Cutting Software for Professional

FineCut 3 for CorelDRAW®

OPERATION MANUAL

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D200674

About FineCut for CorelDRAW

Thank you very much for purchasing a product of Mimaki.
FineCut, direct a cutting software for CorelDRAW®, offers stable cutting environment which have never been realized by other cutting software. A built in sorting function dramatically decreases cutting time.

System Requirements

The following conditions are required to use FineCut.

- IBM PC or compatible mounting Pentium processor or compatible CPU
- Microsoft® Windows®98, Windows®ME,
  Windows®NT4.0 (service pack 3 to 6), Windows®2000, Windows®XP
  * Supported OS are same as corresponding version of CorelDRAW.
  * When connected to a plotter by USB, Windows2000 Service-Pack3, WindowsXP Service-Pack1, or later version is required.
- CorelDRAW® 9, 10 (service pack 1 or later), 11, 12
- Visual Basic for Applications®
- MIMAKI CG series, MIMAKI CF series

Install the Visual Basic for Applications, or the FineCut may not run normally. When installing the CorelDRAW, be sure to install the Visual Basic for Applications by selecting the custom install in the CorelDRAW installer. For the details, refer to the attached installer procedures. CorelDRAW 11 performs the standard.

Notes:

- Do not copy this manual in whole or parts in any form without prior approval from Mimaki.
- Do not copy this software to any other disk for the purpose of other than making a backup disk or load it in memory for the purpose of other than execution.
- Except for the damages prescribed in Warranty Notes of Mimaki Engineering Co., Ltd., Mimaki Engineering Co., Ltd. assumes no responsibility for effects (including loss of income, indirect damages, special damages, or other financial damages) resulting from the use or non-use of the product. This also applies to the case when Mimaki Engineering is notified of the possibility of damages. For example, Mimaki Engineering Co., Ltd. assumes no responsibility for damages of media (work) caused by using this product and indirect damages caused by a product created using the media.

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Each of the company and product names is a trademark or a registered trademark of each individual company.

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About This Manual

FineCut Operating Manual describes the FineCut functions.

Notations

Menu items are enclosed in square brackets like [File] menu. Buttons displayed in a dialog are framed like Plot .

Symbols

Indicates a caution you must observe when operating the product.

Indicates a procedure you must perform.

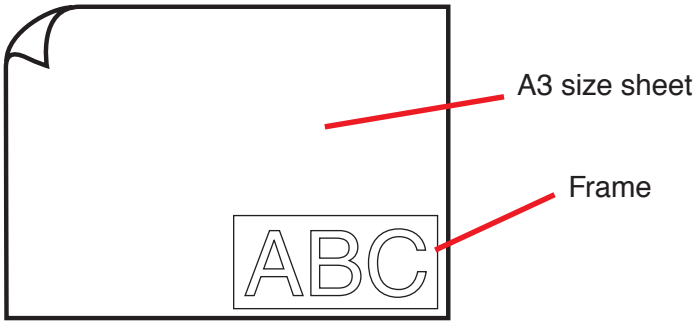
Describes a useful procedure.

FineCut Menu

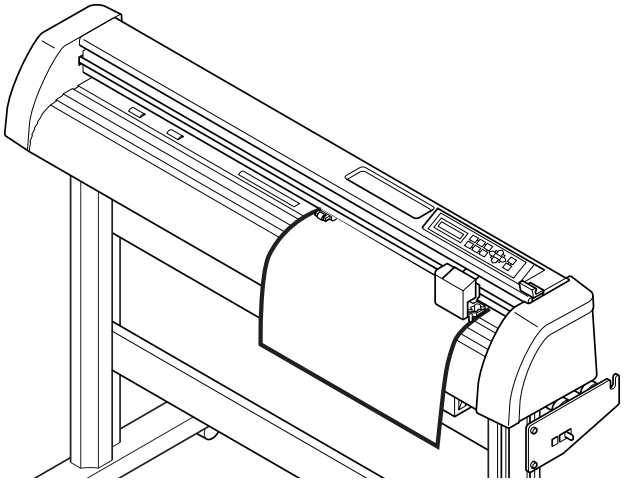
FineCut consists of 6 items. After installing the FineCut, activate CorelDRAW to display the 6 icons of the FineCut on the CorelDRAW screen.

