CoCut Professional für CorelDRAW 6-X3

Illustrator 8, 9, 10, CS, CS2

Freehand 8, 9, 10, MX

AutoCAD LT98, R14, 2000LT, 2000, ...2005LT, 2006

User Manual

EUROSYSTEMS SOFT- UND HARDWARE ENTWICKLUNG S. A. R. L.

www.cocut.com

Important Customer Information about CoCut Professional

Please check the contents of your software package as soon as possible upon receiving it. Should any items be missing, immediately contact the dealer from whom you have purchased the software.

CoCut Professional is available in two different versions:

CoCut and ***CoCut Professional***

The two versions differ with regard to the number of ***tools*** and ***items*** supplied.

Both versions of CoCut are supplied with the CoCut Professional manual, which describes ***all*** the tools of the two versions in detail. Thus some tools may be described in the manual which are ***not*** included in your version of CoCut.

A complete package of **CoCut Professional** should contain the following items:

- **1 CD**
- Copy protection key/**dongle**
- User manual
- Registration card

Besides the program cd-rom, the most important item is the copy protection key/dongle. The number printed on the dongle must match the serial number located inside the front cover of your manual.

Underneath the dongle number, you will find your **personal code.**

Your code number consists of the following numbers:

Dongle-No.-CC11-7 digits-6 digits

If you have CoCut Professional you will find **CC11P** after the dongle no.

Examples:
102300-CC11-1234567-123456 (Code No. for CoCut)
102300-CC11P-1234567-123456 (Code No. for CoCut Professional)

This code number must be entered upon successful installation and initial startup of the software. Make sure you enter the number correctly, or you will not be able to restart the program.

May 2003

Dear Customer,

In an effort to help you solve any problems and answer your questions as quickly and efficiently as possible, we provide our ***Technical Support Line***. This is a toll-free number you can call if you have any technical questions about our products.

This service is available to you free of charge.

Mon. - Fri. from 9.00 am to 12.00 am

Horst Krämer Tel. ++49 6502 9288 11

You can find further useful information including tips and tricks on our web site:

http://www.eurosystems.lu or http://www.cocut.com

under the rubric ***Support*.**

Our support staff have been instructed only to provide assistance to ***registered*** users.

When calling, faxing or e-mailing, please provide the following information:

- **Dongle number** of your EUROSYSTEMS product
- Version number, i.e. CoCut Professional **6-11**
- Date of **manufacture** of your original CD

Please understand that we can only answer enquiries addressed to this telephone number. Other telephone numbers are reserved for marketing, purchasing and sales.

In order to obtain the best possible technical support, we urge you to register your software. Immediately upon receipt of your registration card by fax or online, you will be entered in our Customer Support database.

RCS Systemsteuerungen GmbH
General Distributor for EUROSYSTEMS products.

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User manual text/ typesetting/ layout:
Georg Wagner, Peter Bettendorf
RCS Systemsteuerungen GmbH, Longuich

English translation: Hilary Teske

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Hardware and Software Requirements

- The minimal requirement is a Pentium 350 with 64 MB of RAM
- Windows 98 or later version
- Video Display running at 800 x 600 pixels with 16 colors

Note: *You will find further information on this point in the Hardware and Software Requirements for CorelDRAW 6, 7, 8, 9, 10 and 11, page 2 ff.*

User Manual Format

To make this manual more easily readable, the same symbols and type styles are used throughout. The following is an explanatory chart designed to help you find and interpret these visual aids more easily.

Visual Aid Chart

Symbol / Type Style	**Interpretation**
Bold	Headings
Italic	*Notes*
Bold, *italic*	***Menus****,* e.g.: ***File*** Menu
Bold, *italic*	Tools, boxes, options, commands, icons e.g.: ***New*** command
CAPITALS	Keys, e.g. SHIFT
KEY1+KEY 2	The plus sign (+) between two keys means that you have to hold down the first key when you press the second key. Then you release both keys.
KEY1,KEY 2	A comma (,) between two keys means that you press the keys one after the other and release them.
	Shortcut

Introduction

CoCut Professional™ is add-on software for cutting vinyl from CorelDRAW™. On account of its wide range of graphic possibilities, CorelDRAW is eminently suited to producing high-quality drawings that can easily be printed using powerful printer drivers. If, however, you, wish to use cutting plotters, you may encounter major difficulties due to the lack of a standard language for driving plotters and the different output formats. A solution to these problems is to use stand-alone cutting software, which is often completely isolated, thus making it impossible to exchange data with other systems or programs such as word processing or design applications.

What CoCut Professional Can Do

- CoCut Professional is able to work with many different plotters and adapt to their particular features. Among these are plotters of well-known manufacturers such as Summagraphics, Mimaki, Roland, Gerber, Zünd, etc.
- CoCut Professional automatically converts lines to cuttable contours.
- Cutting by color and precise mounting using register marks
- Color welding: user-defined color overlaps and screen-printing overlaps with user-defined color sequence.
- Cutting preview of vinyl width and display of the amount of vinyl used.
- Positioning, resizing, duplicating, etc. of objects.
- CoCut Professional evaluates the data produced by CorelDRAW and prepares it for cutting on the selected plotter.
- CoCut Professional can cut even extremely large drawings without any difficulty. You can resize and segment your drawings to any scale you wish, no matter what the size of the drawing in CorelDRAW.
- If the drawing is too wide for your plotter, it will be automatically sectioned, i.e. divided so that your plotter can cut it.
- You can set up default values for printing and speed for different materials. These values can be stored in a material database for reuse at any time.
- While your plotter is cutting, you can continue working with CorelDRAW or any other Windows program. The plotter works in the background (with serial drive).

1. How to Install CoCut Professional

General information on installation.

Hardware and Software Requirements for CorelDRAW 6, 7, 8, 9, 10, 11, 12 & X3

The system requirements for CoCut Professional™ are the same as for the CorelDRAW version you are using.
CoCut Professional will not work properly unless your system is correctly configured for using CorelDRAW.

To use CoCut Professional 6, 7, 8, 9, 10 and 11 you need the following equipment:

- A Pentium II 350 is recommended for CorelDRAW versions 7, 8, 9, 10 and 11.
- 128 MB of RAM,
- Microsoft Windows 98®,ME®, NT®; 2000®, XP® CorelDRAW 6, 7, 8, 9, 10 & 11 are not compatible with Windows® 3.1
- Please use only the cable supplied by your plotter manufacturer for transmitting data from your computer to your plotter. If you encounter any problems, please contact the manufacturer or your dealer for assistance.
- As CorelDRAW is a very large program, you will need 250 MB of RAM on your hard drive. For a typical installation you will need more than 150 MB of RAM. So that you can work without any problem, your system should have 100 MB of RAM.

Note: *Close all Windows programs except the Program Manager. If you fail to do this, errors may occur in updating some system files.*

Installing Windows and CorelDRAW™

Before you install CoCut Professional, both CorelDRAW and Microsoft Windows 98, ME, NT, 2000, XP must be installed and ready for use. If this has not been done, first install your version of Windows and then CorelDRAW. Make sure that CorelDRAW works properly by making a test printout.

Windows 98, ME, NT, 2000, XP

- Place the CoCut Professional installation CD in the CD drive.
- The CoCut Professional autostart starts the installation routine.If installation doesn't start automatically, proceed as follows: Click on the Windows ***Start*** button and select **Execute.**
- Irrespective of your drive name, type ***e:\setup.exe*** or ***b:\setup.exe*** in the command line.
- Start the installation by clicking on the ***OK*** button.

Note*: See that the* ***Script-Compiler*** *is also installed with CorelDRAW 6 to ensure that CoCut Professional is correctly installed. This option is automatically selected if you have chosen a complete installation.*

Note*: Errors which may occur in installation and ways to remedy them are described later in this manual.*

Configuring the Serial Port

For CoCut Professional to work properly it is essential that the settings are the same on both plotter and serial port, i.e. the ***Baud rate***, ***Data bits***, ***Parity, Stop bits*** and ***Flow control*** are configured identically.

Example: Baud rate: **9600**, Data bits: **8**, Parity: ***none***, Flow control: **Hardware**

Note: *The settings recommended in your plotter software instructions have to match the settings made when you install CoCut Professional, otherwise conflicts may arise.*

Attaching the Dongle

It is necessary to have a dongle to operate CoCut Professional. This is the small black box in the CoCut Professional package. The dongle has to be plúgged into a free ***parallel*** port on your computer.

These dongles are used by us:

Memo HASP for parallel port

Memo HASP for USB port

MARX (old CoCut Dongle: doesn't work with CoCut or CoCut Professional 11)

If you plug in the dongle between your computer and a printer, the printer must in any case be switched on and online when you wish to cut, otherwise the dongle will not work properly.

For this reason we recommend plugging it into a free parallel port without a printer.

CoCut Professional Installation

CoCut Professional 11 comprises one CD.

Step 1: Plug the dongle supplied with CoCut Professional into your computer's ***parallel*** port (*printer port LPT1*). Secure the dongle by tightening the two screws or simply plugging it into the USB port for a USB dongle.

Step 2: **Windows 98 & ME:**
Choose the ***Port*** icon under Start/Settings/Control Panel/Plotter Manager

Windows NT, 2000 and XP
If you are using NT, 2000 or XP Windows NT as operating system, you will find the ***Port*** icon under Start/Settings/Control Panel.
Select the port to which your plotter is connected (e.g. COM1).
The default settings are as follows:

Baud rate:	9600
Data bits:	8
Parity:	none
Stop bits:	1
Flow control:	**Hardware**

Check the *other settings*, which should be as follows:

COM 1: I/O address 03F8 and IRQ 4
COM 2: I/O address 02F8 and IRQ 3

Step 3: **Windows 98, ME, NT, 2000 and XP:**
Select ***Execute*** in the ***Start*** menu. Place the CD in the CD drive.
Type ***A:\setup*** or ***E:\setup*** in the command line depending on the name of your disk or CD drive.

After a short time a window entitled "*CoCut Professional Setup*" appears.

Step 4 Use the ***Continue*** button to proceed with the installation routine.
"EUROSYSTEMS Licencing Agreement" Dialog Box Once you have accepted the conditions of the EUROSYSTEMS licencing agreement, the actual installation starts.

"User Information" Dialog Box

Type your personal data (name, company, serial number) here.
Example: Serial number: 012345-xy-1-123456-654321

"Select Target Path" Dialog Box
In this dialog box you can select the directory in which CoCut Professional is to be installed. C:\EUROSYSTEMS\COCUT is the default suggestion.
If you wish to install CoCut Professional in another directory, please activate the ***Search*** button enter the desired target directory under ***Path*** and in the dialog box which appears.

"Select Program Folder" Dialog Box
Here the EUROSYSTEMS/CoCut Professional folder is the default suggestion. You can define a new program folder in the ***Program Folder*** command line.

"Setup Ended" Dialog Box
Confirm this dialog box using the ***Exit*** button.

Step 5 Close all applications and restart your computer.

The CoCutSkin

After you have installed CoCut Professional and started CorelDRAW, the CoCutSkin appears on your desktop.

Note: *The CoCutSkin will not be installed unless you have installed CorelDRAW 9, CorelDRAW 9 Office, CorelDRAW 10 or 11 and the Internet Explorer Version 5 or later on your computer.*

Fig.1: CoCutSkin

CoCutSkin always in front

closes CoCutSkin

transmits data to CoCut Professional

Note: *If CorelDRAW is minimized, the CoCutSkin will disappear. If CorelDRAW is switched to full screen, the CoCutSkin will reappear.*

If you close the CoCutSkin using the button, you can open it again under Start/ Programs/EUROSYSTEMS/CoCut Professional/ ***CoCutSkin for CorelDRAW***.

Toolbar button with CoCut Professional™ Macro (Corel 6)

- ***Select the menu Tools/Customize***
- Click on the ***Toolbars*** tab
- Double-click on ***Script Applications***
- Select from the ***General Scripts*** folder the script ***CoCut 6.csc***.
- Choose any symbol you wish and drag it to the CorelDRAW toolbar with the left mouse button held down.
- Click on **OK** in the ***Customize*** dialog box

Toolbar button with CoCut Professional™ Macro (Corel 7)

- Select the menu ***Tools/Customize***
- Click on the ***Toolbars*** tab
- Select from the ***Application Scripts*** folder the script ***CoCut 7.csc.***
- Choose any symbol you wish and drag it to the CorelDRAW toolbar with the left mouse button held down.
- Click on **OK** in the ***Customize*** dialog box

Toolbar button with CoCut Professional™ Macro (Corel 8)

- Select the menu ***Tools/Options***
- From the left-hand set of options select ***Workspace/Customize/Toolsbars***
- Select from the Application Scripts folder the script ***CoCut 8.csc.***
- Choose any symbol you wish and drag it to the CorelDRAW toolbar with the left mouse button held down.
- Click on **OK** in the ***Options*** dialog box

Toolbar button with CoCut Professional™ Macro (Corel 9)

- Select the menu ***Tools/Options***
- From the left-hand set of options select ***Workspace/Customize/Toolsbars***
- Select from the Application Scripts folder the script ***CoCut 9.csc.***
- Choose any symbol you wish and drag it to the CorelDRAW toolbar with the left mouse button held down.
- Click on **OK** in the ***Options*** dialog box

Linking CoCut Professional Script with the CorelDRAW 10, 11, 12 & X3 toolbar

Important note: *CorelDRAW must be installed with the "Visual Basic for Application."*
This option can be installed as follow:

Insert the CorelDRAW 10 CD in the disk drive / Start setup / Select "Customize setup". If a CorelDRAW 10 version already installed on your computer, first select " User-defined setup" and then "Customize setup". In the dialog which now opens double-click on ***Main Applications*** or click once on the ***Plus***. Double-click on ***Productivity*** Aids and select "Visual Basic for Application". After installing CoCut you have to link the CoCut script with the menubar.

- Select the menu **Tools**/**Adjustment**
- From the left-hand set of options select **Workspace**/**Customize**/**Command**
- Click once in the ***File*** box on the right of the list of options, select ***Macros*** and drag CoCut10.CoCut... to the menubar of CorelDRAW 10.

- Now select the **Appearance** tab. Click on the **Import** button and select any symbol you want.

Note: *The symbol disappears every time you restart CorelDRAW and the book-icon (standard default-icon) appears. (CorelDRAW Bug)*

- From the left-hand set of options select **Workspace**/**Customize**/**Command**
- Change the name of the"New sysmbol bar 1" to CoCut.
- Click OK in the ***Options*** dialog box

If you now select one or several objects and click on the installed icon, the objects will be transmitted to CoCut Professional and can be plotted.

Where can I find CoCut Professional in Freehand 8, 9, 10 & MX?

You can find CoCut Professional in the *Xtras* menu under *Animate* and in the *Window* menu / *Xtras* under *Functions.*

How can I import data from Freehand 8, 9,10 & MX to CoCut Professional?

Start CoCut Professional and if objects are selected, only the selected objects will be exported to CoCut Professional.

Start CoCut Professional and if no objects are selected, ***all*** objects located on your working area will be exported to CoCut Professional.

Restriction: Fountain fills and lens effects are not supported.

Note: *Freehand 8 has a color correction mechanism (like, for example, CorelDRAW), which affects the display of colors in Freehand.*
Solution*: Turn off this command via* ***File/Settings/Colors.***

Where can I find CoCut Professional in Adobe Illustrator 8, 9,10, CS & CS 2?

You can find Corun in the ***File*** menu under ***Export.***

How can data be exported from Illustrator 8, 9 and 10 to CoCut Professional ?

Start CoCut Professional and if objects are selected, only the selected objects will be exported to CoCut Professional. Any texts to be exported will be automatically converted to curves.

Note: *CoCut Professional isn't active if no objects are selected,.*

Restriction: Special fountain fills are not exported.

Where can I find CoCut Professional in the various AutoCAD versions? ! ONLY CoCut Professional !

Installation of Menu File for AutoCAD LT 98

Select ***Adjust/Menus*** in the ***Extras*** menu. Click on the ***Scroll*** buttonin n the dialog box appearing This opens the ***File Selection*** dialog box. Change the file ending to *.mnu um. Select the cocut.mnu file and close the dialog box.
Click on the ***Load*** button and then on ***OK*** in the enquiry dialog box.
The CoCut Professional menu has now been loaded.
Now switch to the ***Menu Bar*** dialog box in the upper tab. Select CoCut Plot and add it to the AutoCAD menu in the desired place.
CoCut Professional is now to be found in the menu list and a CoCut toolbar is added to the toolbars.

Installation of the Menu File for AutoCAD R14 ! ONLY CoCut Professional !

Select ***Customize Menus*** in the ***Extras*** menu. In the dialog box appearing click on the ***Scroll*** button. This opens the ***File Selection*** dialog box. Set the file ending to *.mnu um. Select the cocut.mnu file and close the dialog box.

Click on the ***Load*** button and then on ***OK*** in the enquiry dialog box.
The CoCut Professional menu has now been loaded.

Now switch to the ***Menu Bar*** dialog box in the upper tab. Select CoCut Plot and add it to the AutoCAD menu in the desired place.
CoCut Professional is now to be found in the menu list and a CoCut toolbar is added to the toolbars.

Installation of the Menu File for AutoCAD 2000LT & 2000 ! ONLY CoCut Professional !

Select ***Customize Menus*** in the ***Extras*** menu. Click on the ***Scroll*** button in the dialog box appearing. This opens the ***File Selection*** dialog box. Changethe file ending to *.mnu um. Select the cocut.mnu file and close the dialog box.

Now switch to the ***Menu Bar*** dialog box in the upper tab. Select CoCut Plot and add it to the AutoCAD menu in the desired place. CoCut Professional is now to be found in the menu list and a CoCut toolbar is added to the toolbars.

Installation of the Menu File for AutoCAD LT98 and R14 ! ONLY CoCut Professional !

Select ***Printer Setup*** in the ***File*** menu. Click on the ***Open*** button In the dialog box appearing and select the ***cocut/t98.pc2 (LT98)*** file or ***cocutr14pc (R14)*** file. Close the dialog box.
Now start a printing job by clicking on ***Print*** in the ***File*** menu to make the following settings:
Click on ***Plot to File***, set the ***Resize Factor*** to 1:1 and the ***Unit*** to mm.

Note*: Make sure the* ***Plot To File*** *checkbox is activated when making the first plot.*

This procedure ensures that all drawing elements are transmitted.

The ***Pen Change*** commands from the ***Plot*** file are interpreted so that 8 layers can be separated.
AutoCAD does not plot with arcs, i.e. all elements are converted into lines and dots are interpreted as drill holes.

Note*: If you are using DXF, you have to press* ***ENTER*** *twice after selecting the object, as the execution of the menu macros is canceled by the object selection.*

Note*: If you export using DXF, lettering and texts are not exported, but it is possible to select objects and plot them. The curves are not converted to lines but are changed from the splines or arcs in the DXF file into Bezier curves.*

Note: *The number of layers is not restricted to 8.*

In the Windows autostart group a link to the autoimp.exe program is made during installation, so that the data can be exported to CoCut Professional. When autoimp.exe is started, an icon will be displayed in the system bar at the bottom right of the screen.
The program can be ended by double clicking on this icon.

Note*: If the icon is turned off, the data will not be exported to CoCut Professional.*

The program can be restarted via Start/Programs/Autostart/ Auto-Import for CoCut Professional.

Note*: When installing, make sure that CoCut for AutoCAD is only installed for the AutoCAD version last used when several AutoCAD versions are installed on one computer.*

Setting Up the Port for Data Transmission

Windows 98®, ME®

- Click on the ***Start*** button and select ***Control Panel.***
- Double-click on the ***System*** icon.
- Click on the ***Plotter Manager*** tab.
- Click once on the ***+ sign.***
- Double-click on ***Port.***
- Double-click on the port to which your plotter is connected. (e.g. COM2).
- Click on the ***Port Settings*** tab.
- Set the flow control to ***Hardware*** and make the other settings match the default settings on your plotter (see plotter manual).
- Click on the ***Close*** button.

Windows NT®, 2000®, XP®

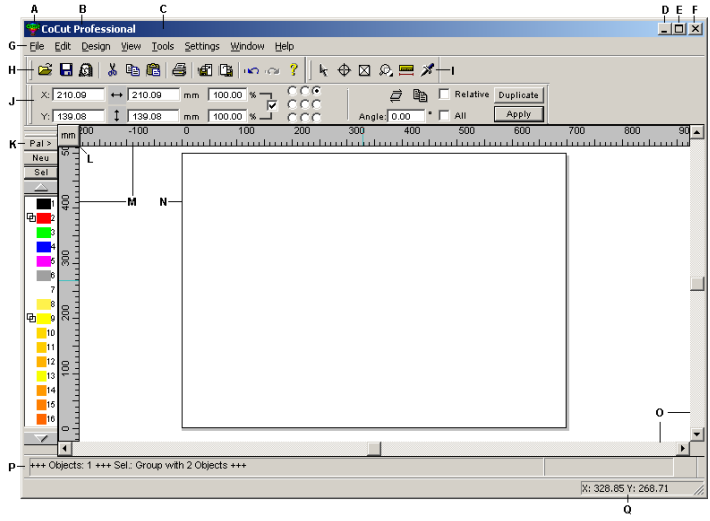
- Click on the ***Start*** button and select ***Settings.***
- Click on the ***Control Panel*** tab.
- Double-click on ***System/Hardware/Plotter Manager***
- Double-click on the port to which your plotter is connected (e.g. COM2).
- Click on the ***Settings*** button.
- Set the flow control to ***Hardware*** and make the other settings to match the default settings of your plotter (see plotter manual).
- Click on the ***Close*** button.

2. How to Work with CoCut Professional ! ONLY CoCut Professional !

2.1 Your Desktop with the CoCut Professional Working Area ! ONLY CoCut Professional !

In this chapter you will learn the basics of working with CoCut Professional. You will be introduced to such items as the desktop, the tools, the text editor, data import and export, loading and saving jobs, as well as cutting.

After CoCut Professional has been started, the following window appears:



A) System field
B) Window title
C) Title line
D) Button „Symbol“
E) Button „Full screen“
F) Button „Exit“
G) Menu line
H) Stnadard bar
I) Tool bar
J) Object bar
K) Layerbox
L) Metric (cm, mm, inch)
M) Vertical / Horizon. rulers
N) Working area
O) Vertical / Horizon. Scroll bar
P) Staus bar object infos
Q) Status bar element infos

Fig. 2: The CoCut Professional Working Area

The ***Rulers*** can be positioned freely as you wish or completely turned off.

The ***Units of Measurement*** (cm, mm, inch) can be changed by simply clicking a button. The button is located in the lower right corner where the horizontal and vertical scroll bars meet.

In the ***Status Bar*** there is extensive information about the objects to be found on the working area, such as wireframe, fill, dimensions, number, combination or grouping. The various elements in the menu line will be dealt with in detail in the ***Reference Section***.

2.2 Explanation of Cursor Shapes in the Working Area ! ONLY CoCut Professional !

Cursor shape	Interpretation
	Mouse cursor

Note: *Select objects by positioning the mouse cursor on the object and pressing the left mouse button.*

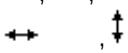
Cursor shape	Interpretation
	Move objects

Note: *This type of cursor is only active when the cursor is located in the interior of the object or in the area between the 8 black squares on the wireframe. The object must be selected.*

	Enlarge object vertically
	Enlarge object horizontally
	Enlarge object diagonally

Note: *The cursors for modifying the size of objects are only active when the cursor is located in the area area between the 8 black squares on the wireframe of the object.*

You can switch to the ***Skew/Rotate*** mode by clicking once on the left mouse button with the cross cursor activated.

Cursor shape	Interpretation
	Object in ***Skew/Rotate*** mode
	Rotate object
	Skew object

2.3 The CoCut Professional *Default* Toolbar ! ONLY CoCut Professional !

CTRL-1

Fig.3: Shortcut for Turning the *Default* Toolbar On and Off

The first time you start CoCut Professional, you will find the toolbox in the upper left corner of your screen. It contains 12 icons.

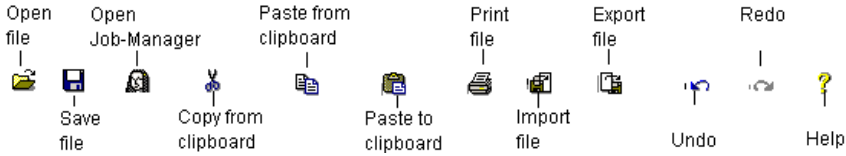


Fig.4: The CoCut Professional *Default* Toolbox

Note: *You can make the toolbox reappear by clicking on* ***Default*** *in the* ***Window*** *menu.*

The toolbox can be moved at any time by clicking the bar at the top and dragging it to the desired location.

Notes: *When you close the program, CoCut Professional will save the last position of the toolbox.*

2.4 The CoCut Professional *Toolbor* ! ONLY CoCut Professional !

CTRL-3

Fig. 5: The *Toolbar*

2.4.1 The *Arrow* Tool

Fig. 6: The *Arrow* Tool

The arrow tool, also known as the general work tool, is used to select, move, temporarily group and resize text or objects.

Select

Click on any point of the object and it is automatically selected, i.e. a frame defined by eight small squares appears around it. When working in the ***Edit Wireframe*** (F9) mode, you must click on the outline of the object to select it.

Note: *To select individual characters in a text string, the text must first be converted to a bitmap by using the* ***Text to Curves*** *command in the* ***Edit*** *menu. The selected letter(s) can then be detached from the string by pressing* SHIFT+L.

Move

You can move objects by selecting them and dragging them to the required positon on your working area with the mouse button held down.

Resize

You can proportionally resize objects by grabbing one of the 4 handles or corner squares of the frame around the object. Double-clicking on one of these corner squares opens the ***Object Attributes***... dialog box in which you may enter specific values under ***Size.***
To resize an object non-proportionally, double-click on the squares located between the corner markers.
To resize by eye (proportionally or non-proportionally), simply click on the appropriate square and drag it until the desired size has been attained.

Register Marks

With this option you can place register (crop) marks in your artwork. This tool permits you to mount color-separated cutting jobs with precision.

You can set register marks by clicking on the  icon in the CoCut Professional ***Toolbar*** and placing the mouse cursor on the spot where the first register mark is to be set. Now click once with the left mouse button and the register mark is set. Proceed in the same way to set the other register marks.

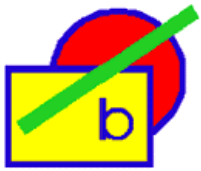
Note: *Register marks will be cut in every layer regardless of its color.*

Example:

To permit you to mount the vinyl colors precisely, the register marks will be cut in the same place on the vinyl regardless of its color.

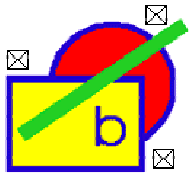
The following objects are located on the CoCut Professional working area and are to be cut: 2 blue objects, 1 red, 1 yellow and 1 green one.

It is useful to set register marks so that you can mount the objects precisely later.



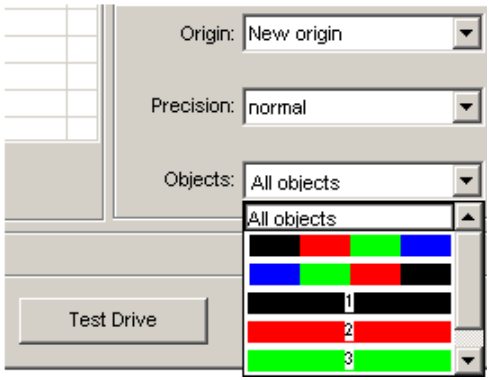
To do this, click on the appropriate icon in the CoCut Professional ***Toolbox***.

Position the mouse cursor at the place next to the objects where you want to set the first mark and click the left mouse button once. Proceed in exactly the same way with the next two register marks.

