

## Change Cursor Help Index

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## How to Register

*Change Cursor* is distributed as shareware. It is **not** free. You may use it for 21 days before registering.

To register, send \$15 (US) to the following address: James Seidman

1374 Pritchett Court  
Los Altos, CA  
94024-5711

By registering, you support shareware development and affordable Windows software. Your contribution will help promote future shareware development and the development of future versions of this program, to overcome the limitations of this version.

(Please note that this program has not been crippled in any way, nor does it "nag" you to register. The author has too much respect for people to do that to a program.)

If you need to contact the author, you can write to the above address, or if you have access to electronic mail, you can write to one of these addresses: **INTERNET:**  
jseidman@jarthur.claremont.edu

**BITNET:** jseidman%jarthur@hmcvax  
**UUCP:** uunet!jarthur!jseidman

## Limitations of this Version

There are some limitations in this version of *Change Cursor*. Some of the major ones are: Only 32x32 pixel cursors are supported. This makes the program incompatible with some high-resolution displays.

The program only recognizes cursor files with a single cursor image in them. The standard format provides for multiple images in a file.

The editor needs advanced features, such as area fills, line draws, and undo ability.

The editor requires a color or gray-scale monitor to work effectively.

No keyboard support is provided. Editing of cursors can only be done with a mouse.

There is no clipboard support provided. These will be fixed in the next version of *Change Cursor* if the resources are made available by people registering the program.

## Getting Started

*Change Cursor* really performs two functions. First, it provides a cursor editor for you to design your own cursors. Second, it gives you a way to replace the normal arrow and hourglass cursors with your own.

The program provides a way for you to configure it so that it will remember which cursors you want to use and automatically load them every time you start Windows.

If you like this program, please register it so that the author can continue to develop this and other utilities.

## Editing Index

These are the topics dealing directly with editing and creating cursors. [Selecting Colors](#)

[Drawing](#)

[Seeing How the Cursor Will Look](#)

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## Selecting Colors

There are four colors available for drawing the cursor. Two of these are not colors in the normal sense, but really artifacts due to how the cursor is drawn.

Two of these colors, black and white, are self-explanatory. These colors will always appear the same way on any background. They will appear normally in the detail window.

The other colors are "screen" and "inverse." The screen color allows whatever is behind the cursor to show through. It appears blue in the detail window.

The inverse color will invert whatever color is on the screen behind it. The exact effect will depend on what kind of graphics adapter you have. The inverse color appears yellow in the detail window.

The right and left mouse buttons can correspond to different colors (see Drawing). You select the color by clicking on the appropriate button in the boxes between the detail window and preview window. The top set selects the color for the left button, and the bottom set selects for the right button.

## Drawing

Drawing is done in the detail window, which appears towards the left of the *Change Cursor* program window. It shows a blow-up of the cursor you are currently editing. It also shows the cursor's hotspot as a cross in one of the squares.

You can edit the cursor there by clicking on squares with the right or left mouse buttons. You can also click and drag to change a series of squares.

The colors which the buttons correspond to can be changed by the color selection. You can see how the cursor will look at any particular time by moving the cursor to the Preview Window.

## Previewing the Cursor

Since it may be difficult to see what the cursor will look like from looking at the detail window, you can see it actual-size against a variety of backgrounds.

When you move the cursor to the preview window, which is at the *right side of Change Cursor* program window, it will change to the one you are editing. You can move it around the window to see what it looks like against the different backgrounds.

Note that if the cursor you are editing is blank, it will disappear in the preview window. To let you know the cursor is there, the border of the window will change color when the cursor is inside it.

## Setting the Hotspot

The hot spot defines where the cursor is actually pointing. It is shown in the detail window as a cross over one of the squares. This spot can be anywhere inside the 32x32 cursor area.

To set it, choose "Set hotspot" from the "Cursor" menu. Click on the detail window where you want the hotspot to be. Clicking anywhere else will cancel the operation.

## Configuration Index

These are the topics dealing directly with configuring *Change Cursor*. [Saving the Cursor Settings](#)

[Loading the Cursor Settings](#)

[Installing Change Cursor](#)

[Uninstalling Change Cursor](#)

## **Saving the Cursor Settings**

After you set the arrow and hourglass cursors to your own, you can save these settings to be loaded later. You can then restore them later.