[Plot] :	Displays the cutting area to set the object layout and various options. It also sends an object to the plotter for object cutting. (see page 35)
[Plot Selected Only] :	Plots only the selected object.
[Setting] :	Sets the communication conditions for connecting with the plotter used. (see page 33)
[Recognize Outline And Overlap] :	Recognizes the outline width and overlap of the selected object. (see page 14)
[Extract Contour] :	Creates a contour for the selected object. (see page 19)
[Create Registration Mark] :	Creates a registration mark to be recognized by the plotter. (see page 21)

The following process shows how to cut out ABC at the bottom right of the A3 size sheet using Mimaki CG cutting series.
Additionally, make a frame around the ABC, and cut it 5 mm away from the characters.



1 Load a A3 size sheet into a plotter as shown below.



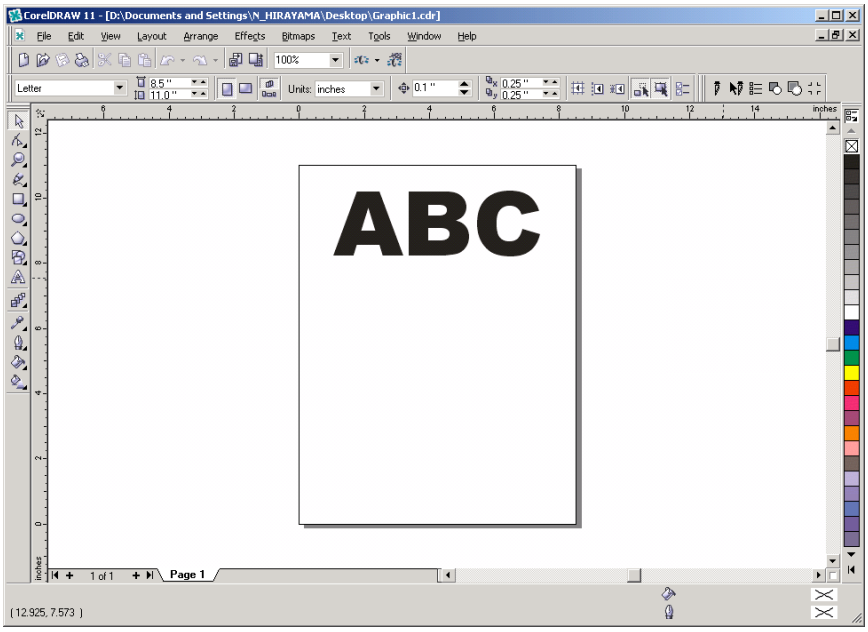
2 Set the plotter to REMOTE mode.

Be sure to set the plotter to REMOTE mode. In case the LOCAL mode, FineCut cannot load the sheet length.

3 Activate CorelDRAW.

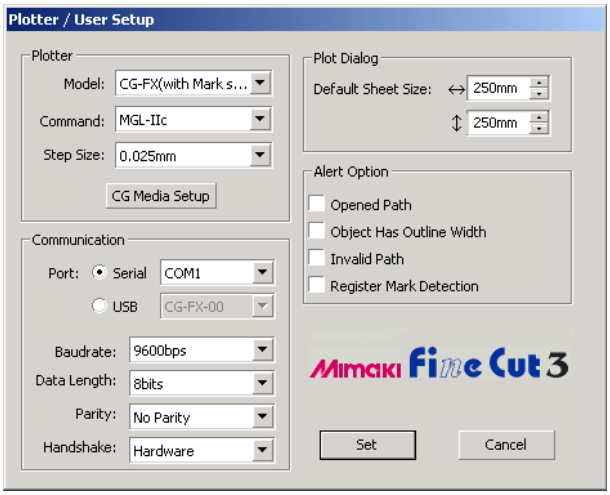
No need to set the paper size to A3 size.