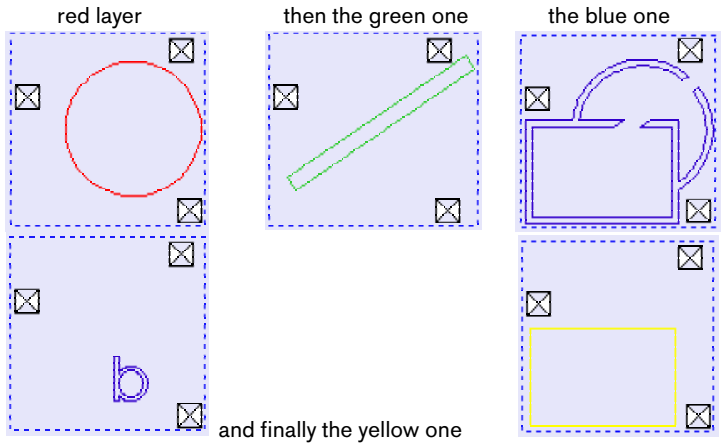


Now select all the objects and click on the ***Cut*** button.

Click with the left mouse button on the arrow to the right of ***Objects*** in the lower right part of the ***Cut*** dialog box which now opens. A selection box will open in which you can choose between various options.



For color-separated cutting first select the



All the layers will be cut one after another and mounted later with the help of the register marks.

Drill Holes

With this command you can place perforation marks or drill holes in your design.

Note: *This option is designed specifically for CoCut Professional users who have flatbed plotters with routing capabilities.*

2.4.2 The *Zoom* Tool ! ONLY CoCut Professional !

This tool is used to ***zoom in*** and ***out*** on your desktop, working area or design.

Fig.7: The *Zoom* Tool Icon

When you click on the ***Zoom*** icon, a flyout box appears containing five additional icons.

Fig.8: Flyout with 5 *Zoom* Functions

The icon with the plus sign is used to enlarge a selected area of your desktop. Using the framing tool, draw a frame around the area you want to enlarge. You can repeat this procedure several times for further magnification. An acoustic alert will warn you when you have reached the limit and no further magnification is possible.

Note: *You can also execute this command by pressing* F2 *and the* **+ (plus***) key in the numeric keypad.*

The icon with minus sign is used to reduce the size of a selected area of your desktop or working area.

Note: *You can also execute this command by pressing* F3 *and the* **- (*** ***minus****) key in the numeric keypad.*

The icon depicting a sheet of paper is used to view the working area in its entirety. The icon depicting a monitor is used to display all objects on your working area. CoCut Professional will enlarge or reduce the objects to make just enough room for everything to fit on your screen.

The last icon depicting a magnifying glass is used to display all selected objects in the maximum possible size.

Note: *If you hold down the* ***SHIFT*** *key while executing this command, only the selected objects will be enlarged to their optimal size.*

2.4.3 The *Measure* Tool ! ONLY CoCut Professional !

Fig. 9: The *Measuring* Tool

The measuring tool is used to perform measurements (between any two points) in your design. As soon as you click on the ***Measure*** icon in your tool box, the cursor changes into a bull's eye. Move the center of the bull's eye to the first point, i.e. the point from which you intend to measure.

While holding down the left mouse button, drag the bull's eye to the second point, i.e. the end-point of the distance you are measuring. A guideline provides a visual connection between the two points.

Note: *If you hold down the* ***SHIFT*** *key during this procedure, the measuring can be limited in a horizontal or vertical direction. This makes it easier to measure straight lines accurately.*

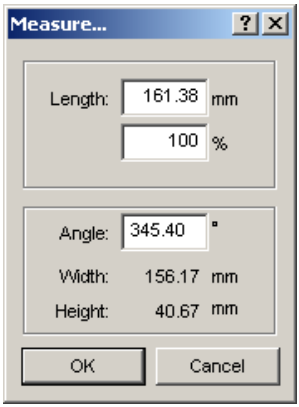


Fig. 10: The *Measure* Dialog Box

The ***Length*** box indicates the result of your measurement. To change this value, click on the text box and enter the new length. You can also make changes to the ***Percentage*** box below.

The dialog box provides additional information such as the *Angle* of the line you measured, the ***Width*** of the object you measured and the ***Difference in Height*** between the first (beginning) and second (end) point.

Clicking on the  button opens the Professional ***Cut*** dialog box.

2.5 The CoCut Professional *Objects Attributes* Toolbar

 G

The ***Object Attributes*** toolbar can be turned on and off via ***Object Attributes*** in the ***Window*** menu or by pressing the ***G*** key.

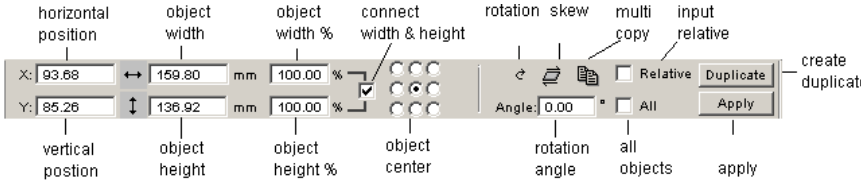


Fig.11: CoCut Professional *Object Attributes* Toolbar

The ***Object Attributes*** toolbar permits you to modify the ***Size*** and ***Position*** of your objects, ***Skew/Rotate*** them or ***Duplicate*** them horizontally or vertically at freely defined intervals.

The ***Object Attributes...*** tool bar contains all the functions most frequently required and considerably speeds up the work on your job.

In the **X** and **Y** boxes you can enter the horizontal and vertical coordinates relatively and absolutely in relation to the reference point.

Absolute and Relative Positions
The absolute position means the real X and Y coordinates of the object's point of reference.

Reference Point
When the object is selected, the reference points are shown as black squares. These squares correspond to the circles in the ***Object Attributes*** toolbar.

Note: *The center of the selected object is not marked as a point of reference.*

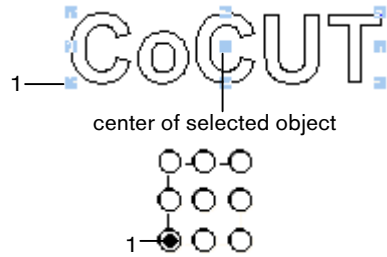


Fig. 12: Object Center and Point of Reference

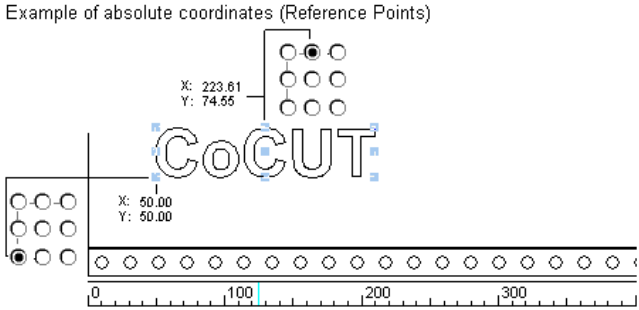


Fig. 13: Example of Absolute Coordinates

If you execute the ***Relative Position*** command, the circles are shown in gray, which means that they are no longer active. You should set the required point of reference for repositioning the circles before activating them.

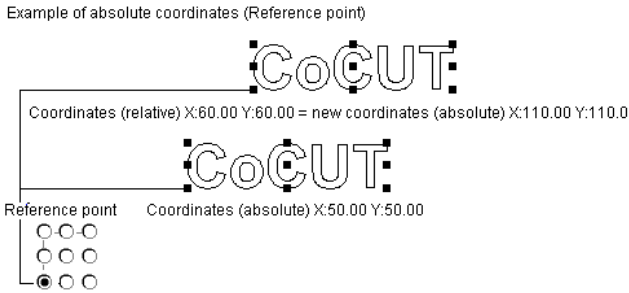


Fig. 14: Example of Relative Coordinates

In the example (Fig. 14) X and Y values of 50mm (1.96 ins) were entered.
The value of 60mm (2.36 ins) was entered for the relative coordinates to the reference point, i.e. the reference point was moved 60mm (2.36 ins) both horizontally and vertically. This results in a new absolute value of 110mm (4.33ins) for the X and Y coordinates.

In the ***Height*** and ***Width*** boxes you can enter the height and width of one or all selected objects as numbers or percentages.

If you click the ***All Objects*** button, the values you enter will apply to all objects.
The two fields are linked to each other, i.e. if the width is changed, the height will also be modified by the amount typed.

If you deactivate the link between length and width, you have the possibility to alter the ***Height*** and ***Width*** separately.

Fig. 15: Connection between Length and Width Deactivated

The *Skew/Rotate* Tool in the *Object Attributes* Toolbar ! ONLY CoCut Professional !

Fig.16: The *Skew/Rotate* Tool

If you click on the ***Skew/Rotate*** icon, the following dialog box appears:

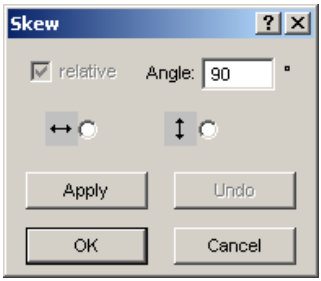


Fig. 17: The *Skew* Dialog Box

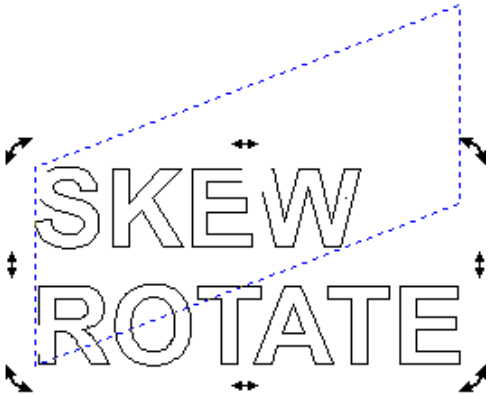


Fig. 18 :Objects in the *Skew/Rotate* Mode

You can rotate your object by moving your mouse cursor to the round arrows at the corners of the object and keeping it held down. When the object has been rotated, its position will be shown by a dotted blue line. You can see the exact amount of the rotation in the status bar on the bottom left of the screen near the mouse coordinates.

A positive value rotates objects clockwise, a negative value counter-clockwise.
If you click on one the straight double arrows while holding down the left mouse button, your object is skewed to the left and right and upwards and downwards. The sides you click on will be moved, whereas the ones opposite remain the same.

If you execute the ***Relative Angle*** command, the relative angle will be shown when the object is rotated or skewed.

The *Multi-Copy* Tool in the *Object Attributes* Toolbar

Fig. 19: The *Multi-Copy* Icon

A click with the left mouse button on the ***Multi-Copy*** icon opens the following dialog box:

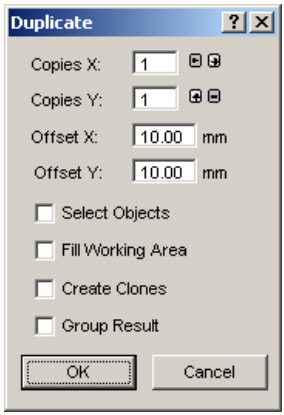


Fig. 20: The *Duplicate* Dialog Box

Number X

You can enter the number of duplicates in a horizontal direction in this box. The arrows to the right of the box indicate the direction (right/left) in which the objects are to duplicated.

Number Y

You can enter the number of duplicates in a vertical direction in this box. The arrows to the right of the box indicate the direction (upward/downward) in which the objects are to be duplicated.

X Offset

You can enter the distance you wish to have between the duplicates in a horizontal direction in this box.

Y Offset

You can enter the distance you wish to have between the duplicates in a vertical direction in this box.

If you execute the ***Select Objects*** command, all your objects will be automatically selected after they have been duplicated.

If you execute the ***Fill Worksheet*** command, the specified working area will be automatically filled with the previously selected objects.

The ***Create Clone*** tool can be used to save storage space, i.e. when an object is cloned, only the data of the original is saved but not the data of the clone.
If the original object is modified, i.e. provided with pencil attributes such as fountain fills, the changes will automatically apply to all clones of the original object.

Note: *Artwork files cannot be cloned.*

Example:
A customer has given you an order to produce 100 of the same sticker, with 5 stickers twice the size of the other 90.
You load the vector template for the job to CoCut Professional, select the template and click on the  (Multi-Copy) button. Execute the ***Create Clone*** command In the ***Duplicate*** dialog box and enter the desired number of clones and the horizontal and vertical offsets.

The clones will be created when you click on the ***OK*** button. Clones are represented with dotted blue lines in CoCut Professional. Now select the five clones which are to be cut twice the size and drag them to the desired size. Once you have modified the clones, the objects will appear in their original color again.

Note: *If you modify the size of a clone, it will become an original again.*

If you execute the ***Group Result*** command, the objects filling the worksheet or the clones created will be grouped according to the sequence in which they were created.

2.6 The CoCut Professional Color Layerbox ! ONLY CoCut Professional !

The color layerbox can be used to color objects, define different vinyl colors, select objects of specific colors and block certain color lavers or make them invisible.

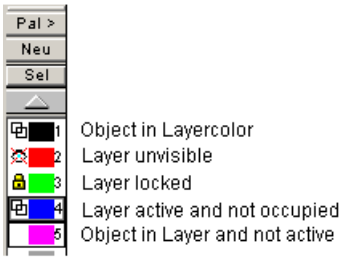


Fig. 21: The CoCut Professional Color Layerbox

Layers 1 through 6 are predefined and cannot be changed. To make the color layerbox reappear either press CTRL+2 or select ***Show Layerbox*** in the ***Settings*** menu.

The layerbox can be moved at any time by clicking with the left mouse button on the gray bar above ***Pal >*** or on the small gray area underneath the last layer. The gray frame around the color layerbox becomes black and you can move the color layerbox to any position you wish on the CoCut Professional desktop with the left mouse button held down.

If you click on the ***PAL*** button, a popup menu with the following items opens:

Layer Numbers
If you execute this command, all the layer numbers will be made invisible.

New
All color layers with a layer number higher than 6 will be deleted.

You can use this command when you want to specify a new color palette individually. You can choose layer colors by clicking once with the mouse cursor on the desired color and then on the ***OK*** button.

Load...
This command loads previously defined palettes.

Save
This command permits you to save a newly defined or modified default palette on your hard disk.
If this new or modified palette is saved as the default palette, this palette will be used ever time you start CoCut Professional.

Save As...
This command permits you to give the palette a name.

Default
This command loads the palette supplied as the default for CoCut Professional. It is a Mactac table of vinyl colors, which is defined as the default palette with the help of the range of colors.

Palette History
This tool makes it possible to load the last 4 color palettes without having to use the various directories. The names of the last 4 color palettes edited appear at the end of the color palette menu list. You can open the desired palette by clicking on it with the mouse cursor.

By clicking on the ***Sel*** icon you can simultaneously select all objects that were created in the selected color layer.

By clicking on the ***New*** icon and making appropriate selections in the ***Layer Setup*** dialog box, you can define new color layers.

Double-clicking on one of the layers/colors will assign the color to all previously selected objects. A single click with the right mouse button on one of the color layers will open the ***Layer Setup*** dialog box.

You can also open this dialog box by using the shortcut L. Double-clicking with the left mouse button with the CTRL key held down provides the selected object with a wireframe in the color currently activated. When the ***Layer Setup*** dialog box is open, you can use the PAGE UP button to choose and install the next color upwards and the PAGE DOWN button for the next color downwards.

When the last color layer in the layerbox is active, a new layer can be added.

The *Layer Settings* Dialog Box ! ONLY CoCut Professional !

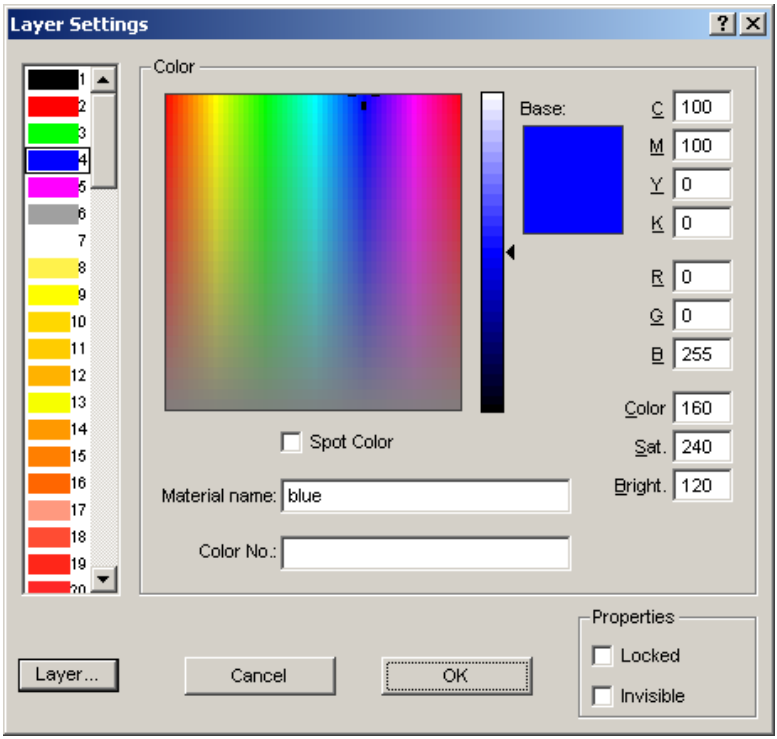


Fig. 22: The *Layer Settings* Dialog Box

In the ***Layer Settings*** dialog box there is a choice of 3 color models:

1. Cyan, Magenta, Yellow, Black
2. Red, Green, Blue
3. Color, Saturation, Brightness

Attributes

Locked means that a particular color layer is no longer available for selection. A lock in front of the layer color indicates this status.

Invisible makes selected objects disappear from the desktop. In front of the color layer that has been defined as invisible, a crossed-out eye indicates this status.

Note: *You can undo either command at any time when you open the* ***Layer Settings*** *dialog box by clicking with the right mouse button on the selected color layer.*

Layer Name

In the ***Vinyl Name*** box you can assign a type of vinyl or a vinyl manufacturer to a color layer.

In the ***Color Number*** box you can type the name or number belonging to the type of vinyl.

Note: *The advantage of specifying vinyl names and color numbers is that you can assign color layers to all the materials to suit your particular stock. When creaing new designs, you can take these materials into consideration, so that the numbers can be seen when cutting. You can save a palette for each selection of vinyl or material type which can be used when creating new designs.*

Shortcuts in Layer Editing

The following shortcuts are available for layer editing:

L opens the ***Layer Setup*** dialog box

Speed when scrolling in the color layer box:

SHIFT	10 times
CTRL	100 times
SHIFT+CTRL	1000 times

Skipping in the Layerbox:

POS1	Skip to the first layer
ENDE	Skip to the last layer
PAGE up/down	Skip over 1/10 of the number of layers
Cursor up/down	Skip to next layer

Advantage of the Page up/down keys:
While the new layer is being chosen the ***Layer Settings*** *dialog box remains open and the appropriate numbers can be entered directly.*

CTRL+Double-click	Assigns a selected object an outline in the currently active color.

Move Single Color Layer

1. Position mouse cursor on desired layer
2. Keep left mouse button held down
3. Move the layer to the desired position
4. Press right mouse button once
5. The color layer is in the new position

2.7 The *Print* Command ! ONLY CoCut Professional !

Fig. 23: The *Print* Icon

Open the CoCut Professional ***Print*** dialog box by selecting ***Print*** in the ***File*** menu, using the shortcut CTRL+P on the keyboard or clicking on the  icon in the toolbox. The following window opens:

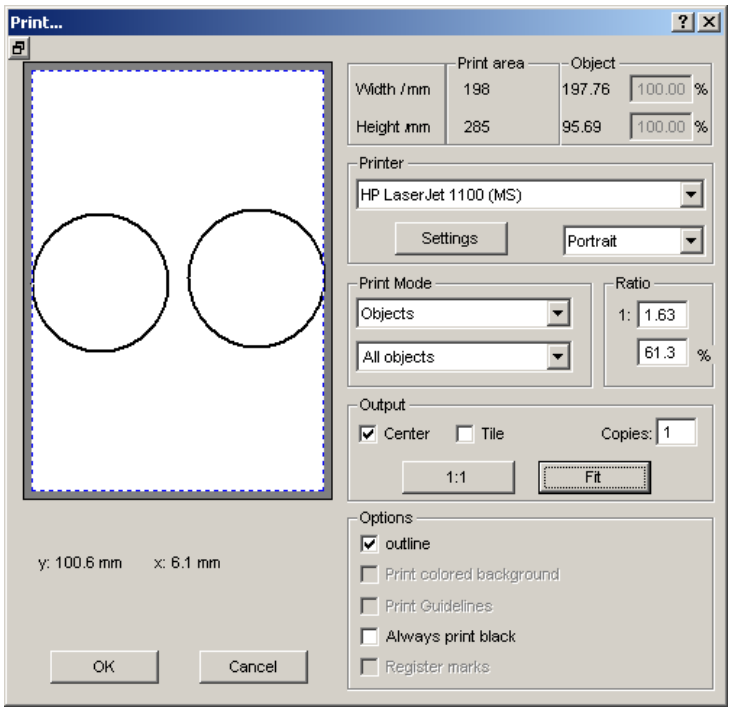


Fig. 24: The CoCut Professional *Print* Dialog Box

In the lower right part of the dialog box you will find the ***Tile*** option and the ***Adapt*** button under Output.

The appearance of the ***Print*** dialog box changes depending on which button you have activated. When the ***Print*** dialog box is called up, the ***Adapt*** button is automatically activated, because objects or graphics cannot be printed in formats exceeding the maximum output size of the printer being used.

The *Adapt* Command

The ***Adapt*** command lets you specify the printable area. The values for the printable area are shown in the ***Printing Area*** box located in the upper right part of the ***Print*** dialog box.

The Preview Window in the *Adapt* Mode

This window allows you to recheck your job before it is printed.
The edges of the window are magnetic, that means that when an object nears the edge of the page it sticks to the edge of the window. The ***Snap to Edge*** command allows you to position your objects quickly in the corners or at the edges of pages.

Tip: *If you want to turn off the* ***Snap to Edge*** *command, hold down the* ***SHIFT*** *key while positioning your objects.*

The coordinates appearing below the preview window show the position of the upper left corner of the first object in the working area.

Mouse Functions in the Preview Window (*Adapt* Mode)

Clicking once with the ***right*** mouse button enlarges the preview window to its ***maximal*** size.
The size of the display depends on the selected screen resolution. (800*600, 1024*768,...).
If you click again with the ***right*** mouse button the original state is restored.
If you hold down the ***left*** mouse button, a dotted black frame appears around the objects to be printed.
This frame always encompasses all objects located on the working area and corresponds to the printing area.

Printing Area and Object

The items ***Printing Area*** and ***Object*** are located in the upper right area of the ***Print*** dialog box.

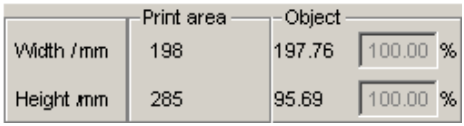


Fig. 25: Printing Area and Object

Printing Area

This box shows the height and width of the specified printing area.

Object
This box displays the object(s) to be printed with its/their heights and widths.

Note: *The boxes for the percentual enlargement of objects are not active in the* ***Adapt*** *mode.*

Beneath the ***Object*** field, on the right side of the ***Print*** dialog box, you will see the ***Printer*** field.

Printer

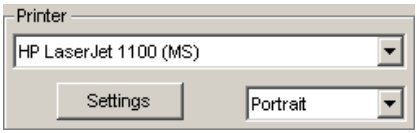


Fig. 26: Choice of Printer

If you open the combobox in the upper part of the dialog box, you will obtain a list of all the printers installed on your system. Select the printer you wish to use.

To make further settings for the printout, click on the ***Setup*** button.
The dialog box which appears is the same as the menu item ***Attributes*** in the ***Printer File*** menu.

Note: *The* ***Print*** *dialog box opened by clicking the* ***Setup*** *button depends on the printer driver loaded and for this reason is not explained in greater detail here.*

You can specify the ***Page Format*** (upright/oblong) in the field to the right of the ***Setup*** button.

What is to be printed ?

In the field headed ***Print Mode*** there are two comboboxes which you can use to determine what is to be printed.
In the first box you can choose between ***Objects*** and ***Objects with Worksheet***.

Objects
All objects in the working area will be printed.

Objects with Worksheet
All objects and also the worksheet (black frame) will be printed.
The company name, the dimensions of the working area and the proportional size of the printout will also be printed automatically below the black frame.

The following settings are available in the second box: ***All Objects***, ***Selected Objects***, ***Print Color Separations*** (print in layer sequence), ***Print Single Layers*** (colors).

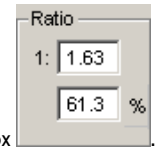
All Objects
All objects in the working area will be printed.

Selected Objects
Only selected objects on the working area will be printed.

Printing Color-Separations
All objects of one color will be printed in the sequence shown.

The color bar (layer order) in the second box contains all the colors (layers) which have been used in the working area. The colors will later be printed in this sequence. The darkest color is always printed first.

Print Single Colors (Layers)
The colors listed in the second box are those which have been used for the objects on the working area.
If, for example, there is only a black and a red object in the working area, there will be a choice of only two color bars (layers) available.

Ratio
You can enter the proportion in which the printout should be made in one of two boxes, either as a figure or a percentage. The boxes are coupled, i.e. if you enter a figure, the equivalent percentage will automatically appear in the box 

. and vice versa.

Examples of proportional entries in figures with the corresponding percentages:

Proportion 1 : 1	100.00 %
Proportion 1 : 2	50.00 %
Proportion 1 : 3	33.33 %
Proportion 1 : 4	25.00 %

Center
If this option is activated, all objects on the working area will be centered.

Tile
If this option is selected, the ***Print*** dialog box appears in the ***Tile*** mode.

Number of Copies
In this box you can specify the number (max. 9999) of copies to be printed.
The ***Adjust*** and ***Tile*** buttons permit you to switch to and fro between these two modes.

If this option is activated, all objects on the working area will be centered.

Tile
If this option is selected, the **Print** dialog box appears in the **Tile** mode.

Number of Copies
In this box the number (max. 9999) of copies to be printed can be specified.
The ***Adjust*** and ***Tile*** buttons permit you to switch to and fro between these two modes.

1:1
When this button is activated, all objects on the working area will be displayed in their original size.

Adjust
When this button is activated, the objects in the working area are reduced so that they can be shown in their entirety in the preview window.

Print Colored Worksheet
If you choose this option, your worksheet will be printed with the specified background color.

Print Guidelines
If the job contains guidelines, these will also be printed.

Always Print Black
This option will automatically be activated when ***All Objects*** is selected in the first box and ***Print Color Separations*** (in layer sequence) or ***Print Single Colors*** (single layers) is selected in the second box.
If you want to print the objects in the working area in color, the command must be deactivated.

Register/Crop Marks
This option will automatically be activated when ***All Objects*** is selected in the first box and ***Print Color Separations*** (in layer sequence) or ***Print Single Colors*** (single layers) is selected in the second box

If you do not want the register/crop marks to be printed, the ***Register/Crop Marks*** button must be deactivated beforehand.

The following table shows all possible combinations for comboboxes 1 and 2 and the possible choices of settings in the ***Adapt*** mode.

Possible combinations for Ccomboboxes 1 and 2 in the *Adjust*-Mode:

Combobox 1	Combobox 2	settings: X (activ), — (not active)							
		number of copies	adjust/ tile	ratio	center output	print guidelines	print colored background	always print black	cutting-marks
objects	all objects	X	X	X	X	—	—	—	—
	selected objects	X	X	X	X	—	—	—	—
	color seperated printing	X	X	X	X	—	—	X	X
	print single layers layers	X	X	X	X	—	—	X	X
objects with worksheet	all objects	X	—	X	X	X	X	—	—
	selected objects	X	—	X	X	X	X	—	—

Fig. 27: Possible Settings in the *Adapt* Mode

Buttons in the *Print* Dialog Box

The *OK* Button

If you click on this button, the settings made will be transmitted to the printing device.

The *Cancel* Button

You can use this button to quit the ***Print*** dialog box.

The *Help* Button

Clicking on this button starts CoCut Professional online help.

The *Setup* Button

Clicking on this button opens the dialog box for setting up your printer.

