*

Here you can specify, if you use a dual-screen or a multiscreen configuration and if you want to use both monitors to create one Windows workspace. This is only possible if you have installed the suitable miro graphics board/s and the suitable Windows drivers.

The virtual desktop is the space which can be used for the Windows desktop. The minimum virtual desktop equals the current monitor resolution. The virtual memory is determined by the video memory.

## **Resolution**

Here you can specify the resolution for the monitor connected to the installed board. The listbox shows the current resolution. The resolutions for which the Windows drivers supplied by miro have been installed are available.

## **Number of Colors**

Here you can change the number of colors for your Windows desktop. The current number of colors is marked. Depending on the resolution the options which cannot be selected are dimmed.

⇒ When changing the resolution and the number of colors in the single-screen mode, always set the resolution before setting the number of colors. In the miroTWINFACE mode, proceed the other way round.



## miroPOWERSAVE

**miroPOWERSAVE** is a VESA compatible screen saver that teamed with the right monitor also saves energy. The screen saver kicks in after the computer has been inactive for a predetermined amount of time. This is what you need to use miroPOWERSAVE:

### **miro graphics board**

late-model miro graphics board (except for miroCRYSTAL 8S)

### **monitor**

a monitor with power management that meets VESA standards

⇒ To avoid damages to your monitor hardware make sure your monitor has power management according to VESA standards. For more information check your monitor manual!

The miroPOWERSAVE program was automatically copied to your hard disk during the installation of miroWINTOOLS and added to the list of available screen savers in the *Desktop* control panel. You also have to enable the check box *miroPOWERSAVE* in the [miroMONITOR SELECT](#) program which was called up immediately following the installation.

You have to do the installation via the miroMONITOR SELECT program; otherwise miroPOWERSAVE will not function properly with Windows and your settings will not be executed correctly!

[Functionality](#)

[Configuration](#)

[Returning to Windows](#)

## Functionality

The miro screen saver works in three steps:

1. **Standby mode:**

After a predetermined amount of time the screen saver time, Windows activates miroPOWERSAVE, the screen turns black and moving text appears.

2. **Suspend mode:**

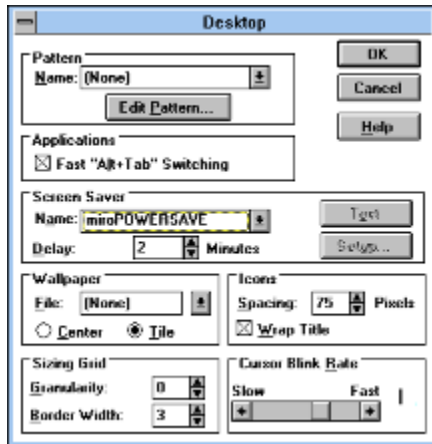
If you haven't moved the mouse or made an entry via the keyboard for a while, the monitor will switch from Standby to Suspend mode the length of the Suspend mode was determined with the miroPOWERSAVE setup. In Suspend mode your monitor's power consumption sinks below 30 W.

3. **Off mode:**

Again, if you haven't moved the mouse or made an entry via the keyboard, the monitor will switch from Suspend to Off mode and your monitor's power consumption sinks below 5 W. Once your screen saver is in Off mode it can take several seconds before a picture reappears on the screen. Depending on your type of monitor there are two ways of returning to Windows after the screen saver switched to Off mode.

## Configuration

The screen saver *miroPOWERSAVE* can be configured in the Windows control panel dialog box *Desktop*. After the installation *miroPOWERSAVE* is automatically listed in the list box of the group *Screen saver*.



- You can change the inactivity time after which the screen saver is to start; default is 3 minutes:
- Click either arrow in *Delay*.
- Likewise, you can change the inactivity time for Standby and Suspend mode:  
In the dialog box *Desktop* confirm the button *Setup*.
- Enter the number of minutes you want in the dialog box *miroPOWERSAVE Desktop*.

Standby-time: Choose between 2 and 20 minutes before the screen saver switches to Suspend mode; default is 2 minutes.

Suspend-time: Choose between 30 and 999 minutes before the screen saver switches to Off mode; default is 50 minutes.

The default values are VESA standard conform. If you enter a different value you get a message alerting you to the fact that this value is not VESA conform.

## Returning to Windows

Here you have two choices, depending on your type of monitor:

1. With some monitors such as miroC2185 you have to turn the power switch off, and then back on to get back to Windows after Off mode.
2. With other monitors all you need to do is move the mouse or press a key and you are back to Windows.

If you have a monitor that, after Off mode, has to be switched off and on manually, activate the check box *Monitor1* in the dialog box *miroPOWERSAVE Setup*.

## miroMONITOR SELECT (DDC)

miroMONITOR SELECT allows to select your monitor.