4 Enter “ABC”.



5 Click [Setting] button.

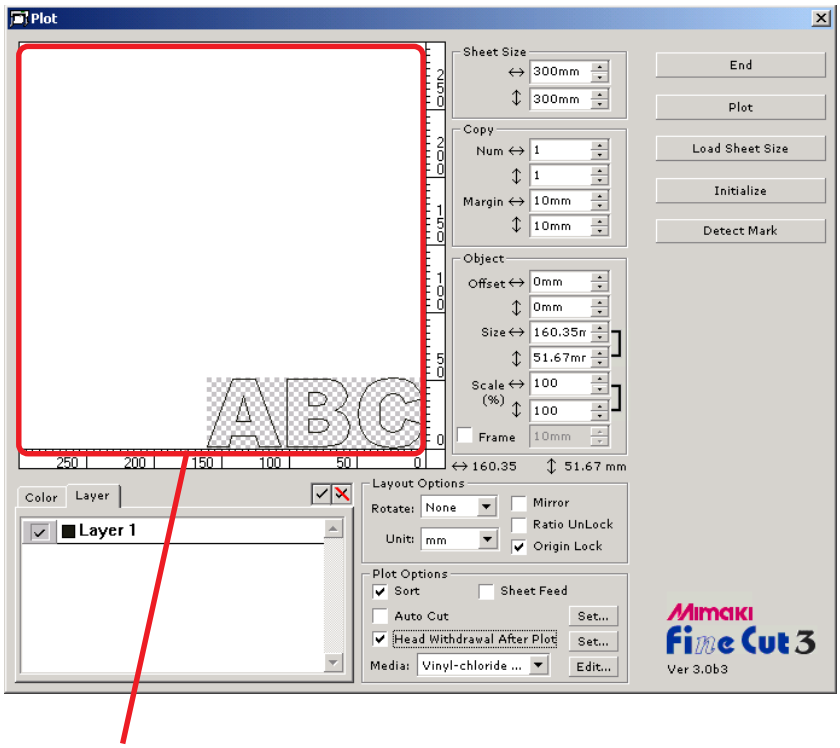
Set the communication conditions to enable communication between FineCut and the plotter. (see page 33)



Click Set .

6 Click [Plot] button.

Plot dialog appears.



The effective cutting area

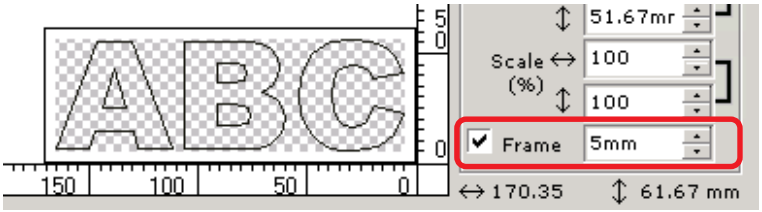
(Mimaki CF series set the origin point to the bottom left of a sheet.
Therefore, ABC characters are displayed at the bottom left.)

CAUTION

If the ⚠ mark is displayed on the left of Load Sheet Size button, the plotter sheet size cannot be loaded. Set the plotter to REMOTE mode, and then click Load Sheet Size button to load the sheet size .

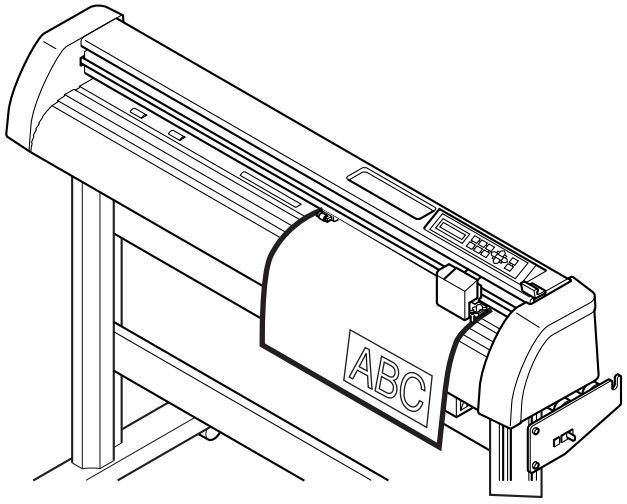
7 Set a frame.