Note: *The* ***Printing*** *dialog box opened by clicking on the* ***Setup*** *button depends on the printer driver loaded and for this reason is not explained here.*

The Tile Mode

If you switch from the ***Adjust*** mode to the ***Tile*** mode, the following preview window appears:

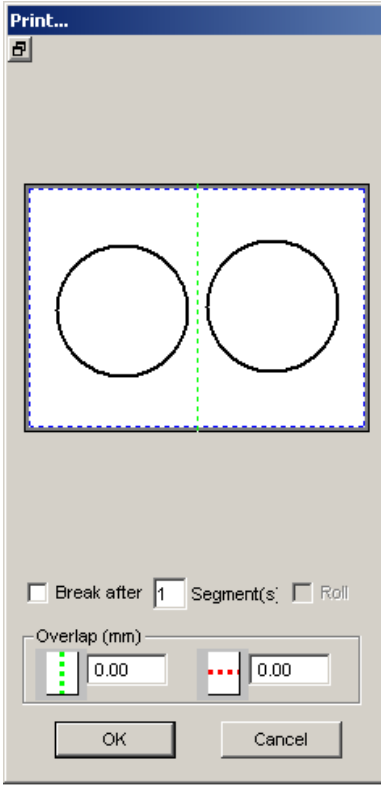


Fig. 28: The Preview Window in the *Tile* Mode

In the ***Tile*** mode all tiles are displayed. A tile is the part of an object which can be printed or cut on the device being addressed.

Break After indicates after which tile (enter the number of the tile) the output should be stopped. You can enter the desired horizontal/vertical intersection of the objects to be printed in the boxes under ***Overlap***.

If you print using ***Roll,*** complete stretches can be printed without any spaces between the single tiles.

You can only stop the printing of a complete stretch and not of the individual tiles. Entering an intersection in the printing direction does not have any effect on this operation, as can also be seen from the display of the tile size.

Note: *After tiling, the dialog box will not automatically be closed, as it is useful to be able to compare the preview directly with output. This also allows you reprint a particular tile immediately.*

Mouse Functions in the Preview Window (*Tile* Mode)

You can enlarge the tiling view to the size of the screen by clicking once with the right mouse button on the tile preview window. A second click with the right mouse button will restore the original state.
Double-clicking with the left mouse button on a tile deactivates the tile, i.e. it is not printed.
If you double-click with the left mouse button while holding down the CTRL key, the tiling will be inverted, i.e. the tiles which were previously deactivated will be activated (printed) and the tiles which were activated will be deactivated (not printed).

The objects can be moved within the preview window using the mouse. The ***Snap to Edge*** function activates you to position your objects easily at the edge of the window. You can turn off the ***Snap to Edge*** function by pressing the SHIFT key.

Example of Printing in the Tile Mode

In the following example, the various functions, shortcuts, etc. in the ***Tile*** mode are explained again in detail.

The ***Tile*** mode offers you the possibility of printing in any size, i.e. any artwork, regardless of its size, can be printed out on the printer connected to your system.
To print your artwork, you do ***not*** require a printer for printing A2, A1, A0 or even large formats.

How is this done*?*
The artwork to be printed is divided into as many partitions (tiles) as necessary to be able to print it on the printer connected to your system.

The number of tiles necessary depends on the size of the artwork to be printed and the output format (A3, A2, etc.) which has been specified.

You can determine the output format using the ***Setup*** button in the CoCut Professional ***Print*** dialog box. The format depends on the printer which is connected to your system.

Load any artwork you like to CoCut Professional and open the ***Print*** dialog box, either by clicking ***Print*** in the ***File*** menu, by pressing CTRL+P on the keyboard or by using the button in the toolbox.

The CoCut Professional ***Print*** dialog box will be opened in the ***Adapt*** mode. Activate the **Tile** mode by clicking the appropriate button.

The ***Print*** dialog box appears as follows:

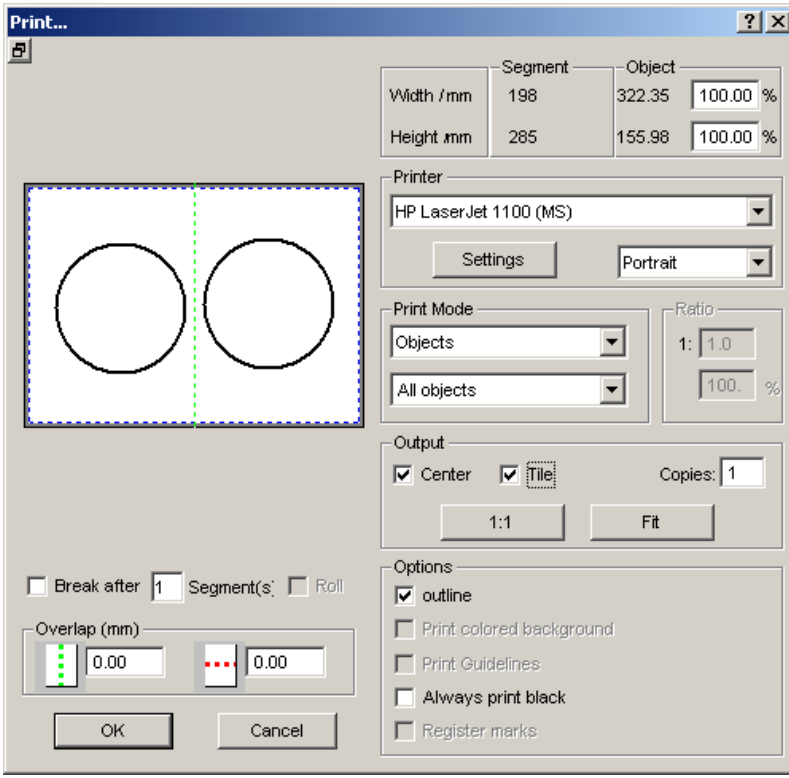


Fig. 29: The *Print* Dialog Box in the *Tile* Mode

In the upper right corner of the dialog box you will see two fields, ***Tile*** and ***Object***. The ***Tile*** field corresponds to the ***Printing Area*** box in the ***Adapt*** mode.

The other fields in the right half of the ***Print*** dialog box behave in the same manner as in the ***Adapt*** mode.

The preview window in the ***Tile*** mode shows all the tiles which are required to print out the entire artwork.
Eight pages, for instance, are required to print out the artwork in the example.
A change in the output format always necessitates an adjustment in the number of tiles.

Beneath the preview window you will find the fields ***Break After***, ***Tiling*** and ***Roll***, which are explained on Fig. 29 of the manual.

Vertical and Horizontal Overlap

The number of tiles increases depending on the number of vertical or horizontal overlaps which you have specified. Fig. 30 shows two tiles to be printed without any overlap.

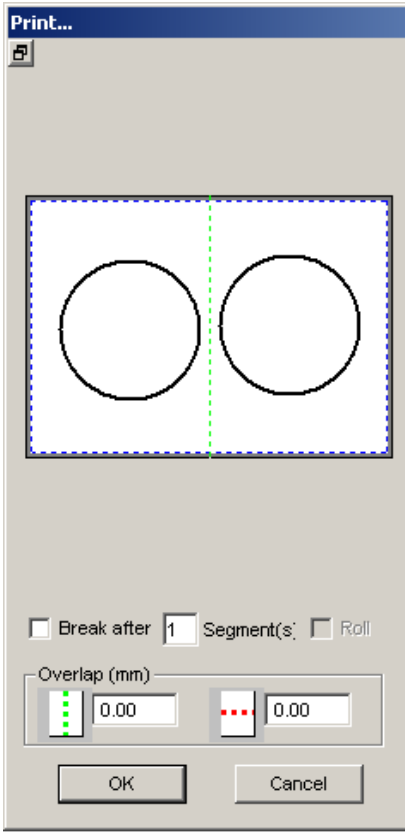


Fig. 30: Two Tiles Without Overlap

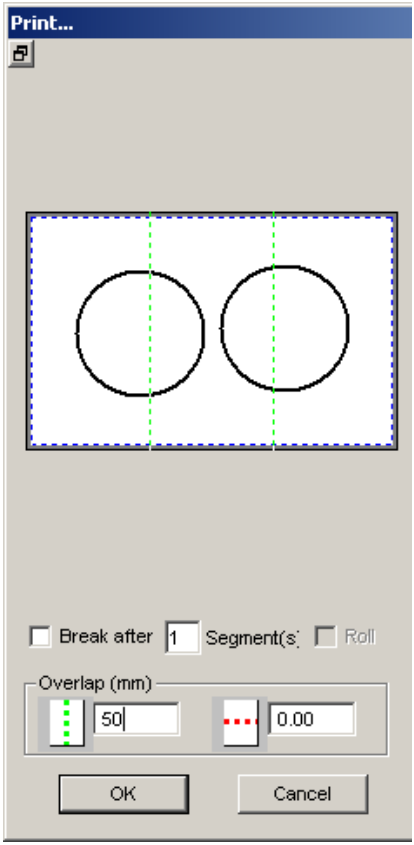


Fig. 31: 3 Tiles With Overlap

Fig. 31 shows that the number of tiles increases when you use an overlap.

Activated and Deactivated Tiles

An ***active*** tile means a tile which is ***not*** marked with an ***X,*** whereas deactivated tiles are always marked with an ***X***.

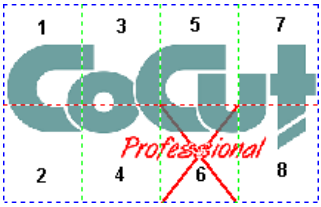


Fig. 32: Deactivated Tile

Tiles can be deactivated or activated by double-clicking on them with the left mouse button, i.e. a tile is deactivated with a double click. A further double click will reactivate it.

You can see from Fig. 32 that tile number 6 is marked with an ***X.*** This tile has been deactivated and will not be printed.
In the ***Tile*** mode you have a further possibility besides activating or deactivating single tiles.

If you hold down the CTRL key while double-clicking on the desired tile with the left mouse button, all tiles, except the one.
On which the mouse cursor is positioned, will be deactivated.

Fig. 33 and Fig. 34 illustrate this.

Fig. 33: 8 Tiles Active (Mouse Cursor is on Tile 6)

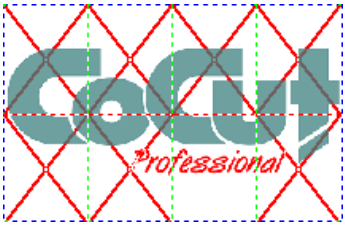


Fig. 34: Tiles 1, 2, 3, 5, 7 u. 8 Deactivated, Tile 6 Activated

Advantage of deactivating tiles:
When your objects are arranged, tiles without objects (empty tiles) may be created, which would result in a blank page being printed.

2.8 The *Cut* Command

This command allows you to activate the module for cutting and drawing your job data. The first time you call up this dialog box, another dialog box will first be opened for setting up the plotter driver and the cutting port.

The CoCut Professional *Plotter Setup* Dialog Box (Local Potter)

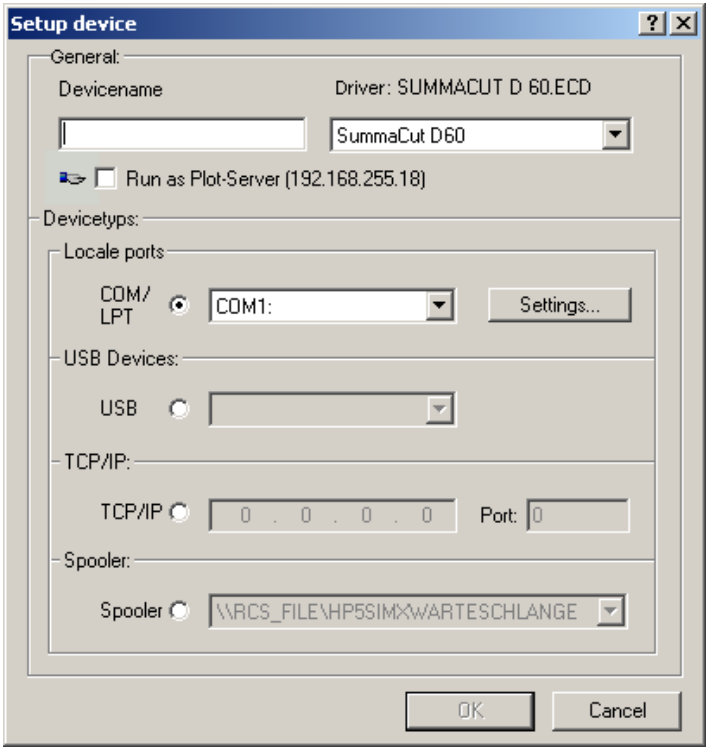


Fig. 35: Dialog Box for Cutting Plotter and Port Setup

General

Choose your plotter driver from the area of the dialog box entitled ***General.*** Click once on the arrow pointing downwards and a selection window will open, in which all the machine drivers available to CoCut Professional are listed.

After you have made your selection, the driver chosen will be shown on the left of the box.

If you do not want to use an existing plotter but install a new one, the name of the new driver can be typed in this box.

If you execute the command ***Activate As Server***, the cutting plotter will be selected as plot server and can be used by another plot manager for cutting.

It is a characteristic of a cutting plotter that it must be assigned a driver to prepare the data for cutting. On the computer on which you are running the plot manager the job data will be converted into machine data with the help of a driver.
The cutting of the machine data can be done in different ways:

Port Types

Local Ports

By local ports are to be understood the ports which are located directly on your computer (COM1, COM2, ...LPT1, LPT2, ...).

Why Use a Serial Plotter Drive ?

The serial RS 232 port is the link for data exchange between the cutting plotter and the host computer.
The host computer calculates the necessary plotting data decentrally.
Two-way or ***bidirectional communication*** takes place between the host computer and the cutting plotter via a hardware handshake. There is a separate data lead for this handshake in the original cable supplied by the plotter manufacturer. The centronics port, i.e. the parallel (printer) port, only permits one-way or unidirectional communication between the host computer and plotter.
The cutting plotter can receive, but not cut, data using this port. Thus, when using this port, it not possible to specify the vinyl width, vary the stabbing pressure or reduce the cutting speed.

Only one port at a time can be active, in this case the plotter, as it receives the data first.

Besides this purely technical difference, there is another important reason, which is the different distribution of resources with computers using MS Windows 3.xx.

Whereas serial drive lets you go on working during plotting, the computer is blocked all the time during plotting when parallel drive is used.
In this case serial drive means higher productivity.

Clicking on the ***Settings*** button opens a dialog box for configuring the port. The settings made apply for the whole system.

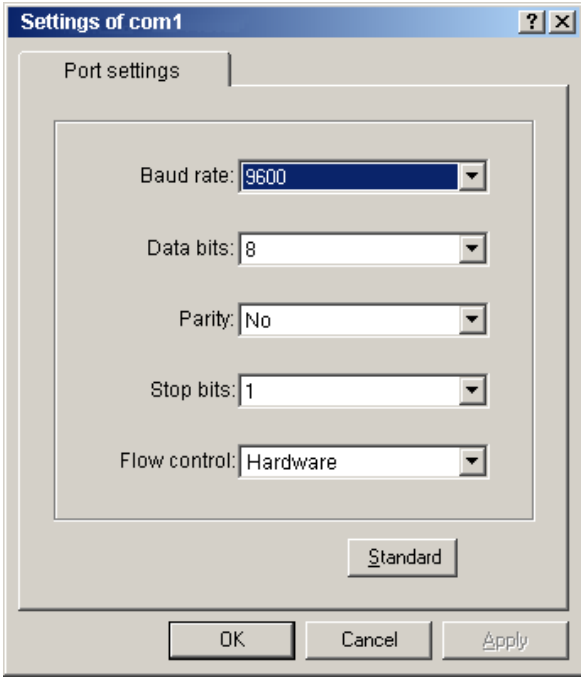


Fig. 36: Dialog Box for Configuring the Port

Note: *With serial drive you must make sure that the baud rate (bits per second) is the same on the computer and the plotter, as otherwise they cannot communicate with each other.*

USB Plotters
All the currently connected ***USB*** plotters are listed here.

TCP/IP
Here you must enter the TCP/IP address and port number for cutting.

Spooler
Here you can select a Windows printer driver.

Click on the ***OK*** button to confirm the settings made in the dialog box. If you click on ***Cancel*** the settings will not be adopted.

Note: *Next time you recall the* ***Cut*** *dialog box, it will be opened directly with the previously installed machine driver.*

The CoCut Professional *Cut Dialog* Box

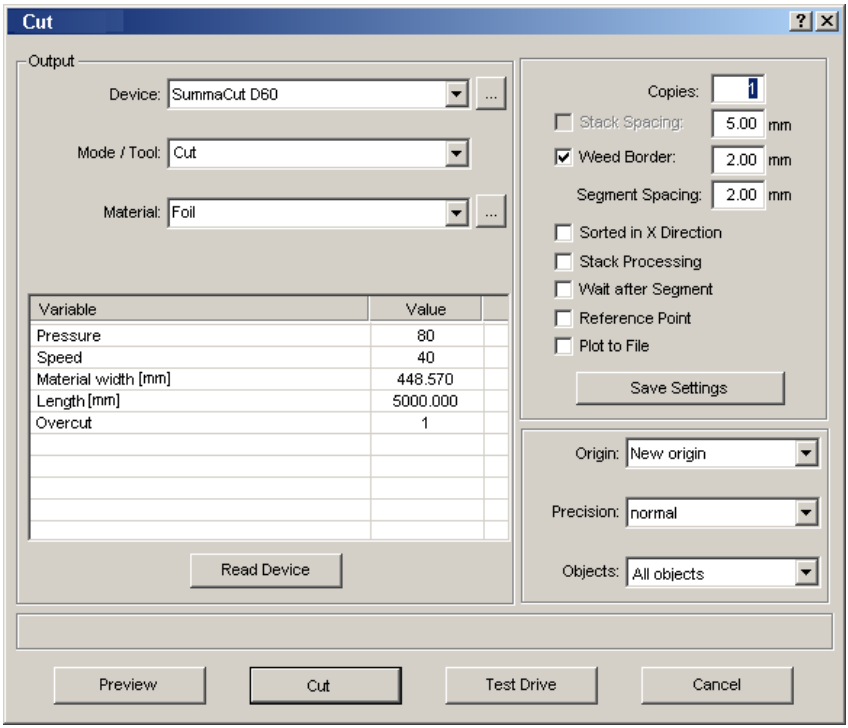


Fig. 37: The CoCut Professional *Cut* Dialog Box

Output

In the part of the ***Cut*** dialog box entitled ***Output*** are to be found all the selection boxes and settings which are directly connected to the plotter.

After ***Plotter*** the previously specified plotter will be shown.

If you want to select another plotter, you must click on the button. Then a selection window will open in which all previously installed plotters are listed. If you click on the ... button, you will have a choice of three further items.

Choose from the Mode/Tool list box if you want to cut, draw or pounce (perforate vinyl, e.g. for painter‘s stencils).

In the ***Material*** box choose the material to be cut. This box is connected to a material databank which needs to be filled, i.e. the data for the various types of vinyl are stored in this databank.

Thus, for example, the settings for pressure, speed/velocity and width may be different for normal vinyl than for flock or metal foils.
These values have to be entered individually, as they depend on the material and the machine you are using.

The range of values are described in your plotter manual.
For example, the maximum speed is 60 cm/sec, i.e. 60 should be entered under ***Speed/Velocity***. Other plotter manufacturers use mm/sec as unit of measurement. In this case a three-digit figure has to be entered, e.g. 150.

Clicking on the  button opens the following ***Popup*** menu:

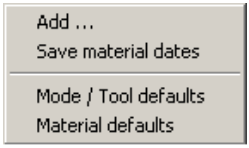


Fig. 38: *Popup* Menu of the *Material* button

You can add a new set of data to the material databank by clicking on ***Add.***

If you select the menu item ***Save Material Data***, the previously entered or modified values will be written into the databank.

If you select the meu item ***Mode/Tool Default***, the values stored in the databank for this tool will be used. If you want to modify the values specified, you must position the mouse cursor in the the appropriate boxes and enter a different value.

If ***Material Default*** is selected, the values stored in the databank for this material will be used. If you want to modify the values specified, you must position the mouse cursor in the the appropriate boxes and enter a different value.

With a large number of cutting plotters the ***Read Back*** button indicates the height of the plottable area so that the value for ***Width*** does not have to be entered manually.
If you are using a plotter which does not offer this option, no value or a zero will be indicated.

In the ***Number of Copies*** box you can specify how often the selected objects are to be cut. After cutting, this value will be automatically reset to 1.

Stack Offset lets you define whether the copies are to be stacked vertically. This option can only be activated if it is possible to cut the selected object more than once one above another.

In the stack preview the first object will be displayed in its “normal“ state. Every further object in the stack will be shown with a black square containing an X.

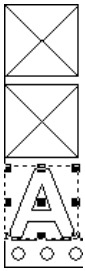


Fig. 39: Objects in the Stack Preview

Note: *When this option is selected, the lower part of the cut dialog box shows how often the images in the job will fit one above another and how many meters of vinyl will be needed.*

Weed Border allows you to specify whether a rectangle is to be cut around the plot and at what distance so as to make it easier to strip or weed the vinyl.

With ***Segment Offset*** you can specify the horizontal distance between single segments.

If you select the ***Sort*** function, all objects located on the working area will be sorted in a horizontal direction when they are cut.

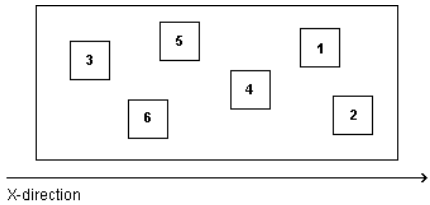


Fig. 40: The *Sort* Function in the *Cut* Dialog Box

In Fig. 40 you can see 6 objects which have been created in numerical order.

First object 1 was created, then object 2, etc. If the ***Sort*** function is not active, first object 1, then object 2, etc. will be cut, i.e. long distances will have to be covered when cutting. This can cause the vinyl to become displaced and takes too much time.

If ***Sort*** is activated, first object 3, then 6, then 5, etc. will be cut. With this variation, the plotter covers the shortest distance possible.

If the you execute the ***Stack Processing*** command, all the jobs will be processed one after another without any break.

If your artwork is too big for cutting, CoCut Professional will divide it into as many segments as are necessary for it to be cut in its entirety.
If you select the option ***Wait after Segment*** the cutting procedure will be paused after each segment and the vinyl can be repositioned if necessary.

Note: *This function is not suitable for plotters which have a small cutting width or for flatbed plotters.*

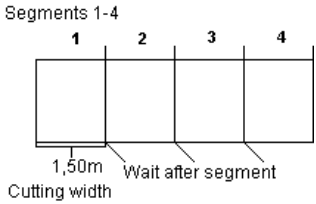


Fig. 41: Example of Segmentation (Cutting Width 1.50m/59 ins)

The physical zero point (0/0) of the plotter or router can be set using the ***Sheet Origin*** function.
If this function is turned off, CoCut Professional automatically chooses the physical zero point as the starting point for cutting or routing.

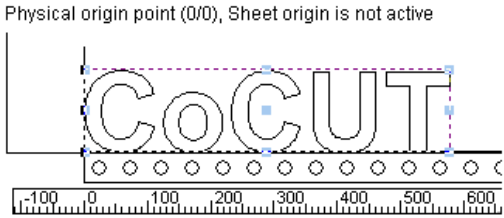


Fig. 42: Sheet Origin Not Active

If ***Sheet Origin*** is activated, the physical zero point is moved by the amount of the offset coordinates of the point of reference.

The point of reference coordinates correspond to the position of the lower left corner of the object to be cut on the CoCut Professional working area.

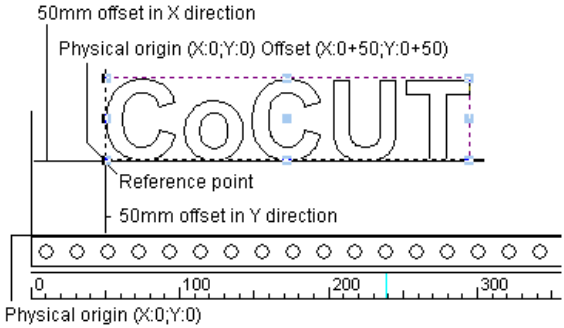


Fig. 43: Sheet Origin Active

If you click the ***Save Settings*** button, all values which you previously entered in the ***Cut*** dialog box will be adopted and transmitted to the plotter which is currently active.

If the checkbox ***Output to File*** is activated, the output data will be sent to a file specified by you and saved on your hard drive.

With ***Origin*** you have a choice of two options. If you select ***Do Not Fix***, the physical zero point will be taken as the new point of origin after cutting.

If you select ***New Origin***, the plotter will run in a horizontal direction to a specified distance behind the object last cut and this position will be the new point of origin.

In the ***Accuracy*** selection box there is a choice of the following settings:
Very low, low, normal, high and ***very high. Normal*** is the default setting.

The ***Accuracy*** command specifies how many vector part pieces an object should consist of. The more nodes / vectors are set, the more accurately an object will be cut. However, this only plays a part with objects whose size is measured in tenths of a millimeter. All other sizes of objects are automatically calculated by CoCut Professional and the optimal number of nodes set for subsequent cutting.

Color Separation in Cutting

Besides the cutting commands ***All Objects*** and ***Selected Objects,*** CoCut Professional also allows you to cut single colors or sequences of colors.
The list box where you can make your selection is entitled ***Cut Mode***.

Every color used in your design appears in the ***Cut Mode*** list with a number which clearly identifies each color layer.
Two horizontal color bars also appear in this list box.
These color bars show the sequence in which the color layers will be cut. The color layer appearing first on the left will be cut first, i.e. before you start cutting, you must load your plotter with vinyl of this color.
After the data of one color layer have been transmitted to the plotter, a ***Cutting Plotter*** icon ().appears in the status bar.
A double-click on this icon activates the Job Control. If you position the mouse cursor on the icon and click with the right mouse button, a popup menu will appear where you can close the Plot Manager or the Plot Manager version can be shown.

In the Job Control the color layers not yet cut appear in the sequence in which they were selected.

You can modify the sequence of colors at any time, delete single layers or cancel the whole job.

First load the plotter with the material which is in the first position in the stack. Then click the ***Continue Cutting*** button. Repeat this procedure until all the colors have been cut.

Note: *For cutting color separations please use the cutting register marks from the drawing tools. The register marks will be cut in the same place on the vinyl regardless of color. This helps you to mount the various vinyl colors later.*

Install Network Plotter ! ONLY CoCut Professional !

If you select this menu item, the following dialog box opens:

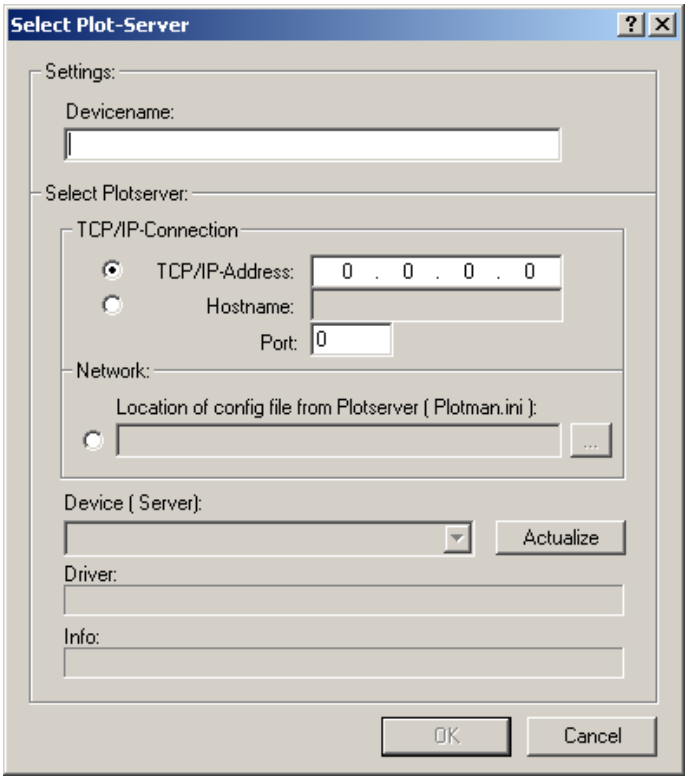


Fig. 44: Dialog Box for Installing the Plot Server

A network plotter permits you to cut CoCut Professional jobs on a Plot Manager running on another computer. Unlike with a “normal“ plotter, the data are not converted into machine data but transmitted in their original state to the plot server.