During the Windows driver installation miroMONITOR SELECT has been copied to the hard disk and located in the miroWINTOOLS Program Group. If you have selected the miro Windows drivers for the miroTWINFACE mode, miroMONITOR SELECT offers the suitable extended options.

### Starting miroMONITOR SELECT

- Double-click the miroMONITOR SELECT icon to start the tool.

The miroMONITOR SELECT dialog box appears.



### Settings

*Hardware* shows the installed miro graphics board.

#### *Monitor*

To change the selected monitor:

- Open the Monitor type list box and select your monitor.  
If your monitor is not in the list, select the monitor with the next smaller horizontal scan frequency.  
⇒ An incorrect selection can seriously damage your monitor. If you are in doubt, refer to your monitor documentation.
- Activate **miroPOWERSAVE** if your monitor support this tool.  
⇒ Only use [miroPOWERSAVE](#), if your monitor has a power saving function complying with the VESA specification!

#### *Auto detect*

If your monitor has a [DDC1](#) or a [DDC2B](#) function, miroMONITOR SELECT automatically detects your monitor.

#### *Info*

The *Info* button shows a list of all available resolutions and frequencies.

## **VESA DDC**

DDC (**D**isplay **D**ata **C**hannel) is a standardized interface between the monitor and the computer defined by the VESA (**V**ideo **E**lectronic **S**tandard **A**ssociation) which makes the flow of information between both hardware components possible.

The data the monitor transfers contain information about format, timings and other characteristics allow the micro graphics board to configure itself for the highest resolution possible.



## miroTINT CONTROL

miroTINT CONTROL changes the monitor's tint.

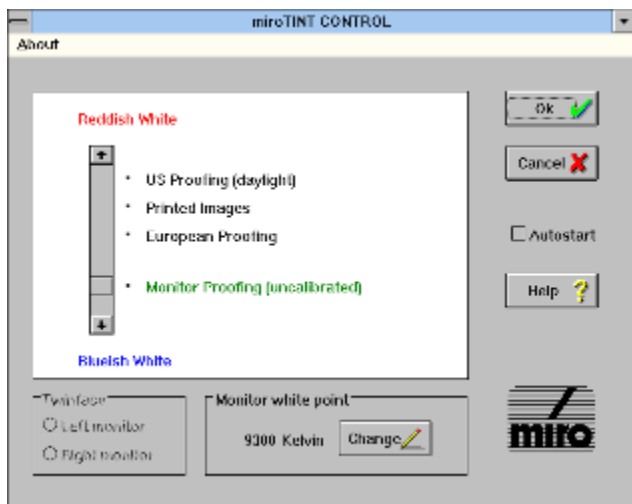
### [Explanations](#)

#### Starting miroTINT CONTROL

To start miroTINT CONTROL ...

- a) ... click miroTINT CONTROL under *Settings* in miroSUPERSCREEN.  
or
- b) ... click the miroTINT CONTROL icon in the Windows Program Group miroWINTOOLS.

Then, the miroTINT CONTROL dialog box appears.



miroTINT CONTROL offers the following settings:

[Slider](#)

[Presettings](#)

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

[Twinface](#)

[Change](#)

[OK](#)

[Cancel](#)

[Autostart](#)

[System menu](#)

[Help](#)



## **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*.

## **Twinface**

Selects whether you want to adjust left or the right monitor.

## **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*.

**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.

## **Help**

*Help* starts the miroSCREEN-Adjust help function.

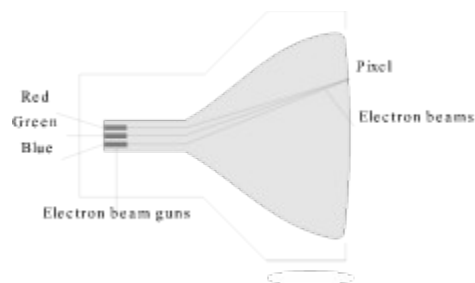
## Explanations

### 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.



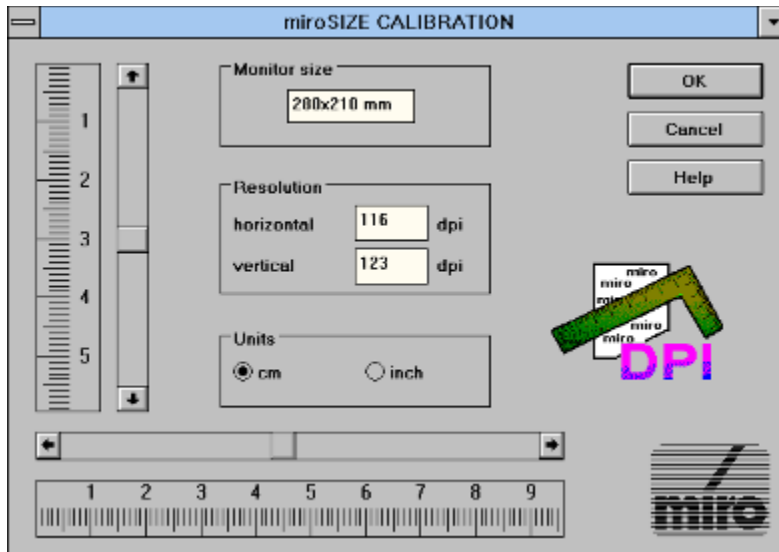
## miroSIZE CALIBRATION

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.