Set a frame at 5 mm around the object. Check [Frame] check box and enter value 5 as the frame space.



8 Click Plot button to start plotting.

The origin point is set to the bottom right of the sheet. Therefore, the object cutting is performed from the bottom right. (bottom left with Mimaki CF series)



9 Click End button.

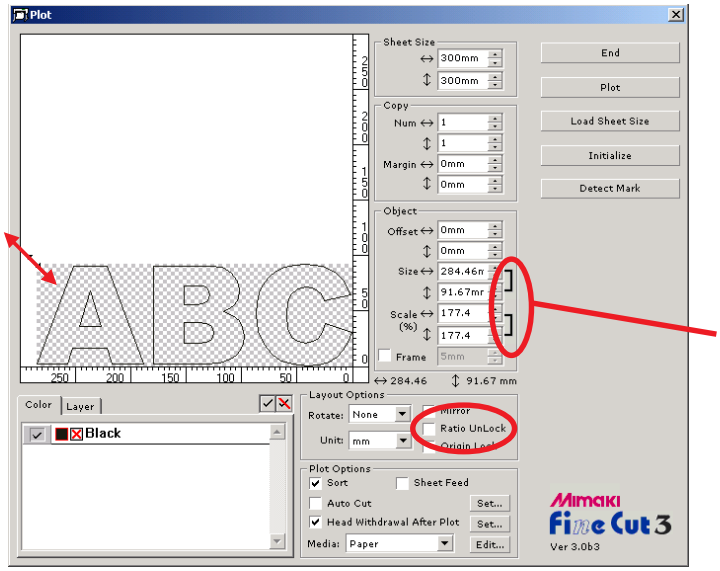
Plot dialog closes.

Enlarge and Reduce an Object

Enlarge or reduce an object. Move the mouse cursor to a corner of the object and then drag it.

1. Enlarge or reduce an object with a fixed aspect ratio.

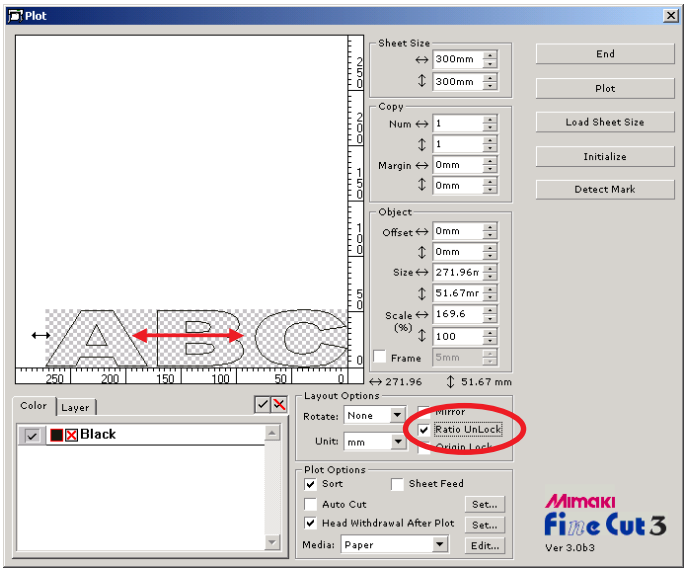
Click [Ratio Unlock] on the Option menu. Enlarge or reduce the object as dragging a corner of the object.