Type the name of the plotter in the input box.

In the field entitled ***Select Server*** enter the TCP/IP address for a TCP/IP connection or the name of the computer to be used.

If the connection is to be established via the network, you must specify the data for configuring the plot server here-

If you click on the Update button, the server plotters will be read.
The server plotter cannot be chosen until the server has been selected, as only then are the server plotters available.

Note: *Enter the driver used by the server for this plotter in the Driver box.. This driver must also be available locally.*

The ***Info*** box displays information relating to the active driver.

The Cut Preview Window

The ***Cut Preview*** window is automatically opened when you click the ***Cut*** button.

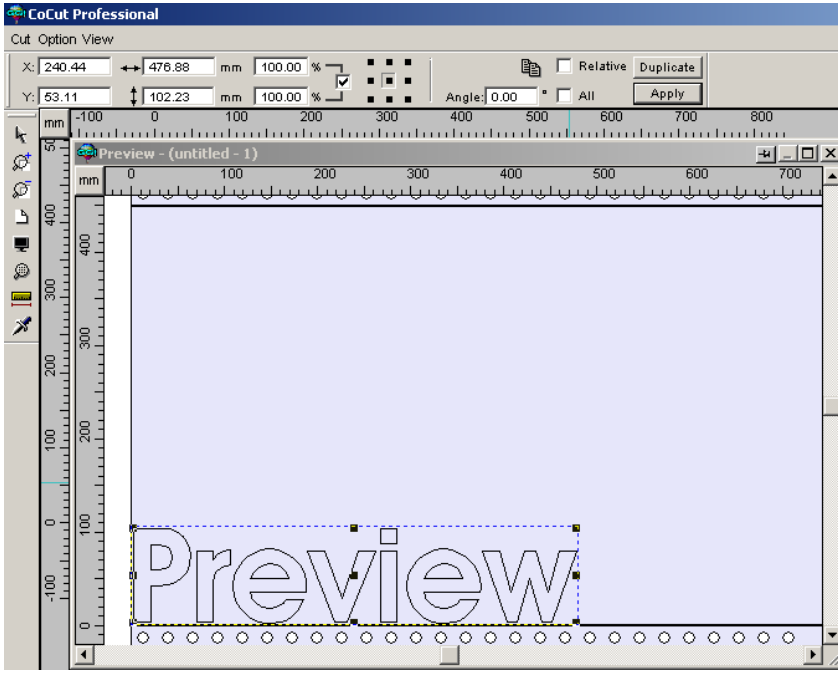


Fig. 45: The *Cut Preview* Window in the CoCut Professional *Cut* Dialog Box

The various functions available to you in this dialog box are explained in detail in the following sections.

The following information about the job to be cut is shown in the ***Cut Preview*** window status bar:

Wireframe, fill, width and height, group or combination and the maximum amount of vinyl used in square meters and continuous meters.

When the ***Cut*** menu is selected, the data are transmitted to the cutting plotter.

Note: *If the job to be cut is located to the left of, above or below the vinyl preview window and the* ***Cut*** *menu is activated, you will be automatically informed that the objects to be cut are outside the cutting area.*

The ESC key allows you to close the ***Cut Preview*** dialog box and return to the CoCut Professional working area.

The *Options* Menu

The *Rotate Axis* Command

This command is used to rotate objects by 90°.

You need this option regularly if you want to adjust your objects quickly to the running direction of the vinyl.

Note: *The A key also performs this command.*

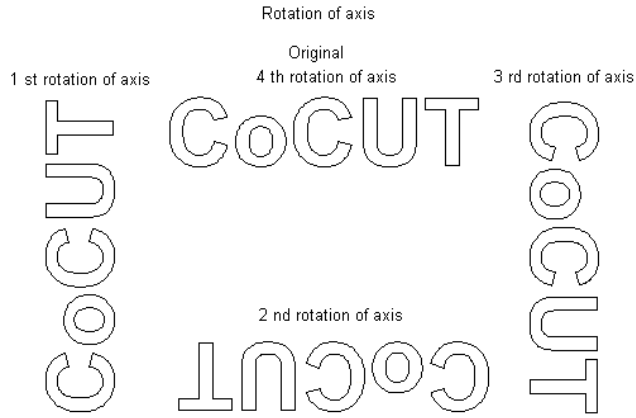


Fig. 46: Example of Axis Rotation

The *Horizontal (X) and Vertical (Y) Mirror* Command

The ***X Mirror*** command mirrors all selected objects on the horizontal axis. The ***Y Mirror*** command mirrors all selected objects on the vertical axis.

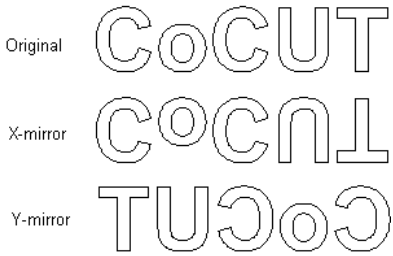


Fig. 47: Example of the *Mirror* Command

The *Optimize Output* Command

When you click this menu item, the dialog box for optimizing the use of the vinyl opens.

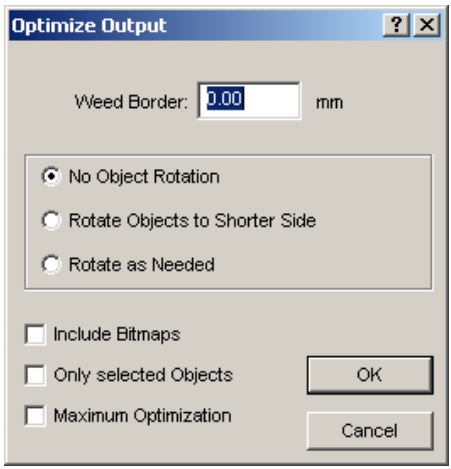


Fig. 48: *Optimize Output* Dialog Box

This function ensures that all the objects are arranged in such a way that they take up as little space as possible on the vinyl.

The following options are available to you in this dialog box:

Weed Border
If you check this option, a weed border will be cut automatically around your job to facilitate weeding. Enter a value for the distance at which you would like to have the weed border cut.

Rotate All Objects to the Shorter Side
All the objects are rotated so that the shorter side is at the bottom.

Rotate as Needed
During the output optimizing process, the objects are rotated in such a way that they are in the best position for cutting.

Include Bitmaps
Normally bitmaps and groups containing bitmaps are not optimized.
You can use this option if you wish to optimize bitmaps.

Only Selected Objects
Only selected objects will be optimized. This option can be used, for example, to optimize in layers (by colors).

Maximum Output Optimization
If you select this option, two further boxes will appear in the ***Optimize Output*** dialog box.

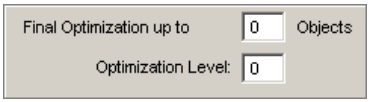


Fig. 49: Additional Fields in the *Maximum Output Optimization* Option

Maximum Output Optimization computes all the possible combinations from the ***Final Optimization*** ... and ***Permutation Depth*** fields.

This calculation may take quite a long time if the values are large, as all the possible combinations from the two boxes are computed and compared.

Note: *Normally no more than 10-15 objects with a permutation depth of 6 at maximum should be set up. When optimization has taken place, one or more of the objects will always be rotated.*

The *Recalculate* Command

This command closes the preview window and reopens the CoCut Professional cut dialog box.

The *Original Display* Command

Clicking on this menu item restores the cut preview window to its original state, i.e. if the object in the preview window has, for example, been duplicated or repositioned, the preview now appears as it was after you had clicked on the ***Cut*** button.

Weeding Lines

Example of Adding Weeding Lines

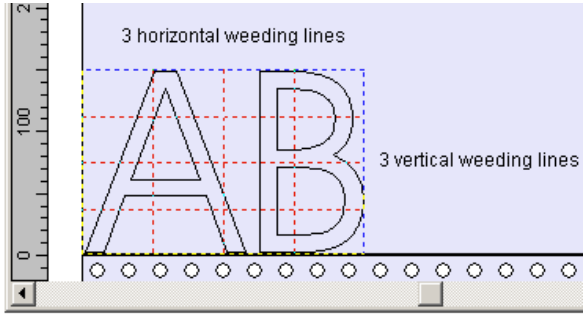


Fig. 50: Addition of Horizontal/Vertical Weeding Lines

You can see in the figure above that there is only a weed border around the objects to be cut.
Especially when the objects are small, this is often insufficient for weeding them quickly and easily.

In the cut preview window you have three possibilities of adding horizontal/vertical weeding lines.

Note: *It is only possible to add weeding lines when this command is activated in the* ***Cut*** *dialog box.*

1. Manual
Position the mouse cursor on the weeding frame surrounding the objects.

The mouse cursor turns into a double arrow. Now drag the horizontal/vertical segment line to the position where you wish to make a segment. Repeat the procedure until you have added all the segment lines you wish.

2. Via the *Options* Menu
Open the ***Options*** menu and select ***Horizontal Weeding Lines*** or ***Vertical Weeding Lines.***

The first weeding line is added horizontally or vertically in the centre of the object to be cut.

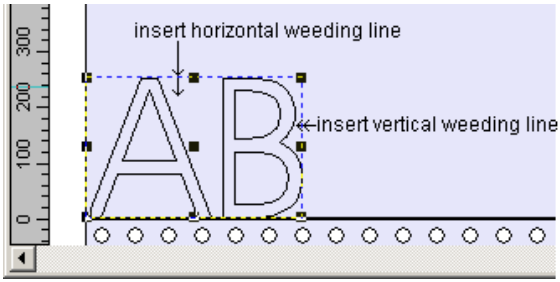


Fig. 51: Example of Adding Horizontal/Vertical Segment Lines via the *Options* Menu

It can be seen in the figure above that if you keep on clicking one of these two menu items the segments created will be divided in the center by further segment lines.

3. Via the Shortcuts h or v (see point 2)
In the figure below we can see how an object is prepared for cutting with segment lines.

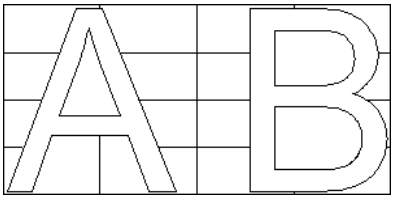


Fig. 52: What Is To Be Cut?

When the ***Cut*** menu is activated, the data is transmitted to the plotter for cutting.

Note: *If the job to be cut is situated to the left of, above or below the material preview when the* ***Cut*** *menu is activated, you will automatically be informed that the objects to be cut are outside the cutting area.*

Press the ESC key to quit the Cut Preview dialog box and return to the CoCut Professional working area.

The *View* Menu

The *Material Width* Command

If you select this full screen command, the entire working area will be shown.

The *All Objects* Command

This command alters the representation of the vector drawing in such a way that all the objects can be seen on the screen. The section is chosen in such a way that the artwork is shown as large as is possible with all the objects being visible.

Note: *If you keep the* SHIFT *key held down while peforming this command, only the selected objects will be zoomed to the maximum possible size.*

The *Show Selected Objects* Command

When you perform this command, only the ***Selected Objects*** on the working area will be shown in their maximum possible size. You can also use the shortcut SHIFT+F4.

The *Total Area* Command

If you perform this command, a preview of the total vinyl area will be shown.
The size of the area shown depends on the frame size (Vinyl height * Vinyl width) of the output device being addressed (e.g. router or plotter).

If you have selected a driver for a roll plotter in the cut dialog box, a vinyl length of 30 m (27 ft) will always be shown in the preview window.

If you chose a driver for a table plotter, for example, in the cut dialog box, the maximal width of this table plotter (e.g. Wild TA 10 = 2m/6 ft 8 ins) will be shown as vinyl length.

Job Sectioning in the Cut Dialog Box

If the job to be cut exceeds the output width specified (***Width*** box in the cut dialog box), the message "***Sectioning Job"*** appears in the lower part of the cut dialog box.

Explanation: *Sectioning means the division of a job into as many parts or sections as are necessary to cut the complete job.*

When you click on the ***Cut*** button, the following dialog box appears:

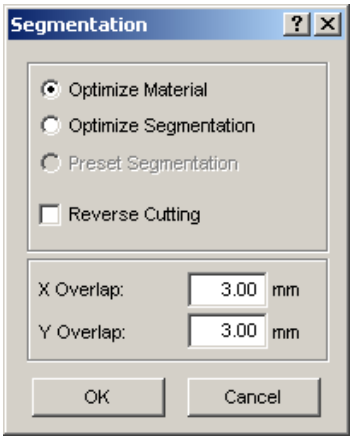


Fig. 53: Sectioning Dialog Box

When you activate the ***Optimize Output*** command, CoCut Professional will divide the object into segments of the maximum permissible size.

The ***Optimize Segments*** command allows you to create segments of an equal size.

Cut Negative lets you specify that the image should be cut as a "negative", e.g. for use as a template in screen-printing.

The intersections of the segments can be determined in the ***X*** and ***Y Overlap*** boxes.

To close the dialog box, click on ***Cancel***.

Clicking on ***OK*** opens the sectioning preview window, which lets you specify the sectioning of your job.

Modifying Sectioning

To modify the sectioning, click on the gray sectioning lines and drag them to the desired position. CoCut Professional will automatically add new sections, if necessary.

A hook in front of a segment indicates that the segment can be cut. If you deactivate the hook by clicking once on the left mouse button, the segment will be deactivated and will not be cut.

The menu items in the preview window and the functions of the right mouse button are the same as those in the cut dialog box.

Exception: *You can use the menu item* ***Segment Size*** *to display the size of the segment on which the mouse cursor is positioned..*

The status line of the segmenting preview window shows the size of the job to be cut in a vertical and horizontal direction and the number of segments.

2.9 The CoCut Professional Plot Manager

The Plot Manager has the following tasks:

Configuring and Reconfiguring Plotters

With the Plot Manager it is possible to configure or install a plotter. All the information necessary for data output, such as driver and port, are combined in a single device.

In CoCut Professional these plotters can then be used for pltting artwork. It is possible to output on several plotters at the same time.

Monitoring the Job Output Process

The output of the various plotters can be monitored with the Plot Manager, e.g. plotting can be paused or stopped and the sequence of jobs changed.

Data Output on Local Ports

The serial and parallel ports on your computer can be detected by the Plot Manager and used for plotting data.

Managing Hot Folders ! ONLY CoCut Professional !

The management of hot folders is a tool which operates independently of CoCut Professional. A hot folder is a directory which is monitored by the Plot Manager. When a file is copied to this folder, the Plot Manager automatically performs certain configurable commands.

Plot Server Function ! ONLY CoCut Professional !

The Plot Manager can make plotters available for other Plot Managers to use. This makes it possible to separate design and plotting workstations.
You start the Plot Manager by double-clicking on the icon in the start bar located at the bottom right of your screen.

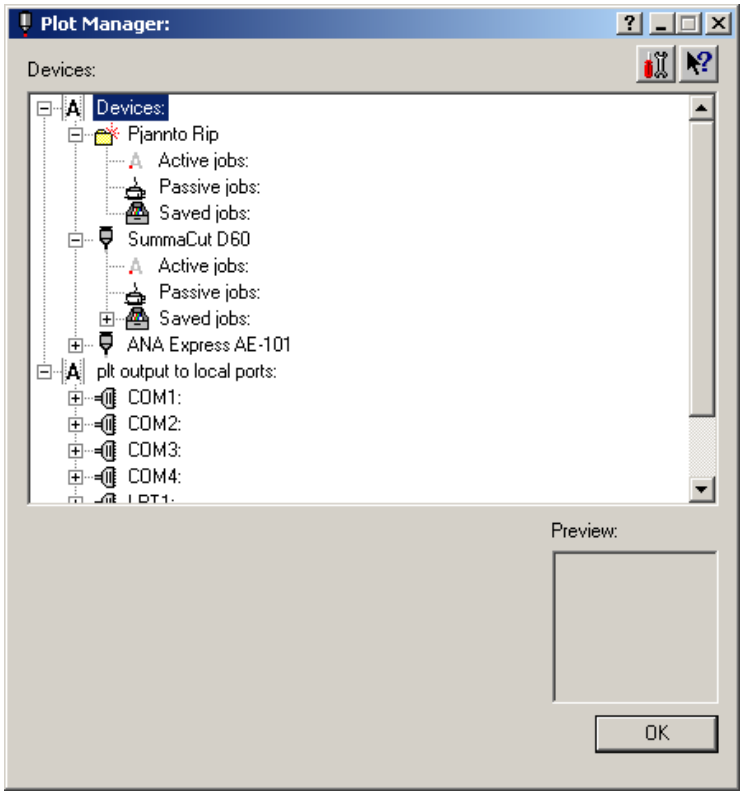


Fig. 54: The CoCut Professional *Plot Manager* Dialog Box

Plotter Folders

Each plotter has three plotter folders for showing jobs:

Note: *Jobs also include plots performed from hot folders or on local ports.*

Plotter Folder 1

Active Jobs

All jobs to be plotted will be collected in this folder as soon as the machine is ready. When one job has been finished, the next one will be started. If the command “Show message window before plotting job“ is activated, a message dialog box will be shown before the job is plotted.

Plotter Folder 2

 **Passive Jobs**

When the plotter is stopped temporarily, all the jobs to be plotted will be moved to this folder.

Plotter Folder 3

 **Plotted Jobs**

The jobs already plotted are saved in this folder. The number of jobs saved can be specified in the Options dialog box of your plotter. When the number of jobs saved has been reached, the next job to be saved will replace the oldest one in the folder.

Job Commands

The commands vary according to the plotter folder and type of plotter as well as the job status.

Note: *You can execute the commands via a context menu.*

Commands for Jobs on Local Plotters:

Active Jobs

When the job is just being plotted:

Stop plot	Plotting of the data will be stopped temporarily. The job will be marked with a red dot

Stopped Jobs

Continue	Plotting will continue.
Make Job Passive	The job will be deleted from the list of active jobs and added to the ***Passive Jobs*** folder.
Delete Job	The job will be deleted.

Passive Jobs

Activate Job	The job will be deleted from the list of passive jobs and added to the list of active jobs.
Delete Job	The job will be deleted.
Message:	You can type a message text for this job. The information will be displayed when the job is to be plotted or selected.

Plotted Jobs

Activate Job	The job will be deleted from the list of plotted jobs and added to the folder of passive or active jobs depending on the plotter setting.
Delete Job	The job will be deleted.
Plot to File	Here you can specify if the job is to plotted to a file.

Commands for Jobs on Network Plotters ! ONLY CoCut Professional !

Active Jobs

No commands

Passive Jobs

Activate Job	The job will be deleted from the list of passive jobs and added to the list of active jobs.
Delete Job	The job will be deleted.
Message:	You can type a message text for this job. The information will be displayed when the job is to be plotted or selected.

Plotted Jobs

Activate Job	The job will be deleted from the list of plotted jobs and added to the folder of passive or active jobs depending on the plotter setting.
Delete Job	The job will be deleted.

Commands for Jobs in Hot Folders: ! ONLY CoCut Professional !

Active Jobs

No commands

Passive Jobs

Activate Job	The job will be deleted from the list of passive jobs and added to the list of active jobs.
Delete Job	The job will be deleted.
Message:	You can type a message text for this job. The information will be displayed when the job is to be plotted or selected.

Plotted Jobs

Activate Job	The job will be deleted from the list of plotted jobs and added to the folder of passive or active jobs depending on the plotter setting.
Delete Job	The job will be deleted.

Commands for Jobs on Local Ports:

Active Jobs

When the job is just being plotted:

Stop plot	Plotting of the data will be stopped temporarily. The job will be marked with a red dot.

Stopped Jobs

Continue	Plotting will continue.
Make Job Passive	The job will be deleted from the list of active jobs and added to the ***Passive Jobs*** folder.
Delete Job	The job will be deleted.

Passive Jobs

Activate Job	The job will be deleted from the list of passive jobs and added to the list of active jobs.
Delete Job	The job will be deleted.
Message:	You can type a message text for this job. The information will be displayed when the job is to be plotted or selected.

Plotted Jobs

Activate Job	The job will be deleted from the list of plotted jobs and added to the folder of passive or active jobs depending on the plotter setting.
Delete Job	The job will be deleted.

Plot Manager Setup

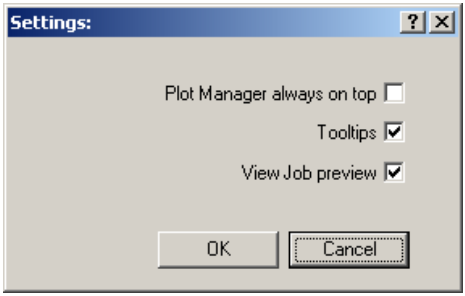


Fig. 55: The Plot-Manager *Setup* Dialog Box

If you execute the ***Plot Manager Always in Front*** command, the Plot Manager will always be in the foreground.

If you execute the *Activate Direct Help* command, a short description of an item in the dialog box will appear when the mouse cursor is moved to this item.

If you execute the ***Show Job Preview*** command, a preview image of the data to be plotted will be shown.

Command Line Entry

When the Plot Manager is started without a command line entry, it searches all plotters for jobs to be plotted. If a job is found, it will be plotted.

The Plot Manager shuts down if no job is found or all the jobs have been plotted. If !SPOOL! is entered at the beginning in the command line, the Plot Manager stays active.

It must be shut down manually by clicking with the right mouse button on the Plot Manager icon in the taskbar.

Hot Folders ! ONLY CoCut Professional !

You can use a hot folder for monitoring a directory. When a file is copied to the monitored directory, one of the following actions will be peformed according to the setting made:

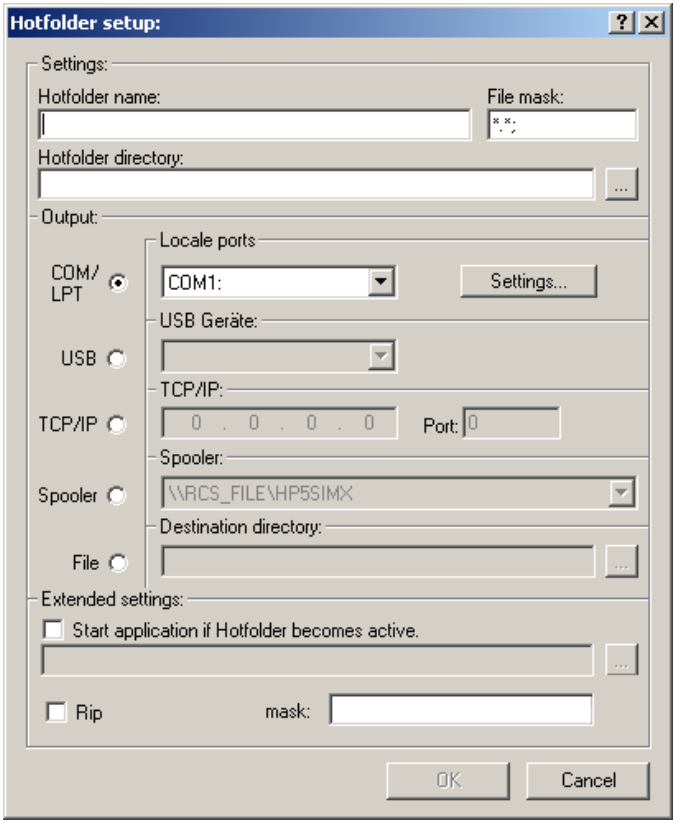


Fig. 56: Dialog Box for Plotter Setup for a Hot Folder

COM/LPT: The file will be plotted on a local serial or parallel port.

USB: The file will be plotted on a USB plotter. A USB plotter is only displayed when it is connected to your computer.

TCP/IP:	The file will be sent to a TCP/IP address. For some addresses you also have to enter the correct port number.
Spooler:	The file will be plotted with a printer driver.
File:	The file will be copied to the plot directory. Any existing file of the same name will be overwritten. The input file will be deleted once the action has been performed.

In addition, another program can be started to continue editing the input file which is just being edited. The file name will be marked with the % symbol.

Note: *If "File" is specified for plotting, the program will start* ***after*** *the copying process. In all other cases the program will start* ***before*** *plotting.*

Common Difficulties Encountered During the Cutting Process

a) Vinyl Bunches Up

Result:
The blade causes the vinyl to shift, leaving gaps in the contour.

Remedy:
When loading the material, make sure it is held tightly and evenly to avoid any wrinkles.

b) Excessive Cutting Speed

Result:
Small characters or parts of your design, such as serifs, centers, dots, etc. are lifted off and separated from the liner.

Remedy:
Reduce the cutting speed and possibly the cutting pressure.

c) Excessive Cutting Pressure

Result:
The liner is cut or scored, small characters or parts are lifted off and separated from the liner, pieces of liner stick to your letters. Weeding becomes much more difficult.

Remedy:
Reduce the cutting pressure and possibly the cutting depth as well.

d) Insufficient Cutting Pressure

Result:
The vinyl and adhesive are not cut all the way through. Weeding becomes very difficult, if not impossible.

Remedy:
Increase the cutting pressure and possibly the cutting depth as well.

e) Excessive Cutting Depth

Result:
Vinyl, adhesive and liner are cut all the way through. Result is unusable.

Remedy:
Decrease the cutting depth.

f) Dull Cutting Blade

Result:
Only the vinyl is cut through; the adhesive remains more or less intact. When cutting standard vinyl, the life of the cutting blade should be fairly long. When cutting thicker, tougher materials, such as reflectives or sandblast stencil, the blade will dull much faster.

Remedy:
Replace the blade.

g) Small Graphics Separate from Liner

Result:
Weeding becomes nearly impossible. Small parts of the graphic, such as serifs, centers, or dots stick to adjacent vinyl and cannot be removed.
As a general rule, the smaller the graphics you are cutting, the thinner the vinyl must be and the stronger the adhesive to held everything in place.

Remedy:
Decrease the cutting speed and possibly the cutting pressure as much as necessary.

h) Liner Cut Through

Result:
Parts of the liner stick to the letters; weeding becomes very difficult, if not impossible.

Remedy:
Reduce the cutting depth and possibly the cutting pressure as well.

CMX Import ! ONLY CoCut Professional !

You can import CMX files to CoCut Professional with the Windows Explorer or via Windows 98 using drag & drop.

***Note**: Drag & drop is also possible with EPS and bitmap files.*

Procedure:
Arrange the program windows (e.g. CorelDRAW and CoCut Professional) on your screen so that the two windows are next to each other or one below the other.
When you click on the task bar with the right mouse button, a ***context-sensitive*** menu opens, offering you various window arrangements.
Choose the object(s) you want to import to CoCut Professional and simply drag them to the CoCut Professional working area.
It is also possible to import CMX files via the ***CoCut Professional*** dialog box.
Objects can also be imported to CoCut Professional from CorelDRAW 6, 7, 8, 9, 10 & 11 via the clipboard.
Single objects can be selected in CorelDRAW and imported to CoCut Professional using drag & drop.

Description of the Right Mouse Button Menu ! ONLY CoCut Professional !

The object-sensitive menu that can be opened using the right mouse button makes it much easier and faster to work with CoCut Professional.
The menu items ***Refresh Screen, Import, Export*** and ***Working Area*** are available as defaults.

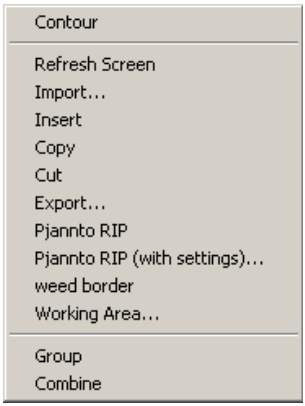


Fig. 57: Examples for Right Mouse Buttons Commands

In addition to these, further menu items will appear depending on how the objects are positioned on your working area (combined, grouped).

Additional items are:

Working Area	**Right mouse button**
1. One object	Outline Combine Import Export
2. More than one object	Group
3. Grouped objects	Ungroup
4. Combined objects	Break apart

2.10 Access to RCS ONLINE

For this you need acess to the internet, e.g. via AOL or an internet provider.

Advantages of access via the internet:

You only have to pay the charges to your internet provider (usually local charges). If you already have access to the internet, no configuration is necessary to connect to us.