### Starting miroSIZE CALIBRATION

- Click the miroSIZE CALIBRATION icon in the miroWINTOOLS Program Group.

The miroSIZE CALIBRATION dialog box appears.



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

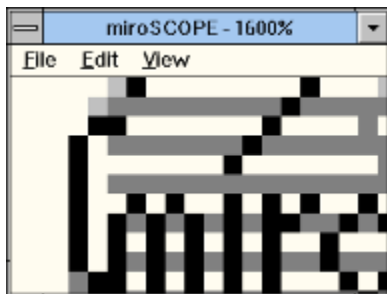
miroSCOPE is a kind of magnifying glass. miroSCOPE enlarges the area around the current cursor position. This function is especially useful if you want to view an enlarged section of an image when editing drawings and images. In addition, you can copy a zoomed detail into the Windows Clipboard.

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.

### Starting miroSCOPE

- Double-click the icon to start miroSCOPE.

The miroSCOPE window appears.



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 *Freezw* 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.



## miroSCREEN-Adjust

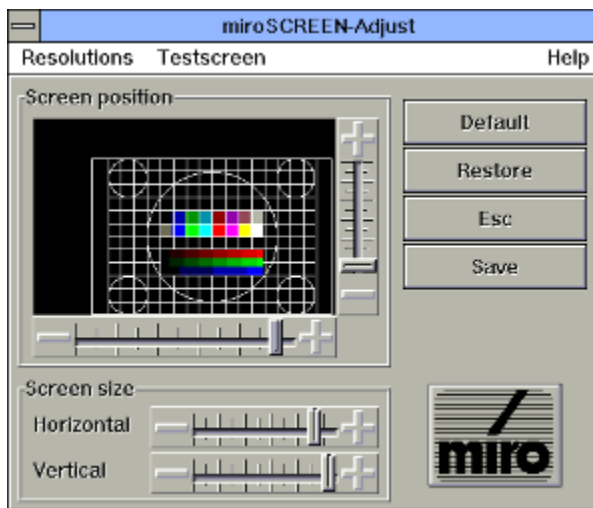
The miroSCREEN-Adjust tool adjusts the monitor image size and position. In the miroTWINFACE operation the monitor image can be adjusted on both monitors.

### Starting miroSCREEN-Adjust

- To start miroSCREEN-Adjust, double-click the miroSCREEN-Adjust icon in the miroWINTOOLS program group.

### 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:

[Screen](#)

[Testscreen](#)

[Help](#)

[Screen position](#)

[Screen size](#)

[Default](#)

[Restore](#)

[Esc](#)

[Save](#)

## **Screen**

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.

## **Help**

Gives you information about how to operate the tool.

## **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.

## **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.



## miroDRIVER-Control

miroDRIVER-Control allows you to easily configure the parameters for miro drivers. You do not have to modify the parameters manually in the SYSTEM.INI file. miroDRIVER-Control is located in the miroWINTOOLS program group.

The miroDRIVER-Control dialog window offers three settings:



### *Maximum Performance*

The default setting *Maximum Performance* selects the maximum speed for all Windows driver parameters.

### *Individual Settings*

Use *Individual Settings* to configure the Windows drivers individually. For each parameter you can configure you will find information in the *Individual Settings* dialog window. Changes are automatically entered in the SYSTEM.INI file.

### *Maximum Compatibility*

If problems occur with the *Maximum Performance* setting, select the *Maximum Compatibility* setting. The *Maximum Compatibility* option sets especially critical parameters to values which ensure the maximum compatibility with your system.

For more information on miroDRIVER-Control, refer to the Readme file.



## 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. During the mirowin installation miroPINBOARD has been copied to the *miroWINTOOLS* program group.

### Starting miroPINBOARD

miroPINBOARD starts automatically every time Windows is started.

### Using miroPINBOARD

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.



The [Configuration](#) button



The [Task switcher](#) button



The [Desktop size](#) button



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



The [miroTWINFACE](#) button (miroTWINFACE mode only)



The [Fixing](#) button



The [Bit depth](#) button



The Zoom button



The Video button



The TV button



## The Configuration button

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.

Only miroVIDEO 22SD mvp:

If you selected the Video button, you can also select the caption *Current timing and refresh rate*.

### **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 miro 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.



### *Overscan/Underscan*

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

**The Task switcher button**

Opens a menu showing you all running applications. To switch to another application, click the name of this application.

### **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).