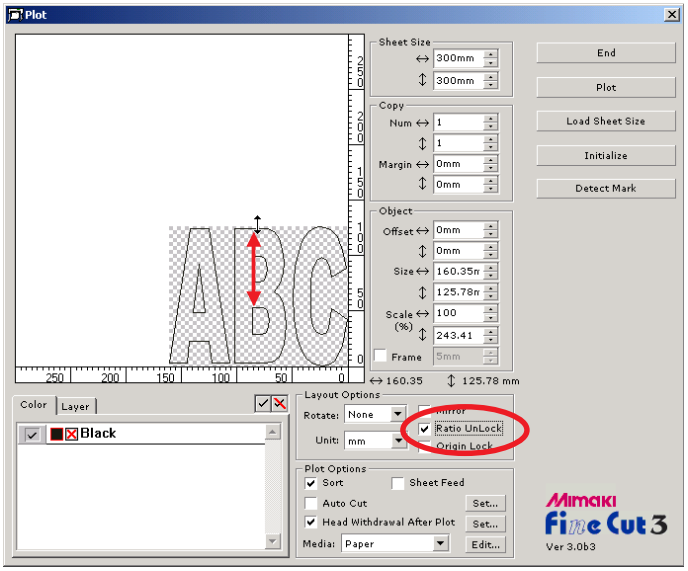


It indicates the ratio is fixed. (see page 37)

2. Enlarge or reduce an object only along horizontal or vertical direction.

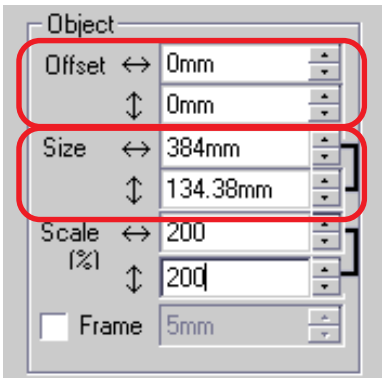
Click [Ratio Unlock] on the Option menu. Enlarge or reduce the object as dragging any one side of the object.





- Drag the mouse as holding down the Shift key of the keyboard to enlarge or reduce the object with the aspect ratio retained.
- Change the horizontal and vertical sizes separately before invalidating Ratio Unlock to enlarge or reduce the object with the new aspect ratio retained.

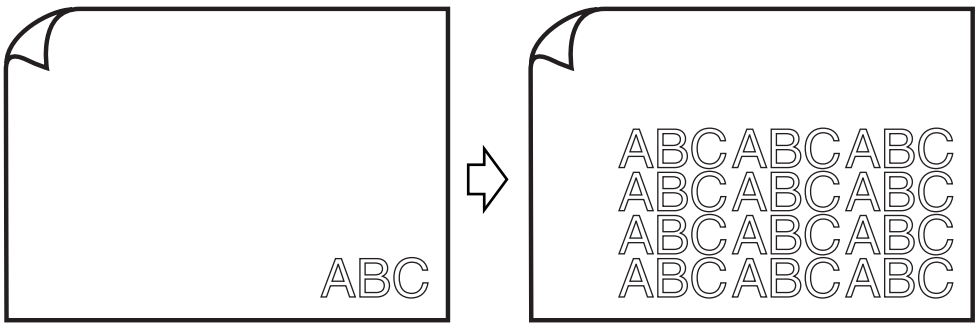
Enter the values of the Size and Scale on the Object menu to enlarge or reduce the object more precisely.



Cut an Object Multiple Times (Copy)