Open your www browser and type our address:

http://www.eurosystems.lu or **http://www.cocut.com**

3. Reference Section

Menu items in chronological order:

3.1 The *File* Menu ! ONLY CoCut Professional !

The *Job Manager* Command

The ***Job Manager*** command starts the visual file manager of CoCut Professional.

Introduction

The Job Manager is a powerful tool for managing files. At last you will know what files you can find where and what files belong to which customers. With the Job Manager this is absolutely no problem!

Finding old jobs used to involve time-consuming, often fruitless searches but is now quick and easy with the Job Manager.

With the Job Manager it is possible to manage CoCut Professional or EuroCUT jobs, CorelDRAW files or to create an archive of any kind of graphics, text or spreadsheet formats (e.g. Excel).

The most important commands of the Job Manager can be executed using the context-sensitive menu of the right mouse button
or the shortcuts. This guarantees that you can work rapidly and comfortably with the Job Manager.

The Job Manager allows you to search for files in selected directories and with editable enquiry masks.

When you create a new job or edit an existing job and save it in the previously specified search paths, the Job Manager displays the job next time you start your computer.

The Job Manager can make backups of the artwork data, which can be recorded on a CD for your archives.
When backup is made, a complete version of the Job Manager will be stored at the same time so that the artwork data can be used on any computer or network of your choice.

The Job Manager Desktop and Working Area

After you have started the Job Manager its desktop and working area appear as follows:

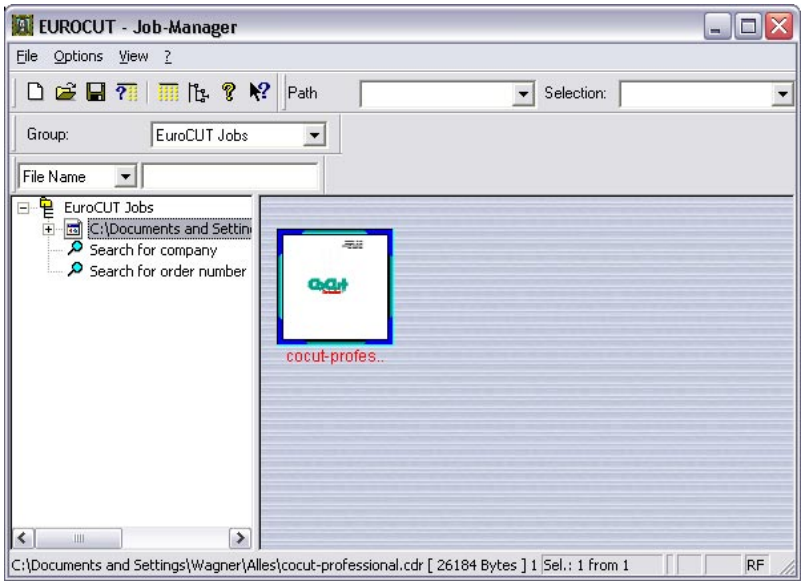


Fig. 58: The Job Manager Desktop and Working Area

In the upper part of the desktop you can see the system menu with ***File Names*** and buttons to ***Minimize, Maximize*** and ***Quit*** the Job Manager.

Fig. 59: System Menu with File Names and Buttons

Here you will find the Job Manager menus, which will be described in detail later.

The ***Job Manager*** symbol bar can be turned on and off by clicking on ***Symbol Bar*** in the ***View*** menu.
The most important commands for editing data are to be found at the beginning of of the bar. After these there is the button for opening the ***Search*** dialog box and the tree view and tree structure can be turned on and off.

Info about... opens a dialog box which shows your ***Job Manager*** version, the numbers of bitmaps and the storage space required. Clicking on the last button opens the ***Job Manager Help***.

Note: *If you want more preview images to be shown in the preview window, you can turn off the tree view.*

Fig. 60: The Job Manager Toolbar

All existing groups of directories and their search paths are displayed in the ***Directory Groups*** window. When you start the Job Manager for the first time only the ***EuroCUT Jobs*** group of directories appears in this selection box.

You can make the selection window visible or invisible by clicking on ***Directory Groups*** in the ***View*** menu.

Note: *You can also use the context-sensitive menu of the right mouse button to call up the most important menu items.*

Next to this box there is another selection box with a choice of two possibilities.

If you select ***File Name*** and type, for example, the letter ***a*** in the field to the right, the Job Manager selection goes to the first job beginning with the letter ***a.***

If ***File Date*** is selected and, for example, ***4 April 2002*** specified as the starting date in the input box on the right, the Job Manager selection goes to the first job created on this date.
You can make tbis selection window visible or invisible by clicking on ***Search Mask*** in the ***View*** menu.

The directory group window is located on the left beneath the directory group display. All ***Directory Groups*** and their ***Search Paths*** are displayed here and also all ***Searches***.

On the right is the Job Manager ***Preview Window***, in which are displayed the located preview images of the files, selected directory groups or search paths.

The Job Manager ***Search Mask*** is located in the lower left corner of the desktop. Here you can specify and edit your own search masks.

Note: *The search mask is not displayed the first time you start the Job Manager.*

You can make the search mask visible or invisible by clicking on ***Search Mask View*** in the ***View*** menu.

When you start the Job Manager the first time there is a choice of two search masks.

Search mask 1: Search by ***Company***
Sarch Maske 2: Search by ***Order No.***

Company and ***Order No.*** are fields from the EuroCUT Job Info.

The ***Search Path Display*** shows all existing and newly created search paths.

In the ***Selection*** box you can specify the enquiry command for searching the selected search path.

You can make the ***Path Selection*** visible or invisble by clicking on ***Path Selection*** in the ***View*** menu.

Switching between Full-Screen and Part-Screen Modes

The ***Job Manager*** window can be switched to different modes. The Job Manager is started in full-screen mode as default. You can switch to part-screen  . The full-screen button then takes on the following appearance: 

In the part-screen mode the vertical and horizontal dimensions of the window can be modified.
To do this, move the mouse cursor to the outer edge of the ***Job Manager*** window. The cursor then turns into a horizontal double arrow.
Keep the left mouse button held down and modify the size of the Job Manager window as you wish.

Note: *The* ***Always in Front*** *command is only active in the part-screen mode.*

It is especially useful to use the part-screen mode in conjunction with plotting or graphics programs.

When the desired graphics program and the Job Manager are open, the Job Manager can be positioned on the graphics program working area in such a way that the work with the graphics program is not obstructed.
If the ***Always in Front*** command is executed in the Job Manager, the Job Manager will always be visible.

Advantage: *All jobs located in the specified search paths can be dragged to the graphics program directly with drag & drop or imported.*
Thus it is no longer necessary to search or open jobs using several dialog boxes.

Selecting One or Several Preview Images

You can select a preview image by positioning the mouse cursor on the appropriate preview image and pressing the left mouse button.

Several jobs can be selected in two ways

1. **Selecting several jobs singly**
   Keep the CTRL key pressed down and select the appropriate preview images singly one after other with the left mouse button.

2. **Selecting several jobs one after another**
   Keep the SHIFT key pressed down and select the first and last image of the preview images chosen.

Finding a particular preview image in the Job Manager window

When there is a large number of preview images, it is often difficult to find a particular preview image quickly. To do this, there are two possibilities available in the preview window:

1. **Using the a-z keys:**
   When, for example, you press the“a“ key, the first preview image whose file name begins with an “a“ will automatically be displayed.

2. **Intelligent scroll bar**
   Position the mouse cursor on the ***Scroll*** button and keep the left mouse button pressed down. If you drag the ***Scroll*** button up or down, the name of the currently active job will be displayed. After finding the job you were searching for, release the mouse button again. The selected job will now be displayed as the first one in the upper left corner of the preview window.

The *context-sensitive* menu of the right mouse button in the Job Manager preview window (mouse cursor on blue background)

The ***context menu*** activates you to access the various functions in the preview window quickly. You can open the context menu of he preview window by positioning the mouse cursor in the colored area of the preview window and then pressing the right mouse button.

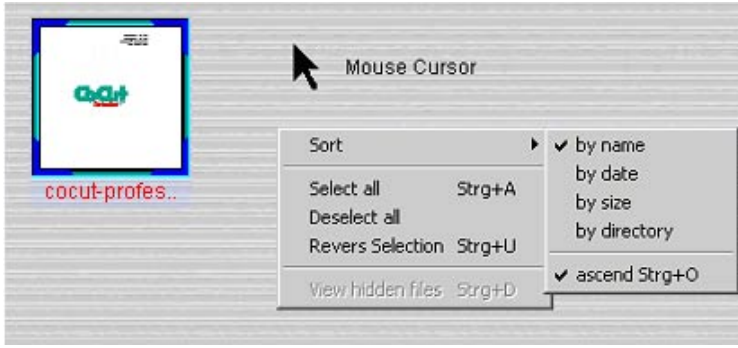


Fig. 61: The Context Menu in the Preview Window

Sort

There is a choice of the following functions in the ***Sort*** menu

When you execute the ***By File Name*** command, all the preview images will be sorted according to their file names.

The file whose name begins with an ***A*** is in first position or if there is no file beginning with ***A***, then the next letter of the alphabet.
Example: In a directory there are four files to be sorted according their file names.

Major, Miller, Walton, Williams

As none of the names begins with ***A***, the name beginning with the next letter of the alphabet is displayed, in our example ***Major***, followed by ***Miller***, then ***Walton*** and ***Williams*** at the end.

If you execute the ***By Date*** command, all the preview images will be sorted according to their dates of creation or, if the dates have been changed, according to the date of the most recent change.

If you execute the ***By File Size*** command, all the preview images will be sorted according to their file sizes.
If you activate the menu item ***By Directories***, all the preview images will be sorted in the order in which they are found in the directories of the chosen search path.

Example: The files located in the following search path are to be searched for according to the directory sequence.

Z:\one\two\three\...
In the example above the preview images of the files located in directory ***one*** will be displayed first, then those from directory ***two***, etc...

All above-mentioned menu items can be used in ***ascending*** order. If, for example, the sort is to be done ***By File Size*** and ***Ascending*** is executed, all the preview images located in this search path will be shown, starting with the smallest.

Select All

 CTRL + A
This command selects all files located in the chosen directory group.

Unselect All

This command unselects all files which were previously selected.

Unselect

 CTRL + U
This command unselects all files which were previously selected.

Reveal Hidden Files

 CTRL + D
This command is not active unless you are searching in a directory group for files that do not meet the criteria and are thus not displayed.

Example: A directory group contains 30 files. Ten of the file names begin with the letter ***A***. The twenty remaining files begin with other letters. Now a search is to be made for all files whose names begin with an ***A.***

The ten files beginning with an ***A*** are displayed as the result of the search. The other twenty files are not shown in the preview window.

If the ***Reveal Hidden Files*** command is executed, all files located in this directory group will be displayed.

The context-sensitive menu of the right mouse button in the Job Manager preview window (mouse cursor on an Job)

The context menu activates you to access the various functions in the preview window quickly. You can open the context menu of the preview window by positioning the mouse cursor on the colored area of the preview window and then pressing the right mouse button.

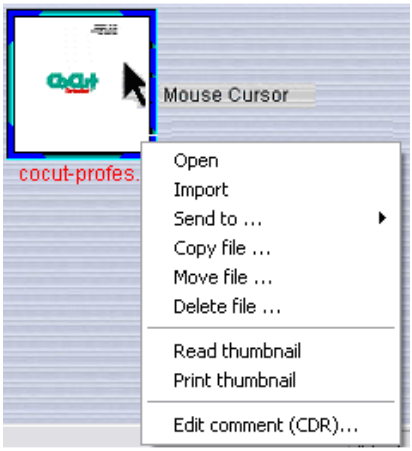


Fig. 62: The Context Menu of the Preview Images in the Preview Window

Open File
Opens the file with the application registered for the file format.

Import File
Imports the file with the application registered for the file format.

Send to...
Starts the standard email program (if one exists) and prepares an email with the file as attachment.

Copy File...
Copies the selected file(s) to the chosen directory.

Move File...
Moves the selected file(s) to the chosen directory.

Delete File...
Deletes the selected file(s) and places them in the rubbish bin. The files in the rubbish bin can't be restored once they have been deleted.

Reread Preview Image
The preview images will be read in again.

Print Preview Image
The preview image(s) will be printed.

Commands only for EuroCUT jobs:
Edit Job Info
Print Job Info

The *Job Manager* Menus

The *File* Menu

The *New...* Command

This command opens a new Job Manager file. The Job Manager desktop and working area open with their default settings. You will have to redefine search paths, search masks and settings.

The *Open...* Command

This command loads files stored on your hard disk or a CD-ROM in the Job Manager format (*.jmn) to the Job Manager working area. You can now edit these files as you wish.

The *Save* Command

This command saves your current job. If you have already saved this job, the given file name and directory will be maintained. No dialog box will open for selecting a target directory but the job will be written directly into the previous directory.

Note: *The old version of the job will be overwritten and is no longer retrievable.*

The first time you save a job a dialog box opens for selecting the target directory. Here you can specify the desired ***Target Directory*** for saving the job and the ***File Name*** of the job.

The *Save As...* Command

With this command you can save a new file under the name you select in the target directory you desire. You can also use this command to change the file name and / or the directory of already existing files.
For example, you may want to save a job composed of parts of an already existing job without losing the old version. Then choose the ***Save As***... command and you can save the new file under a different name in a new directory.
You can also use the ***Save As***... command when you want to save the current file on a diskette or CD.

The *Search Hard Disks...* Command

This command opens the Job Manager ***Find Files*** dialog box. This box activates you to find all graphics, text or other files located on your PC or in your network.
You can search according to the default formats available under ***Search By...***. If you want to search for other formats, you can enter them in the Job Manager in the ***Options*** menu under ***File Formats***.

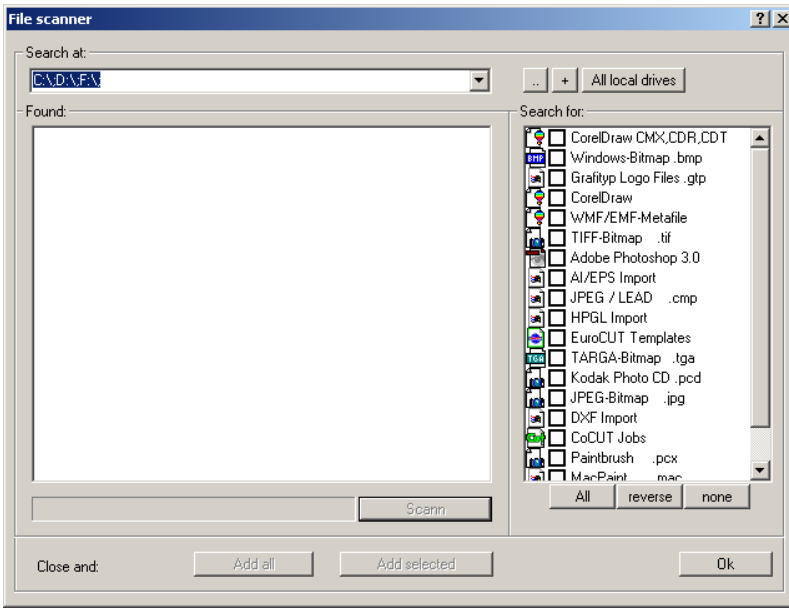


Fig. 63: The Job Manager *Find Files* Dialog Box

In the upper part of the dialog box you can find the input box titled ***Search In***..., where you can type the directory, the hard disk or the network drive in which you want to search.

If you click the .. button to the right of the input box, the dialog box for selecting the directory opens.

Fig. 64: Dialog Box for Selecting Directory

Here you can choose the directory or network branch to be searched and confirm your choice by clicking the ***OK*** button.

The path or directory selected will now appear in the input box. If you now click on the ***Search*** button, the specified path will be searched for the previously selected formats. The status of the search is shown to the left of the ***Search*** button. The ***Search*** button is not activated unless a format is selected.

With the + button you can select directories in the manner described above. These will be added to the directories you have already typed.
Clicking on the ***All Hard Disks*** button automatically enters all local hard disks in your system in the input box.

The selection window entitled ***Search By*** can be used to select particular file formats. Here you will find all the formats which are available as defaults after the Job Manager has been initially installed. If new file formats are added to the Job Manager, they will also be shown here and can be selected. You can select a particular format by double-clicking on it with the left mouse button.

You can unselect the previously selected format by double-clicking on it again with the left mouse button.
The three buttons beneath the window can be used for quickly selecting or unselecting file formats.

The ***All*** button can be used to include all existing formats in your search.

The ***None*** button unselects all previously selected formats and the ***Unselect*** button cancels the selection.
You start the search by clicking on the ***Search*** button.

When the search is completed all the paths found will be shown in the box entitled ***Directories Found.***

The files found will be shown displayed sorted according to format, i.e. all TIFF files found and their respective paths will be stored under **TIFF-Bitmap. tif.** All JPEG files and their respective paths will be stored under **JPEG Bitmap .jpg.**
If you now click with the left mouse buttonon the PLUS sign in front of **TIFF Bitmap .tif,** all the directories in which TIFF files were found will be displayed.
If you now click with the left mouse button on the PLUS sign in front of **JPEG Bitmap .jpg,** all the directories in which JPEG files were found will be displayed.

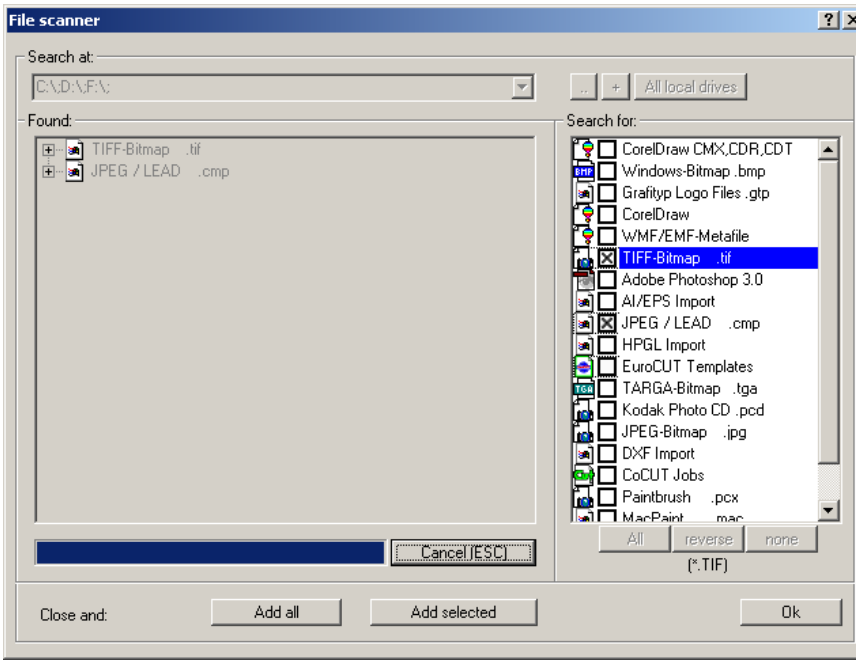


Fig. 65: The Job Manager *Find Files* Dialog Box

Fig. 65 shows the ***Find Files*** dialog box during a search. The ***Search*** button is replaced by the ***Cancel*** button during a search. The search status display is located to the left of this button.
If the search is canceled, only the directory groups and paths found before cancelation will be shown.

In Fig. 66 you can see in the window entitled ***Directories Found*** that after a successful search two groups of directories (***JPEG Bitmap .jpg*** and ***TIF Bitmap .tif)*** are displayed. You can recognize groups by the PLUS sign in front of the group name.

If you click once with the left mouse button on the PLUS sign in front of ***JPEG Bitmap .jpg,*** the tree element will open up, showing all the TIFF files and the directories in which they are located.
You can proceed in the same way with the JPEG group of directories or any other groups, which will be displayed in the window after a successful search.

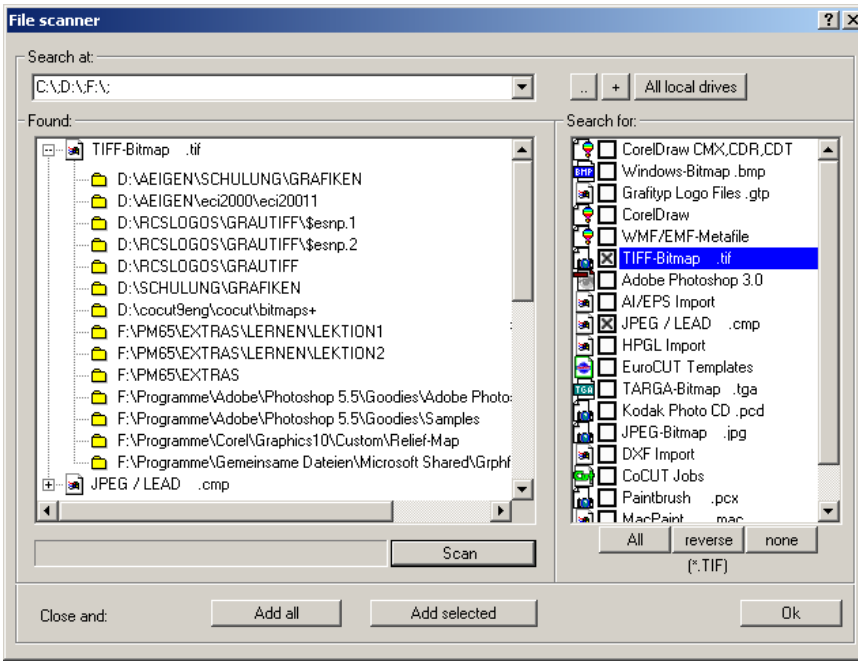


Fig. 66: Section of the *Directories Found* Window

Fig. 66 shows part of the ***Directories Found*** window. The ***TIFF Bitmap Directory*** and its subdirectories are shown in the upper part of the area.

You can select several directories ***Singly*** by clicking with the left mouse button on the desired directories with the CTRL key held down.

You can select ***Several*** directories at once by moving the mouse cursor to the first directory and pressing the left mouse button once. Press down the SHIFT key and keep it held down.
Now select the last directory with the left mouse button and the whole group is selected.

You can now open the context-sensitive menu by pressing the right mouse button.

If you select the first menu item ***Add to Group*** another popup menu will open and the selected directories can be added to an existing group or saved in a new group.
Already existing groups will be shown in the lower part of the popup menu.

You can give a group a new name by simply typing the desired name in the input line and clicking on the ***OK*** button.
The directories will then be added to the window of the groups of directories in the Job Manager under this name.

If you select the menu item ***Add Automatically,*** a new directory group will be automatically added containing the same directory, e.g. if one or several directories from the ***TIFF Bitmap*** group are selected and ***Add Automatically*** is activated, a new directory group called ***TIFF Bitmap*** will be created and the selected directories will be copied to this group of directories.

Note: *The menu item* ***Combine*** *is not active unless at least two directories are selected. Only directories located in the same group can be combined.*

This command is especially useful when several directories have the same structure.
In Fig. 66, for example, the first four directories all begin with ***D:\Order\Peter***... .
There are various different directories located under the directory named ***Peter***. If you select the menu item ***Combine***, these four directories will be combined under the directory name ***D:\Order\Peter*.****

Note: *All the combined directories will be regarded as being a single directory, i.e. when later, for example, a search is made for the directory in the main window of the Job Manager, it will apply for all the directories combined in* ***D:\Order\Peter*.****
The combined directories can no longer be treated singly.

If you click on the ***Add All*** button, all the directories found will be added to the Job Manager window.

If the you click on the ***Add Selected*** button, all selected directories will be added to the Job Manager window.

Printer Setup

This menu item opens the Job Manager ***Print*** dialog box. Here you will see a list of all the printers installed on your system. Choose the printer you wish to use.
Click on the ***Setup*** button to make further settings for the printout.
The dialog box that opens corresponds to the menu item ***Attributes*** in the chosen printer's file menu.

Note: *The* ***Print*** *dialog box which is opened by clicking on the* ***Setup*** *button depends on the printer driver loaded and for this reason in not described further here.*

Quit

If you select this menu item the Job Manager will be closed and the most recent changes saved.

The *Options* Menu

Add Directory Group

If you activate this menu item, the following dialog box will open:

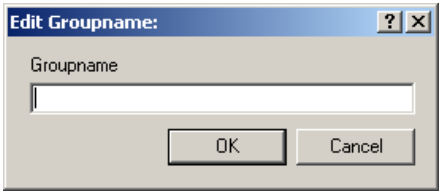


Fig. 67: Dialog Box for Naming a New Group of Directories

Enter the name for the new group of directories in the command line entitled ***Directory Group Name*** and confirm it by clicking on the OK button.

If you click on the ***Cancel*** button the name you have typed will not be adopted and no new group of directories will be created.

This command is also available in the context menu of the right mouse button.

Add Search Path

If you execute this command the ***Add Search Path*** dialog box will open.

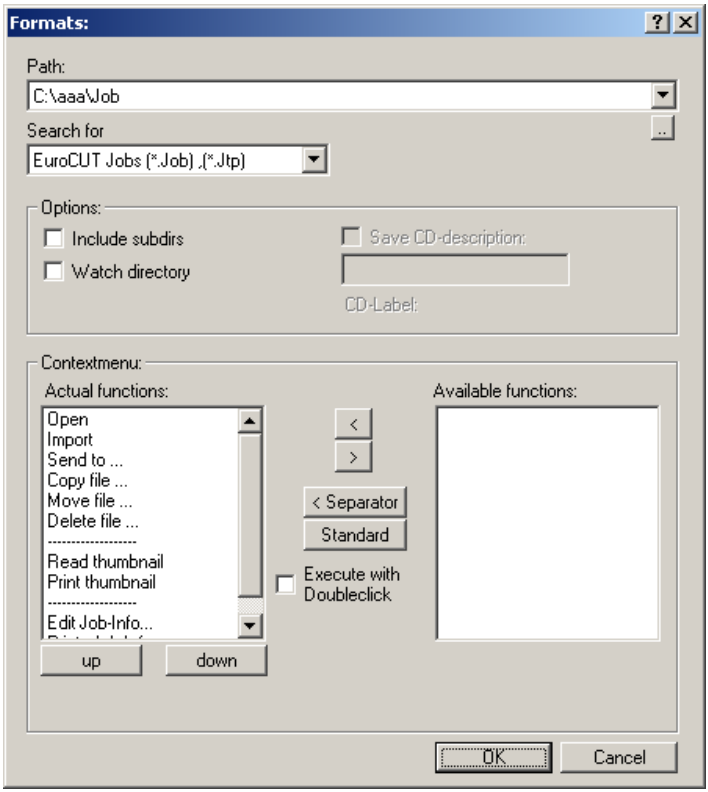


Fig. 68: Dialog Box for Adding New Search Paths

The search path is entered in the upper part of the dialog box. To the right of the box there is a triangle pointing downwards. If you click on this triangle with the right mouse button, all existing search paths will be displayed.

If a different search path from the existing ones is to be entered, click on the ... button with the right mouse button.

The following dialog box will open:

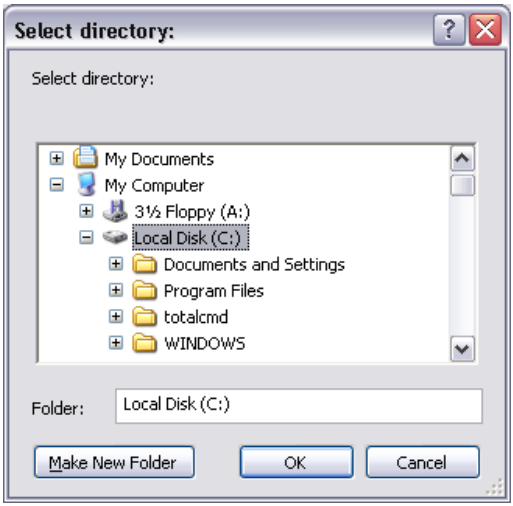


Fig. 69: Dialog Box for Selecting Directory

Choose the directory or branch of the network to be searched and confirm the dialog box by clicking on the ***OK*** button.

The path or directory selected now appears in the input box.