Simply choose "Save cursor settings" from the "Configure" menu. The names of the files which correspond to the cursors you are currently using will be saved. NOTE: The settings will only be saved correctly if the cursors you have used had corresponding filenames.

## Loading the Cursor Settings

After you have saved cursor settings, you can restore them by selecting "Load cursor settings" from the "Configure" menu.

Doing this will read in the saved filenames, and automatically load and use the corresponding cursors. If you have no saved settings, the default cursors will be used. NOTE: This action will be done automatically when you start Windows if you install *Change Cursor*.

## Installing Change Cursor

You can install *Change Cursor* so that it will run automatically each time you run Windows. It will automatically load the saved settings for the cursors.

Choose "Install Change Cursor" from the "Configure" menu. Your WIN.INI file will be modified appropriately.

## Uninstalling Change Cursor

If, after installing *Change Cursor* you decide you don't like it, or if you choose not to register, you can uninstall the program.

Choose "Uninstall Change Cursor" from the "Configure" menu. Your WIN.INI file will be modified appropriately.

## Manipulating Index

These are the topics dealing directly with manipulating the cursors. [Replacing the arrow](#)

[Replacing the hourglass](#)

[Getting the default cursors](#)

## Replacing the arrow

Once you have designed or loaded a cursor, you can use it to replace the default arrow.

Choose "Use this cursor as arrow" from the "Cursor" menu. The cursor which is currently in the detail window will replace the default arrow.

## Replacing the hourglass

Once you have designed or loaded a cursor, you can use it to replace the default arrow.

Choose "Use this cursor as hourglass" from the "Cursor" menu. The cursor which is currently in the detail window will replace the default hourglass.

## Getting Default Cursors

If you want to edit or use the default arrow or hourglass, you can get them into the [detail window](#).

Choose "Get default arrow" or "Get default hourglass" from the "Cursor" menu.

## File Index

These are the topics dealing directly with working with cursor files. [Loading Files](#)

[Saving Files](#)

[Starting a New Cursor](#)

## **Loading Files**

You can load a cursor file as you would in any other windows application. Just select "Open..." from the "File" menu. A dialog box will appear showing you a choice of files.

## **Saving Files**

You can load a cursor file as you would in any other windows application. Just select "Save" or "Save as..." from the "File" menu. A dialog box will appear showing you a choice of files.

"Save" will overwrite the file you have been working with. "Save as..." will prompt you for a new file name.

## **Starting a New Cursor**

If you want to start a cursor from scratch, select "New" from the "File" menu. You will start over with a completely blank cursor.

## How the cursor works

This section describes how the cursor is actually shown. It is provided for the curious, and is not necessary to use *Change Cursor*. It also assumes some basic knowledge of computer science.

The cursor is made up of two bitmaps, an AND bitmap, and an XOR bitmap. Each of these is effectively a "monochrome" bitmap, made up of 0's and 1's.

When the cursor is displayed, a series of operations is carried out on each of the pixels in the cursor's 32x32 pixel area. First, each pixel is ANDed with the corresponding bit in the AND mask. This results in the pixel either being the original color, if the AND mask was 1, or black, if the AND mask was 0.

Now each pixel is XORed with a bit from the XOR mask. If the bit in the mask is 0, the pixel is unchanged. If the bit is 1, the pixel is inverted. You can see that white is produced by setting the AND mask to 0, producing black, then setting the XOR mask to 1, inverting the black to white. Black results when both masks are 0. Having both masks 1 would invert the screen color. Lastly, having an AND mask 1 with the XOR mask 0 leaves the underlying screen color unchanged, or making that pixel of the cursor appear "transparent."

For most graphics cards, all this pixel manipulation actually takes place in screen memory. Every time you move the cursor, the area where the cursor was is restored from memory, the new area is stored in memory, and the cursor is drawn. If Windows attempts to draw where the cursor is, the cursor must be removed from the screen temporarily. On some cards, such as Video-7 VGA cards, the cursor is actually done in hardware and is not part of screen memory.