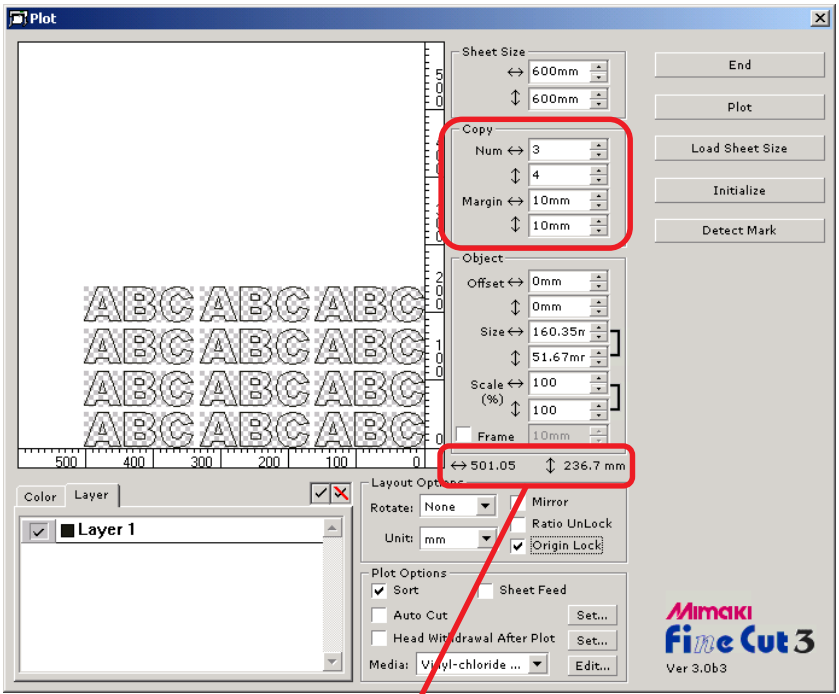
Use the copy function to cut an object multiple times vertically and horizontally, use the copy function.

The following example shows how to cut ABC on the A3 size sheet.



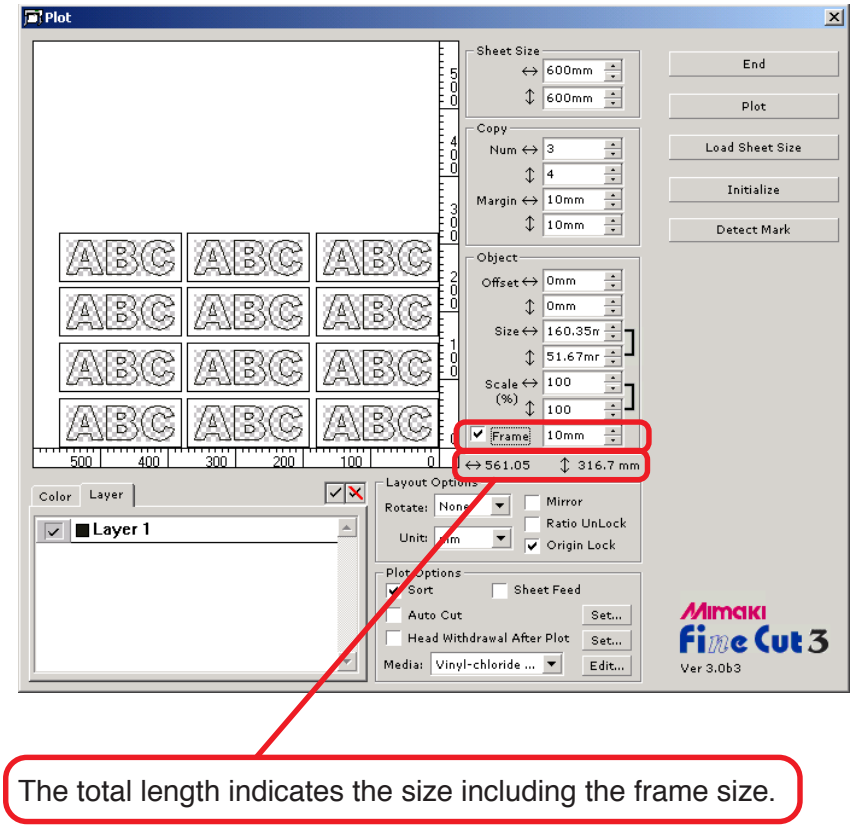
Enter value 3 for horizontal and value 4 for vertical on [Copy].

Set the margin between objects (horizontally and vertically) to 10 mm.



The total length indicates the size including all margins of the object.

Check [Frame] check box and input 10 mm in Frame to set 10 mm space around the object.



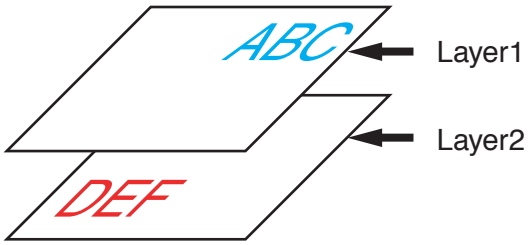
CAUTION

When setting a frame, it is set for each object. Cannot enclose all the copied objects with a single frame.