Under ***Files To Be Found:*** select the format for the search in the previously specified directory. The following settings can be made In the field entitled ***Options***:

If you execute the ***With Subdirectories*** command, all the subdirectories of the previously specified directory will be searched.

Note: Monitor Directory *is not active in this case, because only single directories can be monitored.*

If you execute the ***Monitor Directory*** command, the chosen directory will be monitored, i.e. when a new file is saved in this directory, the Job Manager will automatically detect it and show the new file.

Save CD Name and ***CD Label*** are not active unless files from a CD are to be searched for.

In the lower part of the dialog box you can assign various commands to the context-sensitive menu of the right mouse button.

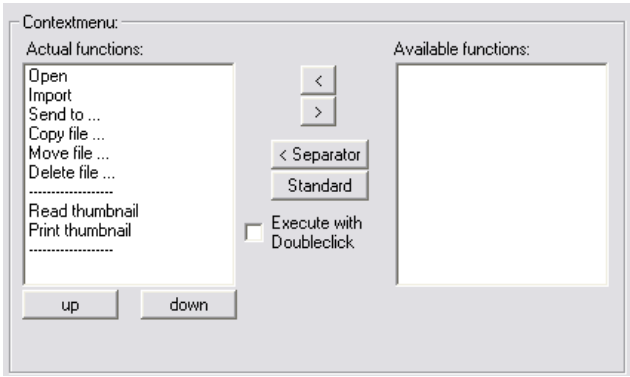


Fig. 70: Detail of the *File Format* Dialog Box

The commands available in the context menu are listed under *Current Commands.* Any search path can be assigned its own context menu.

Example: A search path only contains files to be sent by email. In this case two functions would be enough for the context menu. You could specify ***Open*** as the first command so that you can quickly check the file you want to send. The second command would be ***Send To...*** The other commands are not necessary in this case.

The button with the arrow pointing left can be used to move commands to the ***Current Commands. Current Commands*** are the commands which will subsequently be available in the context menu.

The button with the arrow pointing right can be used to move commands to the ***Available Commands. Available Commands*** are the commands which will not be subsequently available in the context menu.

The ***Dividing Line*** button can be used to insert dividing lines between single commands to make it easier to read the contents of the context menu.

If you modify the default context menu, i.e. remove some of the commands, you can restore it to its original state by clicking the ***Default*** button.

If you select the ***Execute with Double Click*** command, the command in the context menu will not be executed unless you double-click on the right mouse button.

You can use the ***Up*** and ***Down*** buttons to move menu items or dividing lines to any place you wish.

File Formats

This command can be used to add new formats to the Job Manager or delete file formats.

Note: *Only the names of newly added formats, without previews, are displayed in the preview window.*

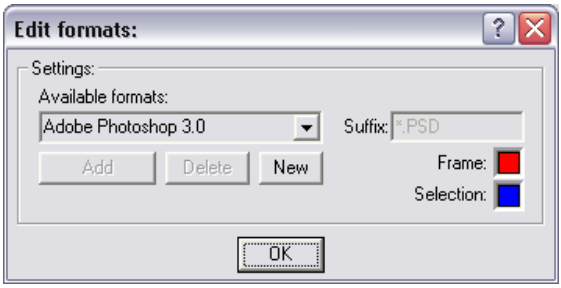


Fig. 71: Dialog Box for Adding or Deleting File Formats

Existing formats are shown and new formats added in the left part of the dialog box. The suffix of the particular format is shown next to it on the right.

Underneath you can specify the frame colour for the preview images and the selection color by clicking in the color area.

Note: *Only newly specified formats can be deleted again.*

Define Font...

If you activate this menu item, the following dialog box opens:

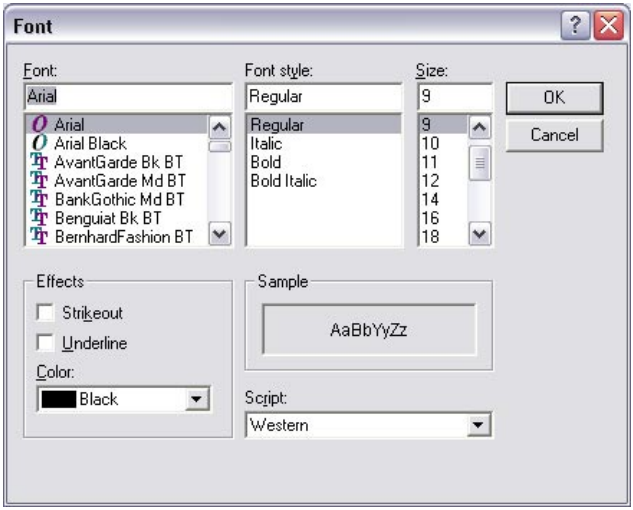


Fig. 72: Dialog Box for Selecting Font Type and Font Display in the Preview Window

In the upper part of the dialog box you can define the font type, style and size for the captions of the preview images in the ***Job Manager*** preview window.

You can make other settings in the lower part of the dialog box.

The image captions can be shown crossed out or underlined and you can specify the font color.
All these commands are intended to make it easier to recognize and distinguish the preview images.

Under ***Scripts*** you can choose how the caption is to be displayed, for example an English person would choose ***Western*** and a Arab person ***Arabic.***

Define Language...

If you execute this command, the dialog box for selecting the language opens:

Fig. 73: Dialog Box for Selecting the Language

Here you can choose the language in which the menus and dialog boxes of the Job Manager are to appear.

Simply click on the arrow pointing downwards and choose the language you wish.

Create Backup...

If you execute this command, the ***Backup*** dialog box opens:

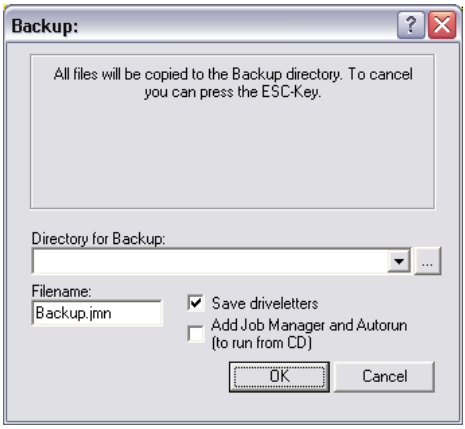


Fig. 74: Job Manager *Backup* Dialog Box

Select from the input box entitled ***Backup Directory*** the directory or the data carrier where the data is to be saved.

Type the the backup ***File Name*** in the box underneath. Backup files always have the suffix *.jmn.
On the right you can specify if the drive name is to be saved as well. This command is turned off in the default version.

Note: *You should not execute this command unless two paths exist with the same search directories but different drive names, so that the backup routine is able to distinguish between them.*

If you execute the command ***Create Backup for CD***, the data and the Job Manager itself will be copied to the CD.

Note: *You can cancel the backup by pressing the ESC key.*

Delete Preview Cache

The preview images created by the Job Manager are stored in a cache for faster access. When should you delete the preview cache?

You should delete the preview cache when you delete a *.jmn file. The search paths and directories of the preview images no longer exist but the image information is still in the cache, although it is no longer needed.

When the preview cache is deleted, the preview images of the single search paths have to be read in to the preview window again, which can take a while if there is a large number of images.

The *View* Menu

The appearance of the Job-Manager can be modified in the ***View*** menu. Here you can turn the symbol bar, the status bar, the path selection, the directory groups, the search masks and the search mask view on or off.

If you eexecute the ***Job Manager in Front*** command, the Job Manager will always remain in the foreground.
This command is especially useful in conjunction with EuroCUT or CoCut Professional.

In the part-screen mode you can positione the Job Manager window in such a way that the entire working area of EuroCUT/CoCut Professional is available to the user and the Job Manager can also be seen.

Advantage: *Jobs to be edited can be found or opened quickly or dragged to EuroCUT/CoCut Professional.*

The *?* Menu

A click on the ***?*** menu opens the ***Info about Job Manager*** dialog box. Your Job Manager version is shown here and the number of files stored and the necessary storage space.

The Commands in the Job Manager

Key	Function
Right mouse button	Context-sensitive menu (mouse cursor is on of the preview images preview image)
SHIFT+	
Left mouse button	Select jobs from – to
CTRL+	
N	New file
O	Open file
S	Save file
F	Search hard disks
Left mouse button	Select single images

The *Open...*Command

CTRL-L
The ***Open*** command is used to retrieve /open existing jobs, in the CoCut Professional format, either from your hard drive or a diskette. The file is loaded to your screen, i.e. to your working area, and can then be further modified or edited.
In addition, you can delete jobs. You will first be asked if you really want to delete the job.

The *Save* Command

CTRL-S
This command is used to save the job you have been working on. If you have previously saved the job, the file name and directory under which it was saved will be retained. The previous version is overwritten and will no longer be retrievable.

If you are saving a job that has not yet been saved, CoCut Professional will automatically activate the ***Save as...*** command when you click on ***Save***. Here you will be able to enter a file name and an appropriate directory for this job.

The *Save As...* Command

SHIFT-CTRL-S
This command is used to save a new job under a file name and in a directory the user is free to choose.

You may also use the ***Save As...*** command to change the name of an existing file. This is particularly useful if you have used or intend to use an existing design to create a new one but would like to retain the older version without overwriting it.

You can also use this command to save a job on a diskette. Simply specify the appropriate disk drive in the dialog box.

The *Import* Command

 CTRL-I
With this command you can import artwork which is not saved in the CoCut Professional CCJ format.

The *Export* Command

 CTRL-E
If you want to use a job in another graphics programm you must convert it to a different format for export.

The *Online Service...* Command

This command connects you directly to the support page of EUROSYSTEMS S.à.r.l. and the General Distributor RCS Systemsteuerungen GmbH.

Note: *If you have not installed a browser, a text file will be displayed, informing you what to do so that you can make use of the advantages of the online service.*

After registering with EUROSYSTEMS-ONLINE you have these additional facilities:

- You can make use of our file service.
- If you are registered, you have the possibility of importing the latest service releases or demo versions of our software products free of charge.
- It is not necessary to state your address every time you order from our online shop.
- Specialist traders and distributors have access to the Business Center.
  When you would like to download data subject to a charge, you must have a credit on your account with RCS-ONLINE.

The *Print* Command

 CTRL-P
With this command, you send the job you are working on to the default printer in any size you require (tiling).

The *Cut/Plot* Command

 S
This command activates the **C*ut/Plot/Route*** module.

The *Quit* Command

 CTRL-Q
With this command you close CoCut Professional and return to the Windows environment. If you have not yet saved the CoCut Professional file you were working on, you will be prompted to do so now.

3.2 The *Editing* Menu ! ONLY CoCut Professional !

The *Undo* Command

 F5
This command makes it possible for you to undo or reverse the last few editing proceduresyou have completed. The standard or default setting allows for the last five steps to be reversed. You can increase this number in the ***Setup*** menu under ***Settings/Diverse/Number of Reversible Steps.*** The default value is designed for a computer with 8 megabytes of RAM. Only if your computer is equipped with more RAM do we advise an increase in the number or reversible steps. The maximum permitted is 100.

Note: *This setting can only be changed for a new file (**File** menu, **New**).*

The *Redo* Command

 F6
This command is the opposite of ***Undo.***
It restores the editing functions you have previously chosen to undo.

The *Cut* Command

 CTRL-X
With this command you can remove objects from your working area and temporarily store them on your computer's clipboard. This is a very convenient way to insert an object in a different position, in a different file or even in a different program.

The *Copy* Command

 CTRL-C
With this command you can store items on the clipboard without having them removed from your working area.

The *Paste* Command

 CTRL-V
With this command you retrieve items from the clipboard and insert them into your job. When you activate this command, the cursor turns into a right angle containing the word ***Insert.***

Point the tip of the right angle at the exact location where you would like to insert the object and press the left mouse button to execute the ***Paste*** command.
Note: *Only bitmaps with a color depth of max. 8 bits per pixel can be read back via the Windows clipboard.*

The *Paste Contents*... Command

This command lets you import images to CoCut Professional via the clipboard.

Note: *This menu item is not active when objects are copied in CoCut Professional.*

The *Select All* Command

 CTRL-A
With this command you can simultaneously select all objects in your current job, i.e. all objects *inside* as well as *outside* your working area. The selected objects can then be grouped, combined or moved.

The *Ready to Cut* ... Command

This command can be used to prepare an object with a specified line thickness or fill for cutting.

3.3 The *Design* Menu ! ONLY CoCut Professional !

The *Rotate Axis* Command

 A
This command is used to rotate objects by 90°.
You need this option regularly if you want to adjust your objects quickly to the running direction of the vinyl without performing the rotate command.

The *Horizontal (X) Mirror* Command

 X

This command mirrors a selected object on an imaginary horizontal axis through its center point. If you select more than one object, they will be mirrored around an imaginary horizontal axis located in the middle of the selection box indicated by the eight black squares.

If you have not selected any objects, your entire design (all objects) will be mirrored horizontally.

The *Vertical Mirror* Command

 Y

This commandd mirrors a selected object on an imaginary vertical axis through its center point. If you select more than one object, they will be mirrored around an imaginary vertical axis located in the middle of the selection box indicated by the eight black squares. If you have not selected any objects, your entire design (all objects) will be mirrored vertically.

The *Delete* Command

 DEL

On your keyboard you will find a key labeled DEL or delete. The DELETE key is used to permanently remove selected objects from your design. The objects that you want to remove have to be selected first.

The *Duplicate* Command

 CTRL-D

Click with your left mouse button on the ***Duplicate*** command or activate it via the CTRL+D shortcut. The previously selected object or objects will now be duplicated. The positioning of the duplicated objects occurs according to the values entered in the ***Setup*** dialog box accessible from the ***Settings/Diverse*** menu.

Note: *You can also duplicate objects in your design simply by using your mouse. Select the object(s) first. Drag the object(s) to the location where you would like to have it/them duplicated. Without releasing the mouse button, click once with the other mouse button and the selected object will be automatically duplicated.*

The C*lone* Command

You must select the object to be cloned first. Then click on the ***Clone*** command with the left mouse button.

When you clone an object, you create a copy linked to the object. Any changes made to the original object will automatically be made to the clone as well.

If the size or shape of the clone is changed it becomes an original object again.

The *Group* Command

 CTRL-G
With this command you can group several objects so they can be selected and manipulated as a single object. This is particularly useful when you are trying to move several objects at once without changing their positions relative to each other.
Be sure to select the objects first, then activate the ***Group*** command and move this newly formed group of objects to the desired location. It is now no longer possible to manipulate the objects within the group individually.
If you need to do so, please see the ***Ungroup*** command described below.

The *Ungroup* Command

 CTRL-B
This command is used to reverse the ***Group*** command, i.e. it separates objects that were previously grouped. The objects can now be selected and manipulated as individual objects.

The *Combine* Command

 CTRL-K
Similar to the ***Group*** command, the ***Combine*** command also converts several individual objects into one single object. The main difference is that with the ***Combine*** command CoCut Professional ceases to look at these objects as a group of individual objects with their own set of attributes, such as color layers, etc.

Consider the following example:

You have created two squares with different color layers, one somewhat smaller than the other. Now you place the smaller square in the center of the larger one. Select both objects and execute the ***Combine*** command. The two squares are combined into a single object with only one color layer (the one assigned to the larger square). The larger square is recognized as the outer contour, while the smaller square inside forms the inner contour of the new object.

The space between the two contours is filled with the color selected from the layer box. A hole the size of the smaller square remains in the center.

The *Break Apart* Command

SHIFT-L
With this command you undo the ***Combine*** command described above, i.e. the objects that were previously combined can once again be selected and manipulated as individual objects.

The *Draw* Command

When you select this command, a flyout menu appears which combines all basic CoCut Professional tools for designing artwork.

Register Marks

With this option you can place register/crop marks in your design, which will later facilitate alignment application of the various layers in a color-separated job. When you select this command, the cursor turns into a square with a cross-hair on it. Place the cursor at the exact location where you wish to have register mark cut out and click on it with your left mouse button. A register mark is inserted automatically at this location. Repeat this procedure for additional register marks. All marks will be cut in each layer, regardless of layer color or order.

The *Perforation Mark/Drill Hole* Function

With this option you can place perforation marks or drill holes in your design.
When you select this command, the cursor turns into a circle with a cross-hair over it. Place the cursor at the exact location where you wish to have a hole drilled and click on it with your left mouse button. A perforation mark is inserted automatically at that location. Repeat this procedure for additional perforations. The holes will be cut in each layer, regardless of layer color or order.

Note: *This option is designed specifically for CoCut Professional users who have flatbed plotters with routing capabilities.*

Clockwise Rotation of Objects

>
This command is used to rotate selected objects set clockwise.

Counter-Clockwise Rotation of Objects

<
This command is used to rotate selected objects counter-clockwise.

The *Close Contour* Command

This command is used to close the contour of a selected object.

The status line at the bottom of your working area indicates whether or not your design contains an *open contour*. (If it does, the object with the open contour will actually be counted as two!) Activate the ***Close Contour*** command to close the object and make it one.

The *Open Contour* Command

This command is used to open a closed contour of a selected object.

The *Round Corners* Command

With this command you can round off corners, both inside and outside, either for the selected nodes or entire selected objects. It is particularly useful for rounding lettering.

3.4 The View Menu ! ONLY CoCut Professional !

The *Zoom In* Command

 +

This command, used to magnify all or parts of your design, can also be activated by clicking on the ***Zoom*** icon in the tool box and then selecting the icon with the magnifying glass and the plus sign in the flyout box. Once you have activated this command, the cursor turns into the shape of a magnifying glass containing a plus sign.

Using your left mouse button, you can select the area in your design you wish to magnify by dragging a box around it. Once you release the mouse button, CoCut Professional zooms in on the selected area and redraws it.

Note: *The zoom-in procedure can be repeated several times for further magnification until CoCut Professional issues an audible alert that indicates the maximum magnification level has been reached.*

The *Zoom Out* Command

 -

This function reduces the size of the screen step by step.

The *Full Page* Command

 B

This command is used to display the working area in its entirety. This command can also be accessed via the toolbox (click on the icon depicting a sheet of paper in the ***Zoom*** flyout box).

The *Show All* Command

F4
This command modifies the representation of the vector drawing in such a way that all the objects can be seen on the screen in their maximum possible size.

Note: *Holding the* ***SHIFT*** *key down while executing this command will provide a full-screen display of a previously selected object or objects.*

The *Show Selected Objects* Command

SHIFT-F4
With this command you can have CoCut Professional display only ***selected objects*** in your working area in their maximum possible size.

The *To Front* Command

CTRL-O
When you are working with several color layers, you can use this and the following commands to change their sequence.
With the ***To Front*** command the selected object/color layer is moved to the very front or top.

The *To Back* Command

CTRL-U
With this command the selected object/color layer is moved to the very back or bottom.

The *Forward One* Command

PgUp
With this command the selected object/color layer is moved to the next higher color layer.

The *Back One* Command

PgDn
With this command the selected object/color layer is moved to the next lower color layer.

The *Reverse Order* Command

U
With this command the sequence of objects/color layers is reversed. Whatever was on top is moved to the bottom, and vice versa. All objects or color layers in between are reversed as well.

The *Always in Front* Command

CTRL-Y
With this command the CoCut Professional window remains permanently in the front.

The *Refresh Screen* Command

CTRL-W
This command tells CoCut Professional to redraw all objects currently displayed in your working area. Use this command when objects which cannot be selected with the mouse cursor are visible on the screen.

3.5 The *Tools Menu* ! ONLY CoCut Professional !

The *Contour Line...* Tool

K
This command provides a number of selected objects with an outline.
Unlike the ***Outline*** command, this tool can also be used to provide bitmaps with outlines. Instead of individual objects being outlined, if possible an outline is created to encompass all the selected objects. Therefore the function is particularly useful for creating cutting lines for stickers. The objects for the sticker can be put together as you wish. The outline is then created at whatever distance you wish from the objects. It can later be used for cutting out the printed sticker.

First select the objects you wish to frame. Then click on ***Contour Line...*** in the ***Tools*** menu.
The following dialog box appears where you can make the settings:

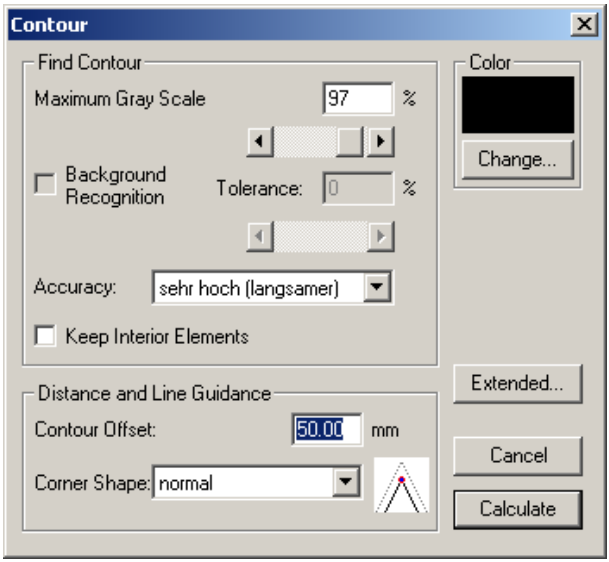


Fig. 75: The *Contour Line* Dialog Box

The fields in the ***Create Contour*** part of the dialog box allow you to influence the calculation of the contour line. In principle, any objects which are not white are included in the contour calculation.

Therefore the background of the artwork to be outlined should ideally be white. Bitmaps, in particular, often contain light-gray patches which may arise during scanning.
With the aid of the field ***Maximal Gray Value*** you can determine that gray patches above the specified intensity should not be framed.

You can enter values between 50% and 99% or set them with the filter. 50% represents a relatively dark gray and 99% is almost white.
You can choose between three options in the ***Accuracy*** box.
Low accuracy works the most quickly. If you are not satisfied with the result with the low setting, choose the middle or high setting. In the latter cases it will take longer to calculate the contour line.

Note: *If you only select one bitmap, the* ***Accuracy*** *box cannot be activated.*

If you check the ***Retain Interior Parts*** box, any interior parts which may be created will not be deleted. This gives you the possibility to cut out parts of the graph by covering it with light-colored “plasters”.

This is illustrated below:

Fig. 76: Retain Interior Parts

On the left you can see the two objects in their original state. A small white circle is superimposed on the black circle. On the right the circle is displayed with the outline which has been created.

As the ***Retain Interior Parts*** field was activated, the inner circle was also retained when the outline was created. If this field had not been activated, only the exterior outline would have been created.

Note: *The default is that the* ***Retain Interior Parts*** *command is not active.*

The lower part of the ***Contour Line*** dialog box, ***Offset and Line Drawing*** allows you to determine the appearance of the contour lines.
With ***Offset*** you can specify the distance of the contour line from the image. If you enter the value “0”, a contour line will be created directly adjoining the edge of the selected objects. If you enter a value smaller than 0 the contour line intrudes on the objects to be outlined.
In the ***Corner Shape*** field you can determine the appearance of the corners of the contour line.
If you choose the ***Normal*** option, the mathematically exact point will be calculated on the contour. This means that the contour line can be considerably lengthened at pointed corners, which often leads to unsightly results.
In such cases you can achieve more satisfactory results by choosing the ***Cut Off*** and ***Round*** options.

The ***Cut Off*** option shortens the contour by the specified amount and cuts off the corner with a straight line.
The ***Round*** option changes the corner into a rounded curve. If you activate the ***Enhanced...*** button, an additional dialog will appear in which you can make the exact settings for the design of the corner.

Note*: The default settings in the* ***Enhanced Settings*** *dialog box should only be altered in exceptional cases!*

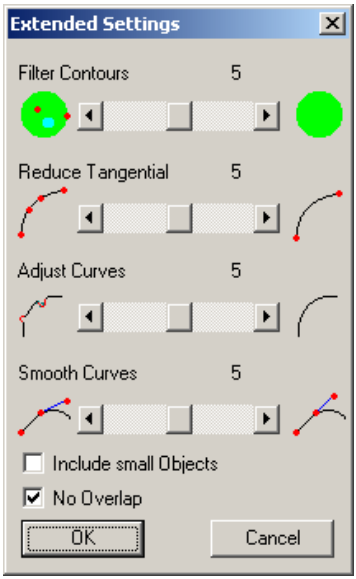


Fig. 77: Enhanced Settings

To optimize the contours, four different types of filter are available:

Filter 1:
Filter Contours reduces major noise (garbage) in bitmaps by ignoring contours consisting of less than five pixels.

Filter 2:
Reduce Tangential Points reduces the number of points or nodes on a curve. The higher the degree of reduction, i.e. the fewer the nodes that are retained, the further the scanned curves will deviate from the original.

Filter 3:
Adjust Curves considers the overall direction of straight lines and curves and eliminates stray horizontal and vertical lines that appear to have no effect on them.

Filter 4:
Smooth Curves aligns the tangents of curve points. The higher the degree of adjustment, the more the curves are smoothed. Smooth curves with perfectly aligned tangents have the advantage of producing very clean cuts.
However, excessive smoothing can once again cause too much deviation from the original. Therefore, a moderate value is preferable.

If the ***Include Small Objects*** option is activated, closed objects will also be created from small objects. The first filter cannot be used when this option is activated.

The ***Without Intersection*** option allows you to eliminate automatically any intersections which may appear within the outlined objects.
Once you have made the desired settings in the ***Enhanced Settings*** dialog box, confirm by clicking on ***OK*** to return to the main dialog box.

To create the contour line, select ***Calculate***. Depending on the complexity and number of the objects selected, it may take several minutes for the outlines to appear.

Fotocut

This module creates vectors from bitmaps.

Mode of operation:
Fotocut creates raster line patterns from Windows bitmap files (**.BMP, *.PCX, & *.TIF).* These patterns can be cut on a cutting plotter or similar device.
The image is divided into logical pixels and the average grayscale is worked out for each of these logical pixels. Thus, an image is created having fewer pixels than the original. This image is then used to create horizontal or vertical lines, circles, squares, etc, whose width is proportional to the grayscale in the corresponding place.

The *FotoCUT* Dialog Box

Open the ***Fotocut*** dialog box by clicking on the menu item of this name.

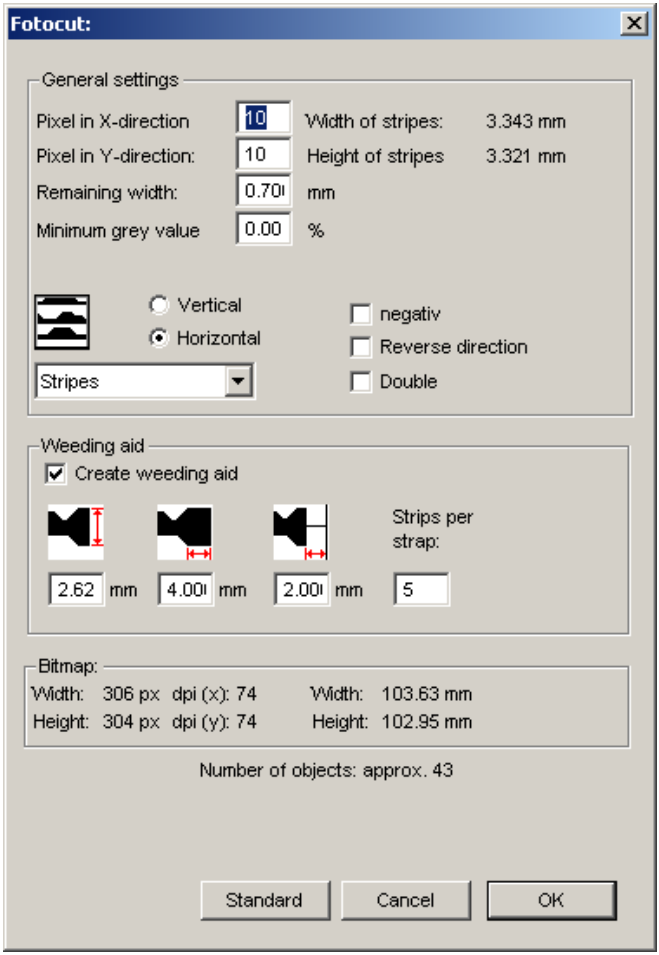


Fig. 78: The *Fotocut* Dialog Box

The various elements of the ***Fotocut*** dialog box are described in detail on the following pages.