Cut an Object by Layer

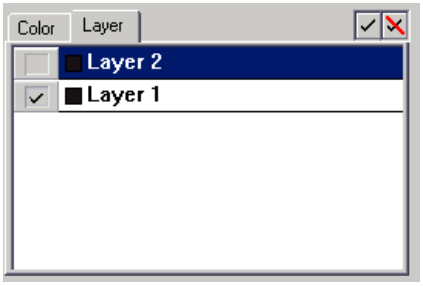
If the multiple layers exists with objects on CorelDRAW, you can cut out the specified layer.

The following example shows how to cut out ABC on layer 1.



Change the Plot dialog to the layer list.

Uncheck the Layer 2 check box.



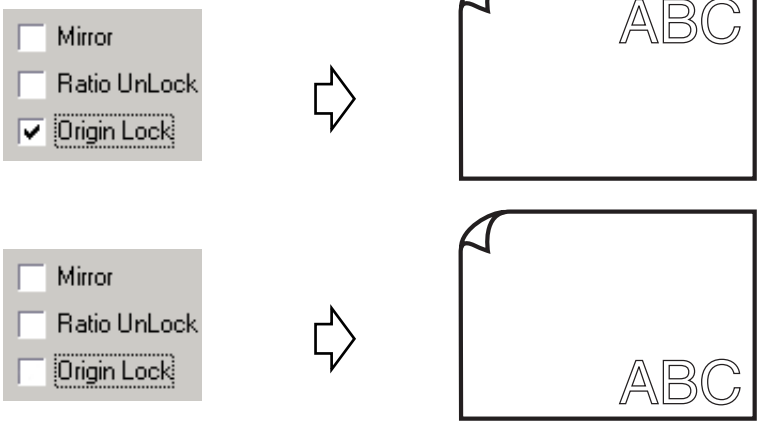
Object DEF on the layer 2 disappears from the cutting area.

Click [Origin Lock] check box to cut out the object (ABC) retaining the layout position.

When uncheck the check box, the object is cut at the bottom right of the sheet (bottom left with Mimaki CF series) base on the origin.

Origin Lock setting

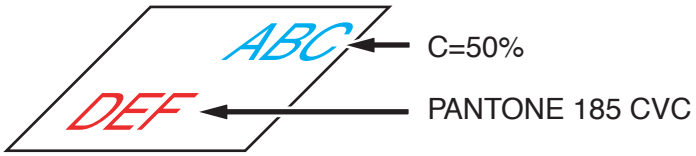
Cut result



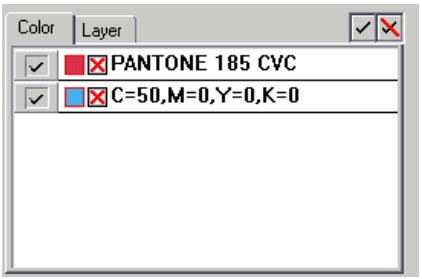
Cut an Object by Color

If an object consists of multiple colors on CorelDRAW, you can cut out the specified color object.

The following example shows how to cut out the Cyan (C=50%) colored ABC.



The color list of the Plot dialog indicates the color configuration of the object.

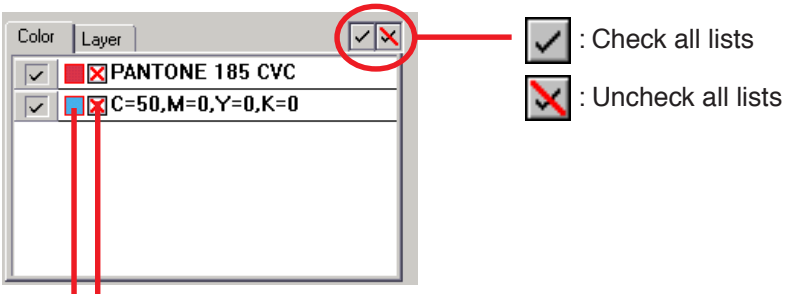


Uncheck the check box of the color set of object DEF. Object DEF disappears from the cutting area.