General Settings

Pixels in X Direction

In this box enter the number of pixels which are to be combined in X direction into a logical pixel.

Note: *The smaller the value entered in this box, the better the output quality of the bitmap will be.*

Pixels in Y Direction

In this box enter the number of pixels which are to be combined in Y direction into a logical pixel.

Note: *The smaller the value entered in this box, the better the output quality of the bitmap will be.*

Rest Width

The remaining width of a line (only for lines) in mm of the line/column size.
The remaining width is also as least as wide as the total amount of vinyl stripes and weed garbage.
As the stripe width depends on the number of pixels (per stripe) and determines the possible remaining width, the original bitmap must be available in a “cuttable“ size.

Example: *If the bitmap is so small that 10 pixels only give 1mm, the remaining width cannot be 1 mm!*

Note: *If the user enters too large a value for the* ***Rest Width****, the old value is taken and a message appears.*

Contrast

The line/column size is determined by dividing the bitmap into logical pixels. The width of the stripe depends on the minimal grayscale setting and the contrast. The maximal width is the line/column size minus the rest width value. The width of the stripe will then be calculated from the average grayscale value according to the contrast value. The contrast is the relation between black and white in %, i.e. with 100% contrast 100% black will be displayed on the maximal and 100% white on the minimal stripe width. If the contrast is reduced, 100% black will be calculated with, for example, only 50% of the maximal stripe width.

Minimal Grayscale

The minimal grayscale is a limit for the grayscale. Thus, a background which has the same grayscale as a bitmap can be deleted.

Note: *This value only needs to be considered when an image is darker than its background.*

The following image will serve as a model for all the examples:

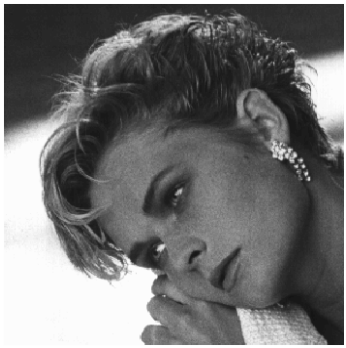


Fig. 79: Model for Examples (photo.bmp)

Negative

This command reverses the grayscale values, i.e. 100% black, for example, becomes 0% white and vice versa.

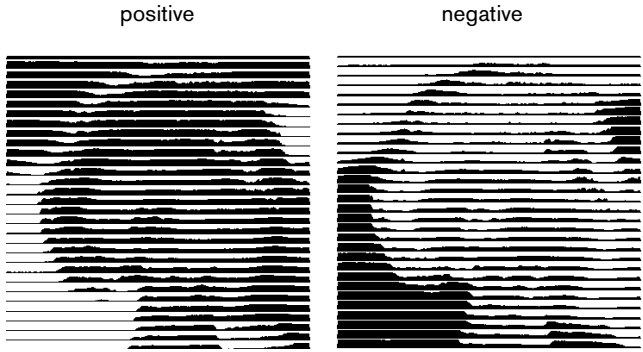


Fig. 80: Example of Reversing the Grayscale Values

Reverse Direction (only for lines)

If this command is executed, the width of the lines will be directed downwards.

Line width upwards Line width downwards

Detail:

Line width upwards Line width downwards

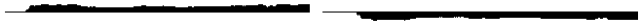
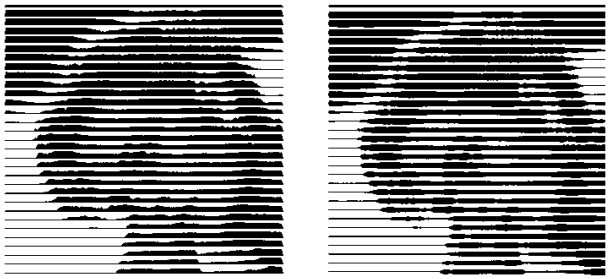


Fig. 81: Example of Reversing the Line Width

Double (only for lines)

This command creates a line of double width, i.e. upwards and downwards.

Line width upwards Line width upwards and downwards



Detail:

Line width downwards Line width upwards & downwards

Fig. 82: Example of Line Width Enlarged Upwards and Downwards

Horizontal or Vertical

Use these buttons to specify the running direction of the lines.

Bitmap

The data of the original image are shown in the field entitled ***Bitmap***. The ***Width*** and the ***Height*** of the image in pixels and the resolution in dpi are shown in the upper part and the ***Width*** and ***Height*** of the image appear below in millimeters.

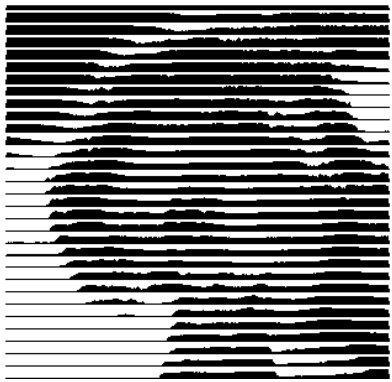
Relations between the entries in the ***General Settings*** field:

Example 1:

The following entries have been made:

Pixels in X direction	= 1
Pixels in Y direction	= 10
Rest width	= 2
Minimal gray scale	= 0
Direction	= horizontal
Negative	= not active
Reverse direction	= not active
Double	= not active

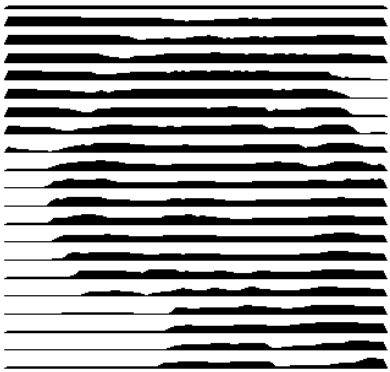
Result:



xample 2:

Pixels in X direction	= 3
Pixels in Y direction	= 15
Rest width	= 5
Minimal gray scale	= 0
Direction	= horizontal
Negative	= not active
Reverse direction	= not active
Double	= not active

Result:



In the illustration above you can see that even small modifications of the values produce very different results.

Weed Aid

Create Weed Aid

The lines are thickened at the ends so that the image can be weeded more quickly.

Stripes per Strap

In this box you can enter the number of stripes that each strap should contain.

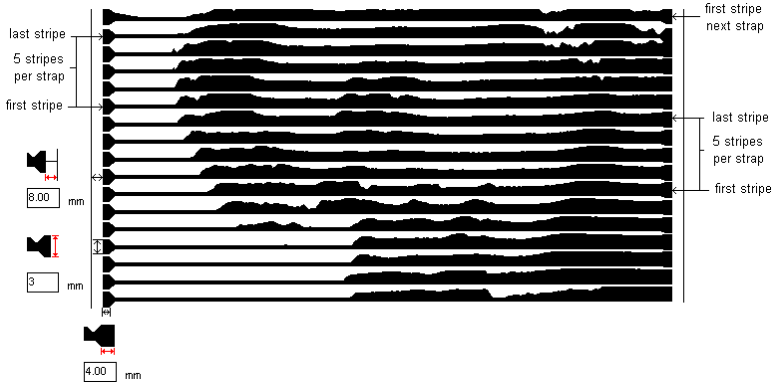
Strap Width

You can specify the width of a strap in this box.

Strap Thickness

You can specify the thickness of a strap in this box. The probable ***Number of Objects*** appears underneath this box.

Example of ***Stripes per Strap, Strap Width, Strap Thickness*** and ***Stripes***:



Modes:

In the FotoCUT dialog box you can choose between the following modes:

Lines, Rhombuses, Circles, Squares, Single Rhombuses, Single Rectangles and Spirals.

Which mode will obtain the best result depends on the bitmap used and the settings made.

Note: *It is not often possible to judge the quality of the result from the screen display. You should print out the result so that you can assess it accurately and don't run the risk of wasting expensive vinyl*

The Attributes...Command

This command lets you increase the number of pixels in an image. Increasing the number of pixels results in the image increasing in size accordingly.
The resolution is indicated in DPI (dots per inch).
This menu item also provides additional information about the bitmap. The ***Storage Space*** required by the bitmap in the working storage and the ***Color Depth*** used are shown.

The *Set Aligning Marks* Command

 SHIFT-J
Tools/Set Justification Marks automatically sets four justification marks on the selected object. The size and position of the selected object as well as the type of plotter (OPOS, OPAL) can be edited using ***Basic Settings*** in the ***Settings*** menu.
The marks are not located in a color layer, are always shown in black, remain the same size when the image is resized and are positioned in a group.

OPOS systems normally require square marks with sides of 3mm. Unlike the OPAL marks, they are not cut during plotting.

Mimaki marks consist of a right angle open towards the object with sides measuring 10 to 15mm. They mustn't be cut as the Mimaki plotter takes the first mark at the top right end of the angle as its point of origin after justification.

For this reason a mini object is created at this point, or a square when the weed border is turned on, and the marks are deleted.

For testing purposes the Mimaki marks can be displayed and also cut by recalling the cutting preview with the CTRL key held down. But in this case the objects are not cut in the correct position.

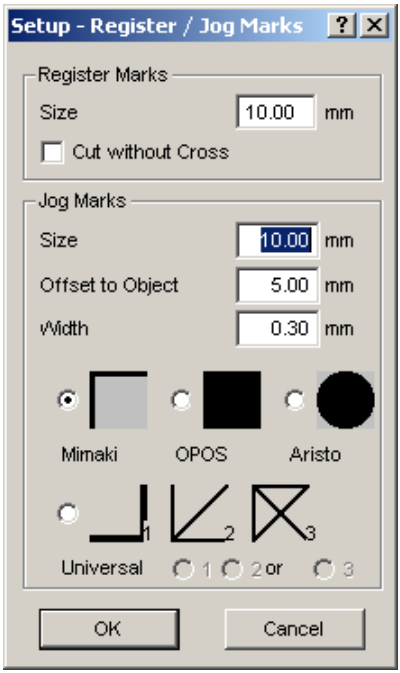


Fig. 83: Dialog Box for Setting the Justification Marks

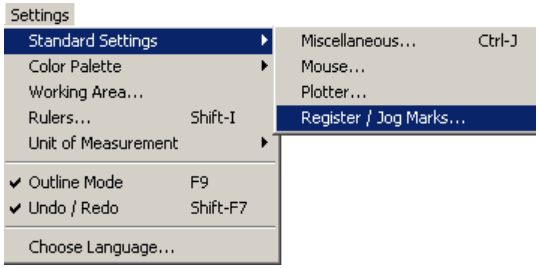
Example of the *Justification Marks* Command with Universal Marks

The ***Justification*** command is needed for producing adhesive labels and stickers. The printed foil with justification marks is inserted in the cutting plotter and the copies are cut with outlines. This command can be used for plotters with automatic optic systems, such as Summa OPOS or Mimaki OPAAL.

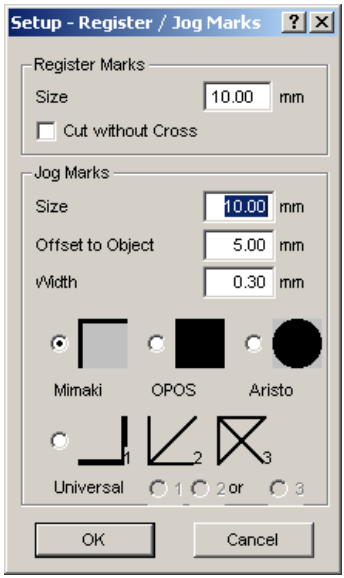
The ***Universal Justification*** command can be used for many plotters which do not have an optic system.

Load your bitmap and give it an outline with the Outline tool.

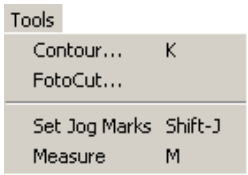
Set justification marks



Align objects with universal justification marks



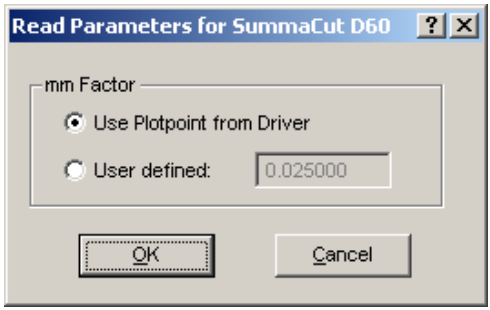
Set justification marks



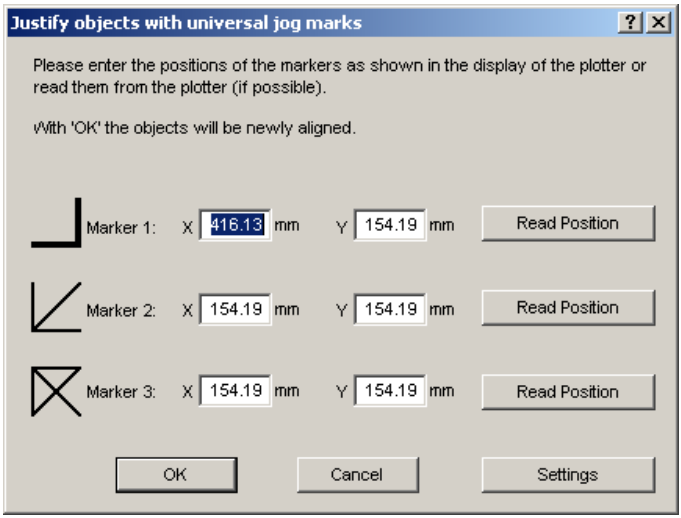
Print material with justification marks

Transmit to the cutting module

Make settings for the special plotter



Read back values from the plotter and align objects with universal justification marks



The *Measuring* Tool

The measuring tool is used to perform measurements (between any two points) in your design.

As soon as you click on the ***Measure*** icon in your tool box, the cursor changes into a bull's eye. Move the center of the bull's eye to the first point, i.e. the point from which you intend to measure.

While holding down the left mouse button, drag the bull's eye to the second point, i.e. the end-point of the distance you are measuring. A guideline provides a visual connection between the two points.

If you hold down the SHIFT key during this procedure, the measuring can be limited in a horizontal or vertical direction. This makes it easier to measure straight lines accurately.

***Note: All** objects are resized proportionally. When bitmaps are rotated, the bitmaps are also enlarged but not the objects shown in the bitmaps.*

The *Welding* Tool

This tool is used to combine two or more selected objects into a single one by joining overlapping areas and deleting extra lines.

If there are objects containing line attributes or fills on the CoCut Professional working area, click on the ***Cut*** button and the following dialog box will open:

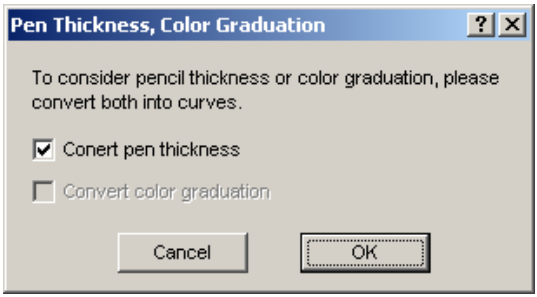


Fig. 84: Dialog Box for Converting Lines and Fountain Fills

This dialog box permits you too convert lines and fountain fills to curves.

If there are objects with pencil attributes and the ***Convert Lines*** command is not active, the pencil attributes will not be cut.

If there are objects with fountain fills and the ***Convert Lines*** command is not active, the pencil attributes will not be cut.

Regardless of the number and shape of the selected objects you can choose from the following options:

Automatic, By Color, ***Full Surface*** or ***Screenprint.***

The other boxes depend on the option selected and will therefore be described in the relevant section.

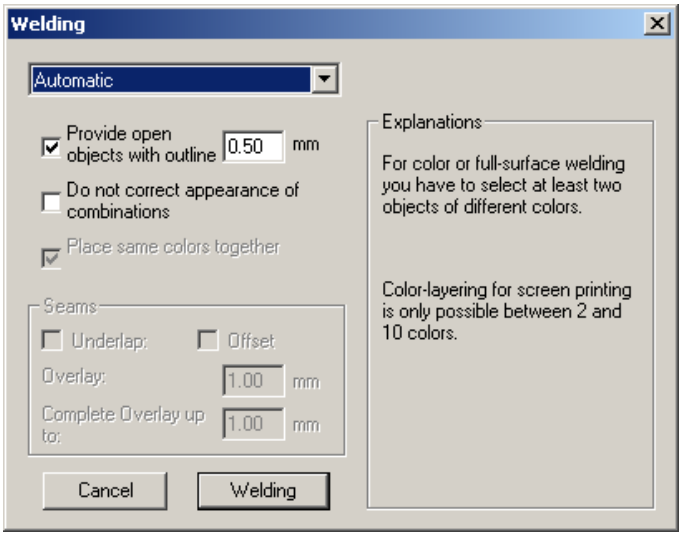


Fig. 85: The *Welding* Dialog Box

One of the main applications for automatic welding is to weld serifs used in script fonts, since serifs of one letter tend to overlap with those the next, which is, of course, something you want to avoid.

Automatic welding eliminates those overlaps and creates smooth transitions from one serif to the next, which can then be cut cleanly and applied as a continuous piece. Should you find certain parts of the letters missing after performing an automatic weld, select the ***Undo*** command and reduce the character spacing from 100% to 99%. This results in nodes located exactly on top of one another being moved so that they can be recognized as separate nodes and the welding can be carried out properly.

The ***By Color*** option removes all areas covered by overlying colors. It does not matter how many objects and colors you select.

If some of the selected objects have open contours, you can close them or add a line of a specified width. This is described in the ***Automatic*** section.

It may happen that the same color appears in different color layers. If you perform the command ***Merge Same Colors***, such layers will be combined into a single layer.

You can generate an ***Overlap*** or an ***Offset*** at the point where two colors meet. Select ***Overlap*** or ***Offset*** in the ***Seams*** field and enter the desired amount.

Full Surface underfills objects of one color which are covering areas of another color. The partially concealed objects are redesigned so that they underlie the entire surfaces of the overlying objects.
For open objects you can use the same procedure as described under ***Automatic.***

This application is most useful for shop window lettering which is often difficult to mount when the ***By Color*** option is used. If you have a maximum of two or three colors it is best to work with the ***Full Surface*** option, where the single vinyl colors are stuck on top of each other.

Screenprint is an especially powerful tool for screen printers.
First of all, the intersections of the single color layers are eliminated. Then the colors are layered in the sequence specified in the ***Color Sequence*** box. Finally a small line is added as an overlap at the “seams” of the single color layers.

You can determine the desired color layering in the preview window on the right side of the dialog. Clicking on the mouse lets you “grasp” a layer and drag it to its proper position. The chart indicates the position of the layers.

In the ***Seams*** and ***Overlap*** boxes you can enter the desired overlap between the color layers. In each case the lower layer underlies the higher one.

You also have the possibility of merging recurring colors in one layer. To do this, select ***Merge Same Colors.***

This option is especially useful for creating templates for screen printing, as in this printing process the darkest color is always applied last so as to avoid streaks which might occur when applying the individual colors.

Note: *If your artwork includes objects with open contours, proceed as described in the section on the* ***Automatic*** *mode.*

3.6 The *Settings* Menu ! ONLY CoCut Professional !

The ***Settings*** menu is used to select basic setups for default values for working with CoCut Professional. There is a dialog box available to the user for each basic setting (e.g. Diverse, Mouse, Plotter).

The *Basic Settings* ... Option

Diverse...

You have a choice of the following default settings:

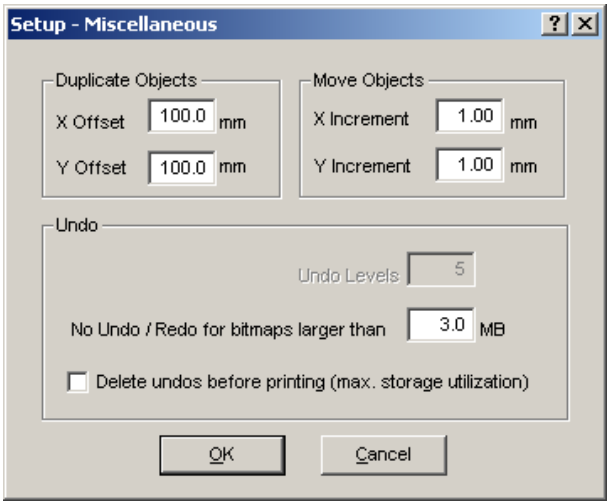


Fig. 86: The Dialog Box for Various Basic Settings

Duplicated Values

X Offset
You can enter the distance you wish to have between the horizontal duplicates in this box.

Y Offset
You can enter the distance you wish to have between the vertical duplicates in this box.

Move Objects

Increments in X Direction
With this entry you can determine the incremental distance a selected object moves vertically when you press the arrow keys on your keyboard.

Increments in Y Direction
With this entry you can determine the incremental distance a selected object moves vertically when you press the arrow keys on your keyboard. If you later decide that you want to move objects in smaller increments than you have indicated here, you have the possibility of reducing the increments as follows:

Note: *Pressing the* SHIFT *key while using the arrow keys reduces the increments to one tenth of the original value. Pressing* SHIFT + CTRL *while using the arrow keys reduces the increments to one hundredth of the original value.*

Undo Command

Number of Reversible Steps
This entry concerns the ***Undo*** command discussed earlier in the ***Edit*** Menu.

No Undo/Redo for Bitmaps Exceeding ...
For bitmaps exceeding the value entered in this field the ***Undo/Redo*** functions are automatically turned off, i.e. any changes made to these bitmaps using the ***Image*** menu cannot be reversed.

The reason for this is that the time required for bitmaps above a certain size is too long, as a copy of the original has to be made for every undo or redo step.
The value entered in this field should be between 5% and 10% of the RAM capacity.
The advantage of this function is that you save time.

Delete Undos Before Printing
This command deletes all undos made to date.

Mouse

This is where you can assign a specific command to your right mouse button, which will then be activated with a single click. Display the list of available functions by clicking on the arrow next to the list box. Double-click on the command you wish to assign.

Plotter
In this setup category you can select a number of important parameters for outputting to your plotter/cutter.

You can activate or deactivate this option via the ***Cut Preview*** window.
In the CoCut Professional dialog box the preview window can only be activated and deactivated if it has previously been activated in the plotter setup. The background of the window appears in gray if it is not activated.

Wait after Segment
Choose this command if you want the plotter to wait after cutting each segment. A segment refers to the partial output of a sign which, in terms of size, exceeds the cutting area of the plotter and therefore has to be cut in sections. This option is commonly used with flatbed plotters that are not equipped with an automatic roll-feed device, in which case the size of the segment is equal to the maximum cutting area of the plotter.

Segment
This indicates the maximal area which can be plotted in in one piece.
Once the segment has been cut, the cut material must be removed and new material loaded and repositioned manually.

Sort
This option refers to the sequence in which objects in your design are cut. If you choose to sort prior to cutting, all inner sections of your design or objects will be cut before the outer sections, and all objects will be cut in order of position on the X axis. With roll or drum plotters, this keeps back-and-forth movement of the material to a minimum and thus maximizes output quality, particularly with friction-fed plotters. This option is also important for routing.
Selecting this option slightly reduces output speed.

Weed Border
This command is used to cut a border or frame around your design to facilitate weeding. You can specify the distance between the weed border and the outermost points of your design.

Overlap
When cutting a sign in sections, you can choose an overlap for each segment to compensate for possible material shrinkage. Cutting signs in sections becomes necessary when the size of the design exceeds the capabilities of the plotter, i.e. the maximum cutting area.

Segment Offset
This command lets you define the distance between the segments, i.e. the distance between the end of one segment and the beginning of the next.

Copy Offset
This command lets you define the distance between multiple copies of your design, i.e. the distance between the end of one copy and the beginning of the next.

Set Register or Aligning Marks

You can use this command to edit the size, position and type of marks (OPOS, OPAAL).

Working Area

This is where you can redefine the size of your working area. Besides various standard settings, you can specify up to 10 user-defined sizes.
This is a useful tool for users of routing and engraving machines, as they no longer need to redefine the working area each time.
The color of the working area can be defined by the user, thus guaranteeing better layout control on the screen.

Note: *Double-clicking on the shading of the working area (to the right or along the bottom) also opens this dialog box.*

The *Rulers...* Tool

In this dialog box you can define the location of the rulers. If you find you are running out of space in your working area, you may choose not to have the rulers displayed at all. With a metric ruler every fourth increment is shown as a longer line and with a ruler in inches every second and fourth increment.

The *Measurement Unit* Command

This command is used to change the unit of measurement (mm, cm or inch). This can also be done by clicking the button located at the point where the horizontal and vertical scroll bars meet.

The *Edit Wireframe* Mode

 F9
In this mode, only the contours or outlines of the objects in your design are displayed. The outline takes on whatever layer color you have chosen for that object.

Note: *If the layer color is white, the outlines are displayed as dotted gray lines.*

The *Undo/Redo* Command

SHIFT-F7
This command activates and deactivates the ***Undo/Redo*** command.

One advantage of deactivating this command is that node editing is faster in the case of large or numerous objects.
When there are several editing steps, the trial phase (original state → editing → temporary final state) can be reversed as follows:

1. Deactivate Undo/Redo
2. Edit objects
3. Activate Undo/Redo

You can restore the state prior to step 1 by clicking the ***Undo*** command in the ***Edit*** menu.

The *Select Language...*Command

If you activate this command, a dialog box for selecting the language opens.

3.7 The Window Menu ! ONLY CoCut Professional !

The *Default* Command

CTRL+1
This command activates the CoCut Professional default toolbar.

The *Color Layerbox* Command

CTRL+2
This command activates or disables the CoCut Professional ***Color Layerbox***.

The *Tools* Command

CTRL+4
This command activates or deactivates the CoCut Professional ***Toolbar.***

The *Object Info Status Bar* Command

CTRL+8
This command activates or deactivates the CoCut Professional ***Object Info Status Bar.***

The *Element Info Status Bar* Command

 CTRL+9

This command activates or deactivates the CoCut Professional ***Element Info Status Bar.***

The *Design* Command

 O

This command activates or disables the CoCut Professional ***Object Attributes*** Toolbar.

3.8 The Help Menu

About...

Clicking on ***About...*** will activate an information panel containing pertinent information on CoCut Professional, such as the serial number, version number, free disk space, the processor and coprocessor.

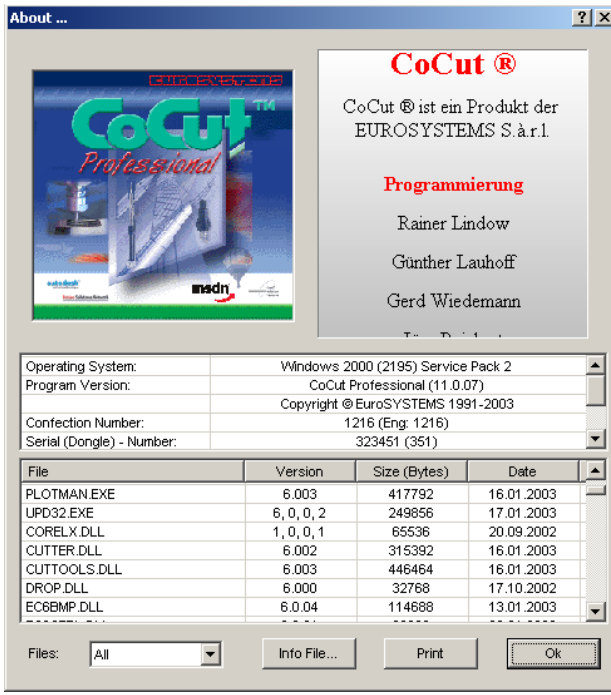


Fig. 87: The *About... CoCut Professional* Dialog Box

The product packing will be shown in the upper left part of the dialog box. General information about the product will be shown to the right.

Your ***Operating System, Program Version*** with ***Serial Number*** and your ***Dongle/Copy Protection Licence Number*** will be shown underneath.

All CoCut Professional ***Program Files*** with their ***Version Number, Size*** and ***Date*** will be shown in the lower part of the dialog box.

To speed up the search for certain program files you can specify in the box after ***Files*** which files are to be shown.

If you click on the ***Info File*** button, a file will be created which contains all files and the infos in the *.ini files. This can be either displayed or transmitted.

If you click on the ***Print*** button, an overview of the files which were previously in the selection box after ***Files*** will be printed.

Note: *It will help our support staff to rapidly eliminate any problems you may encounter with your CoCut Professional version if you let them have this list.*

Help...

 F1
This command launches the CoCut Professional online help.

Object Info...

 F10
This window contains information on the objects in your working area, such as total number of objects, number of objects selected, text blocks, data blocks and bitmaps.

Online Support

You can get into direct contact with the support service of RCS Systemsteuerungen GmbH by clicking this option. If you have not installed a browser, you will be shown a text file informing you what to do if you wish to take advantage of the RCS-ONLINE service.

In RCS-ONLINE you will find useful tips and tricks about EUROSYSTEMS products and also questions frequently asked about software and various cutting plotters. To enable us to eliminate problems as rapidly and efficiently as possible, we would ask you to immediately fill out the fields in the form under ***Software Registration*** if you are not registered with us.

Live Update

If you have access to the internet, you have the possibility of updating your software via ***Live Update.***

When you are connected to the internet select ***Live Update*** in the CoCut Professional ***Help*** menu.

If there is a later version on our server, you will be shown the files and their sizes. You can start downloading them by clicking on the ***OK*** button.

4. CoCut Professional Tips & Tricks

It is often only small things that make it difficult to work with new software. As with any new equipment, users often have questions and encounter problems that are easily solved. To save you a trip to the telephone, we have compiled a number of frequently asked questions and problems to which there are very simple solutions.

CoCut Professional (all versions)

1. CoCut Professional displays the message "Dongle not found"

First of all you should remove all the devices connected to your computer behind the dongle (including the cable) and recheck whether the dongle can be detected. If the dongle can now be detected, you should insert a parallel port card into your computer and plug the dongle into this port.
If the dongle still cannot be detected when it is plugged into the parallel port on its own, you must make sure that the parallel port is set to "Standard", "Compatible" or "SPP". You can usually set up parallel ports which are integrated into the mother board of your computer via the BIOS settings. But if you have an interface, you will have to change the mode using the jumper.
If the dongle still cannot be detected after this, check if the dongle can be recognized on another computer or another parallel port. Our experience in the last few years has shown that the dongle is very rarely faulty but that usually the parallel port where the dongle is plugged in is not working properly.

***Note**: **Never** plug the dongle into a serial or SCSI port as this can damage it irreparably. USB dongles are defective when the red diode flashes. If the diode doesn't light up, the dongle driver wasn't properly installed. To install the dongle properly, execute file hdd32.exe, which you can find on your CoCut Professional CD in the HASP directory.*

2. The plotter cuts the first characters cleanly and then begins to draw indefinable curves.

This is a typical buffer overflow problem when the plotter is driven serially. This occurs when the ***flow control*** is not properly set up for serial transmission. For serial data transmission most plotters are driven with the following parameters:

Bits per second:	9600
Data bits:	8
Stop bits:	1
Parity:	None
Flow control:	**Hardware**

You can change these values under Windows 98 via Start / Settings / Control Panel / System / Plotter Manager / Ports (COM and LPT) / COM port (COMx) / Port Settings. If your plotter has other settings, you can generally find the values in the display under the *Interface* or *Communication* menu and enter them in the Windows control panel.

3. I own a Roland PNC 950, 960 or CM12/24 cutting plotter. If the object height exceeds 70cm (about 24 ins) CoCut Professional proposes a segmentation, although the cutting objects don't exceed the foil width.

These types of ROLAND plotter take the lower left corner as the default origin point. As most other plotters have specified the origin point in the lower right corner, CoCut Professional drives the plotters in such a way that the height of the object is cut widthwise from the vinyl. It is, however, possible to set up ROLAND plotters so that they take the bottom right corner as the origin point. To do this, first press the ROTATE key in the plotter's operating field and then the SETUP key. With the CM series set the dip switch to ON.

4. Although the 'read back' button is activated in CoCut Professional, this function always shows '0' in conjunction with a Mimaki plotter of the CG series. How can the plotter be set up so that the correct foil width is given?

Mimaki CG series plotters will not react to the ***Read Back*** command unless they are run in the ***Host*** mode. For this proceed as follows: switch on the plotter, press the <-key in the operating field and once the plotter has measured out the roll of vinyl, keep pressing this key until "Priority" appears in the display window. Press ENTER and then the ^- key. The word ***Host*** will then appear in the display window. Confirm this selection by pressing ENTER.

5. What value must I enter in the *Print* field so a knife pressure of, for example, 100g is used in cutting?

The following table shows the pressure values:

Pressure	Grams	Pressure	Grams	Pressure	Grams	Pressure	Grams
1	20	11	70g	21	140	31	240
2	25	12	75	22	150	32	250
3	30	13	80	23	160	33	260
4	35	14	85	24	170	34	270
5	40	15	90	25	180	35	280
6	45	16	95	26	190	36	290
7	50	**17**	**100**	27	200	37	300
8	55	18	110	28	210	-	-
9	60	19	120	29	220	-	-
10	65	20	130	30	230	-	-

Fig. 88: Pressure Settings

To work with 100 g pressure, for example, you must enter 17 in the ***Print*** field.

6. The output size on my Mimaki CG series is more than twice the size of the design.

Mimaki CG51, 61, 101 and 121 plotters come with a resolution of 0.025 mm(.00098 in), although they are able to work with a resolution of 0.01mm (.00039 in) and also do so internally.

The CoCut Professional drivers are set to 0.01mm (.00039 in) because the plotters can thus be driven faster and more accurately.
To change your plotter's resolution to 0.01mm (.00039 in), switch on the plotter, press the <- key in the operating field and once the plotter has measured out the roll of vinyl, keep pressing the function key until ***Interface*** appears in the display window.

Keep pressing ENTER until you get to the menu item ***Step Size*** and then press the ^- key. The display window then shows 0.01. Confirm this choice by pressing ENTER and END.

CoCut Professional for CorelDRAW 8

7. Although all objects have been selected, only some of them are transmitted to CoCut Professional.

In your artwork there is probably an object that cannot be converted into curves, e.g. a bitmap. The quickest way to ascertain this is to switch to the wireframe mode. If you find this to be the case, select the object and lock it. After that you will be table to transmit all other objects to CoCut Professional.

CoCut Professional for CorelDRAW 7

8. After installing CoCut Professional for CorelDRAW 7 I cannot enlarge the symbol bar under Windows NT 4.

This problem only occurs when using CorelDRAW 7 und Windows NT 4 and has now been eliminated in the lastest release, according to the CorelDRAW technical hotline. However, there are two ways of avoiding this problem:
If Windows 98 is also installed on your computer as well Windows NT 4, you should reinstall CorelDRAW 7 under Windows 98, making sure that installation is performed into the same directory into which you have already installed CorelDRAW 7 under Windows NT 4. Then start CorelDRAW 7 under Windows NT 4 and adjust the symbol bar, quit CorelDRAW and restart your computer under Windows NT 4.
If you have installed CorelDRAW 7 on another computer on which Windows 98 is installed and the CoRUN symbol has been added to the symbol bar, you can copy the files CDRBARS.CFG, CDRMENU.CFG and CDRROLS.CFG onto a disk and from the disk copy them onto the Windows NT 4 computer into the DRAW directory of CorelDRAW.

CoCut Professional for CorelDRAW 6

9. It is not possible to cut clones in Corel 6 with CoCut Professional.

You must duplicate the objects to be cut or work from the Windows clipboard (copy and insert).
When you try to cut a text inCorelDRAW 6 with CoCut Professional, a message appears: ***Too many nodes***.
CorelDRAW 6 is only able to create a limited number of nodes (about 3000) when converting text to curves. The more serifs and hence nodes the script has, the smaller the number of letters that can be converted into curves.
You can only avoid the problem by setting several small text blocks with fewer letters, as it is not the total numbers of letters set but a too large number of letters in **one** text block that leads to this problem.

10. Although I activated the "Visual Basic for Applications" command when I installed CorelDRAW 10 I can't add the CoCut Professional macro to the toolbar.

You probably can't start the Visual Basic Editor (CorelDRAW 10 under ***Extras*** / ***Visual Basic***) either. There seems to be a bug during the installation of CorelDRAW 10 which you can eliminate as follows:
Place the CorelDRAW 10 CD in your CD drive and start the Visual Basic Installation with the Windows Explorer by double-clicking on the file vba6de.msi (or vba6.msi) in the directory \Corel\Graphics10\Config\Redist\VBA6. After you have done this, Visual Basic ought to run under CorelDRAW 10 and therefore also the macro for CoCut Professional can be added to the toolbar, as described in the manual.

11. How can I create a plot file to be sent later to the plotter on another computer via the COM port?

Select "Plot To File" in the CoCut Professional Cut dialog box. You will be asked to give the file a name. Enter, for example: F:\Path\File.plt. F:\Path is a network directory or a directory which has been made available on your hard disk.
Open the MS-DOS input request (Start/Programs/MS DOS input request) on the computer where the plotter is connected to the serial port (e.g. COM 1) and type the following line:
mode com1:9600, n, 8, 1, p, which means that COM 1 will be used for plotting with baud rate: 9600, parity: none, data bits: 8, stop bits: 1 and flow control: hardware. After that, type **copy G:\Directory\File.plt com1. G:\Directory** is the directory on the computer where **File.plt** is located**.** The plotter should now start cutting the plot file.

Note: *If the computers are not linked in a network, a diskette can also be used in a similar way to transport the data (in the above example replace F:\Path\ or. G:\Directory\ by A:\. Note that the amount of data is limited to 1.44MB so that only small plot files can be transported.*

Tip: *Experienced users who would like to send plots to another computer regularly should create a batch file as follows:*

mode com1:9600,n,8,1,p copy %1 com1:

Now create a plot file and double-click on this file in the Windows Explorer. As Windows normally cannot assign files with the suffix "PLT" (in other cases you must choose another file suffix instead of PLT) you will be asked to choose a program for opening the file in an ***Open With*** dialog box.

You can select the previously created batch file using the “Other“ button and create a permanent link with the command “ Always use this file with this program“.

12. How must I set up the Roland PNC 1000 so that it can be run with CoCut Professional?

You must make the following settings in the plotter Setup (Raise the princh roll):

Configuration COMMAND mode2
INPUT PARALLEL
SERIAL with parallel drive (e.g. LPT1)
With serial drive (e.g. COM1)
STP 1 Stop bits
DAT 8 Data bits
PTY NON Parity
BAUD 9600 Baud rate (Bits per second)
SIZE EXPAND-X Important as the point of origin is set at ***Lower Right***
Parameters TOOL CUTTER
SPEED 15 will be overwritten by the software
FONT OUTL
P-CH IGNORED

13. Allthough the “Read Back“ button is activated in CoCut Professional, this command always shows a zero value. How can I set up my Mimaki plotter so that the correct vinyl width is read in?

The plotters of the Mimaki CG series will not react to the ***Read Back*** command unless they are operated in the host mode.
For this proceed as follows: Switch on the plotter, press the **<-** key and once the plotter has measured the roll, press the function button until ***Priority*** appears in the display. Then press ENTER and after that the **^** key**.** The word “Host“ will now appear in the display. Confirm your selection by pressing ENTER.

14. After I have installed CoCut Professional for CorelDRAW 7 Ich can't enlarge the Windows NT 4 toolbar.

This problem only occurs with CorelDRAW 7 and Windows NT 4 and has apparently been eliminated in the latest version.

However, there are two ways to avoid this problem:
If you have another Windows 98 installation on your computer besides Windows NT 4, you should reinstall CorelDRAW 7 with Windows 98 and make sure that the installation is carried out into the same directory in which you have already installed CorelDRAW 7 with Windows NT 4. After this, start CorelDRAW 7 with Windows 98 and adjust the toolbar, close CorelDRAW and restart your computer with Windows NT 4.

If you have installed CorelDRAW 7 on another computer where Windows 98 is installed and have added the CoRun icon to the toolbar, you can copy the CDRBARS.CFG, CDRMENU.CFG and CDRROLS.CFG files from the CorelDRAW 7 DRAW directory on to a diskette and then copy them from the diskette to the DRAW directory on your Windows NT 4 computer.

15. When I try to cut a text from CorelDRAW 6 with CoCut Professional I get the mesage *Too Many Nodes*.

CorelDRAW 6 is only able to create a limited number of nodes (approx 3000) when converting text to curves. The more serifs and thus nodes the lettering has, the fewer letters can be converted into curves.

You can only avoid this problem by creating several small text blocks with only a few letters, since it is not the total number of letters created but an excessive number of letter within a single block of text that leads to this problem.

16. Question: What is the easiest way to cut a bitmap from CorelDRAW 9 or 10?

You must first of all vectorize your bitmaps as only curves can be cut.
If you have also installed the CorelTRACE program with CorelDRAW, you can click on your bitmap using CorelDRAW and the ***Vectorize Bitmaps*** command will appear in the toolbar (or in the menu under ***Bitmaps***). If you execute this command, CorelTRACE opens and offers you several ***Vectorize*** modes.

You should normally choose ***Vectorize/By Wireframe***. When you close CorelTRACE, the bitmap will be overlaid with the vectorized image and you can now cut the bitmap with CoCut Professional.

5. Glossary

Terms printed in ***italics*** refer to additional glossary entries.

Application Tape — Tape used to transfer cut and ***weeded*** vinyl graphics to a substrate.
The tape's adhesion must be sufficient to hold even the tiniest letters while releasing them easily upon application.

Ascender — The part of a lower-case letter (e.g. b) that extends above the main body of the letter.

Baseline — Imaginary line on which all characters are placed in a line of text regardless of point size (with the exception of ***descenders***).

Bit Depth — Mathematically possible number of colors for a given number of bits, e.g.: 1-bit color depth = 2^1 = 2 possible colors (black/white) 8-bit color depth = 2^8 = 256 possible colors/graytones 24-bit color depth = 2^{24} = 16.8 m possible colors

Block — CoCut Professional command for justifying text by which each line of text, ***excluding*** the last line, is extended to be flush with both the left and right margins.

Bold — Font which is somewhat thicker than the standard typeface.

Byte — Smallest addressable unit in the computer memory, consisting of 8 bits.

Cap Height — The height of a capital letter from the top of the letter to the ***baseline***. Generally, the letter "H" is used for measuring.

Clipboard — An area in your computer's memory used for temporary storage of data that was cut or copied. This data can be pasted from the clipboard into any file.
This feature thus provides an easy way to transfer data from one program to another.

CMYC — Cyan, magenta, yellow, contrast (black). Standard colors for four-color printing.

CMYC Color Area Total amount of all colors represented by the CMYC colors used for printing.

Color Depth The number of possible color tones that can be recognized by a scanner or reproduced on a color monitor.

Contrast Difference between light and dark parts of an image.

Descender The part of a lower-case letter (e.g. g) that extends below the main body of the letter.

Desktop Space surrounding the ***working area*** on the computer screen, containing a variety of tools.

Digitize To put an original image into digital form, either by entering points or lines through a digitizing table, or by using a scanner.

Dongle Protective device included with CoCut Professional that must be plugged into the parallel port (LPT1, printer port) in order to run the software. Also called copy protection key, security lock, or hard lock.

Download To retrieve programs or data via modem from an electronic mailbox and load them into your computer.

EPS, EPSF Acronym for Encapsulated Postscript Format. File format in which text and image data are stored in postscript format. This format includes text and raster data as well as bitmaps for displaying it on screen.

Font Designates a specific size and *style* of a particular typeface, e.g. 12-point Helvetica, bold. Most typefaces include plain, bold, italic, and bold-italic fonts. The terms *typeface* and *font* are commonly (yet incorrectly) used interchangeably.

Font Style Visual emphasis given to parts of a text string by adding text attributes such as bold, *italic* .

Group Combining a number of objects in a group. Once objects are grouped, the positions of the objects relative to each other remain unchanged.

Halftone Image Designates an image that contains various shades of gray or of color. The shades between pure white and pure black are called halftones.

Insertion Point Designates the blinking vertical line in a text box that can be edited.

Justification The alignment of a text block in the working area, either along the left margin, right margin, or centered between the margins. In addition, CoCut Professional offers the following options: ***block*** or ***forced block*** and adjustment of ***cap height***.

Kerning The adjustment of spacing between characters to achieve type that is visually consistent and balanced. Characters may be extended (with kerning values above 100%) or condensed (with kerning values below 100%).

Overfill A narrow overlapping area at the edges of areas of color which are positioned over each other.
This ensures that there are no streaks at the boundaries. The overlap can be created by using an overfill or an underfill.

Point Unit of measure equal to approximately 1/72 of an inch used to measure printing type. Included in the measurement are ***ascenders*** and ***descenders*** as well as a certain space above and below the character.

Process Colors Scale of colors for four-color printing with cyan, yellow, magenta and black (key); it is possible to print any color by mixing these colors.

Resolution The amount of detail in an image as measured in dots or pixels per unit (e.g. **d**ots **p**er **i**nch or dpi). Laser printers generally have a resolution of 300 to 600 dpi.

Scanning Resolution Resolution for scanning analog images.
Formula: Resolution (in dpi) = printing length (L/cm) x 2 (quality factor) x enlargement factor x 2.54 (for converting mm to in).

Streaks Cracks at the boundaries of overlapping or adjoining areas of color or vinyl. They are especially detrimental in screen-printing or printing.

Subscript Letters or characters placed below the ***baseline*** of normal text. Generally, such letters or characters are somewhat reduced in size.

Superscript Letters or characters placed above the ***baseline*** of normal text. Generally, such letters or characters are somewhat reduced in size.

Upload To send files and programs via a modem from your computer into an electronic mailbox system.

Vinyl Generally, two types of vinyl are available, ***calendared*** and ***cast***. Cast vinyl is not stretched during the production process and is therefore less prone to shrinkage. Cast vinyl is generally more costly than calendared vinyl which tends to have less durability and a greater tendency to shrink. Vinyl materials used for cutting generally consist of three layers:

1. Liner (the bottom layer)
2. Adhesive layer in between the liner and the vinyl
3. Vinyl material

Weeding The act of removing excess vinyl around cut graphics.

Working Area The area on your screen used for designing and editing.

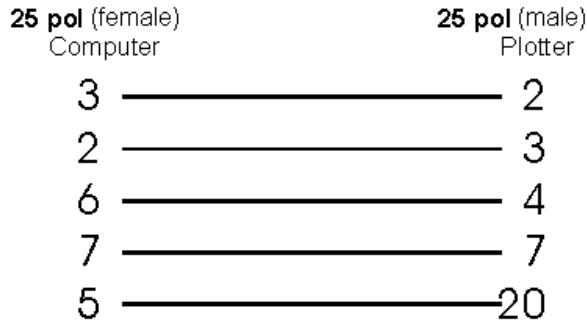
X Height The height (measured from the *baseline*) of a lower-case “x”, i.e. any lower-case letter without *ascender*, in a particular font.

Cable Configuration and Baud Rate

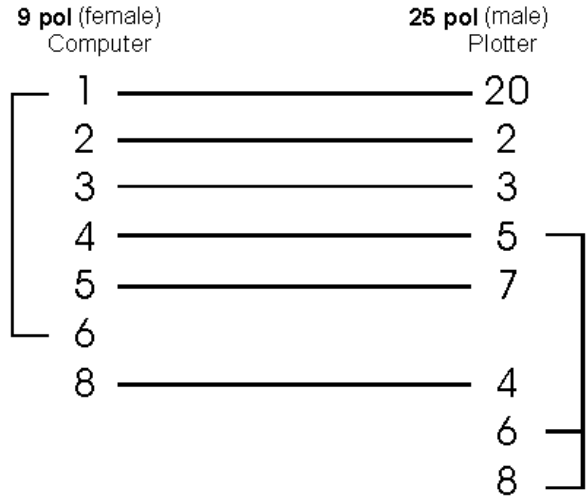
Unfortunately a lot of plotters require a non-standard cable. For this reason we have decided to list the cable wirings necessary for the most important plotters below. We must, however, point out that we do not assume any responsibility for the correctness of this information. In addition, you should exercise great care in soldering your cable, as an improper connection can damage both your plotter and your computer.

Such damage is not covered by any guarantee.

Aristo

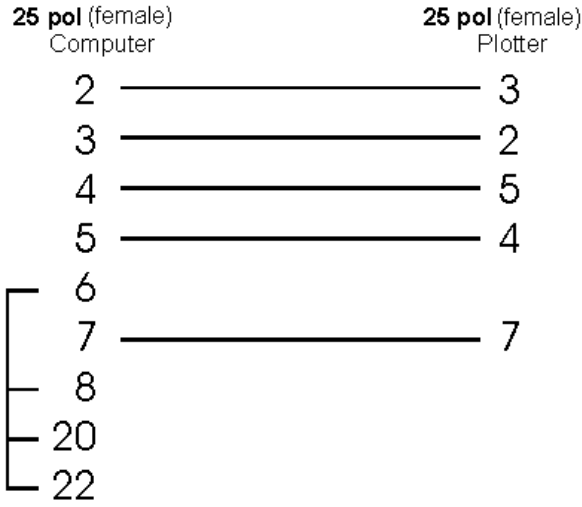


Grapfityp

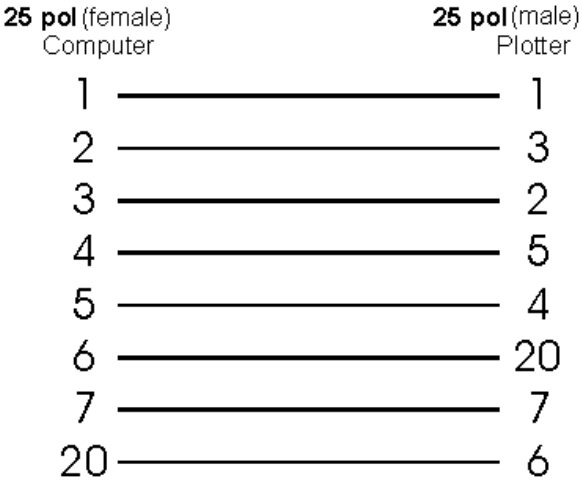


Houston

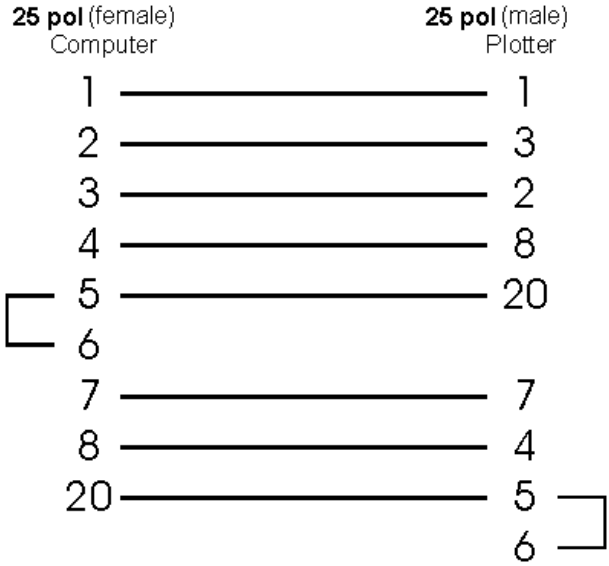
EDMP series (old)



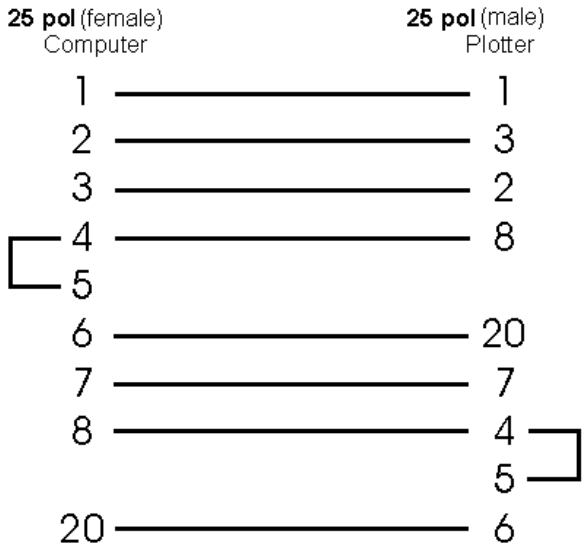
Mimaki



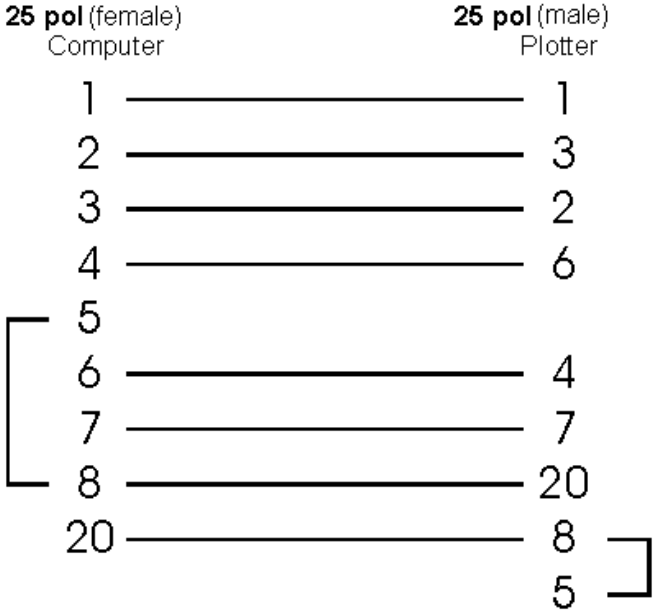
Mutoh



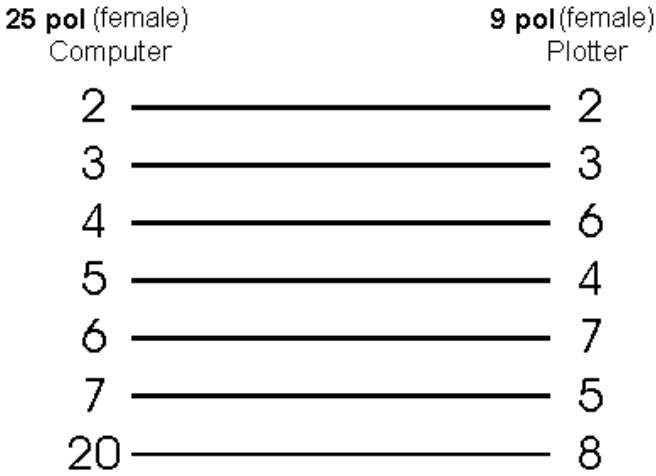
Perigraf



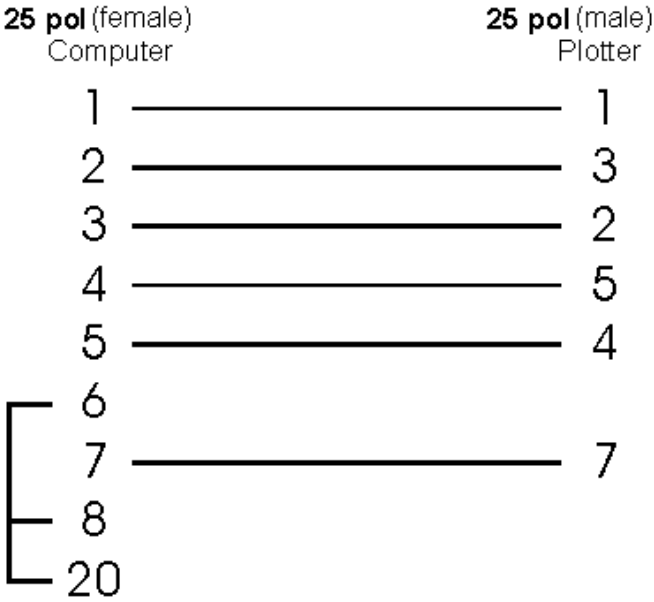
Roland



Summagraphics D and T series



Zünd


25 pol (female)
Computer
25 pol (male)
Plotter
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Imprint

Production information:

This manual was produced with Winword 2000 on a Pentium II 700 MHz.

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