Check [Origin Lock] check box to cut out the object with the position of ABC retained. (see page 12)

Color List

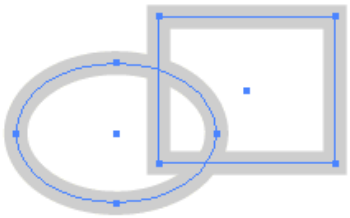
The color list displays all the colors (including PANTONE and other characteristics) used for the object. It also displays the color of fill and outline colors of the object.



Identify the stroke width and overlap

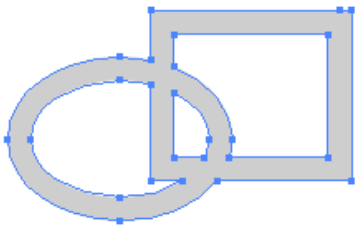
Identify the outline width and overlap of objects to cut it as a figure as displayed on the monitor.

1 Select the object to be identified.



2 Click [Recognize Outline And Overlap] button.

3 The outline width and overlap are identified.



Set Cut Conditions for Each Media

CAUTION

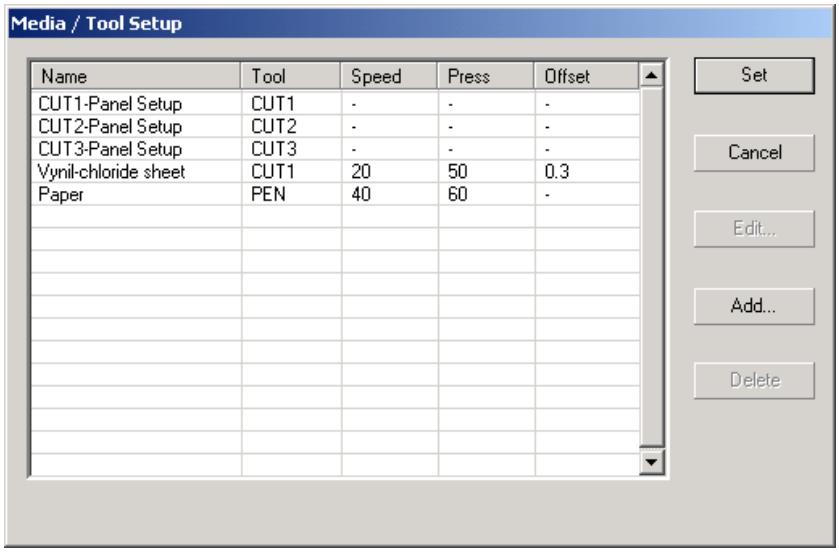
This function is effective only for the MGL-IIc commands.

FineCut enables to register the plotter cut conditions.
Before plotting, change the cut conditions depending on the media type.

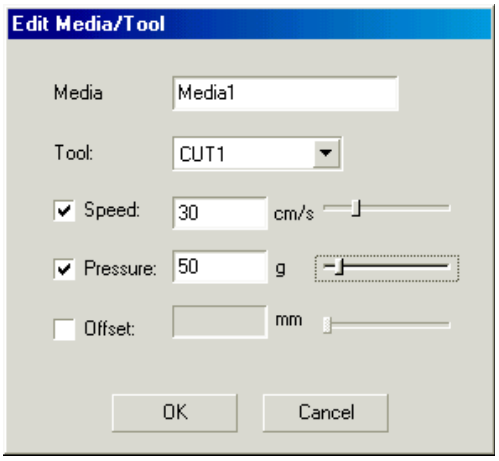
1 Click Media Setup button (see page 33) on the [Plotter/User Setup] menu to display the Media/Tool Setup dialog appears.

(Alternatively, click Edit button (see page 39) in the Plot dialog.)

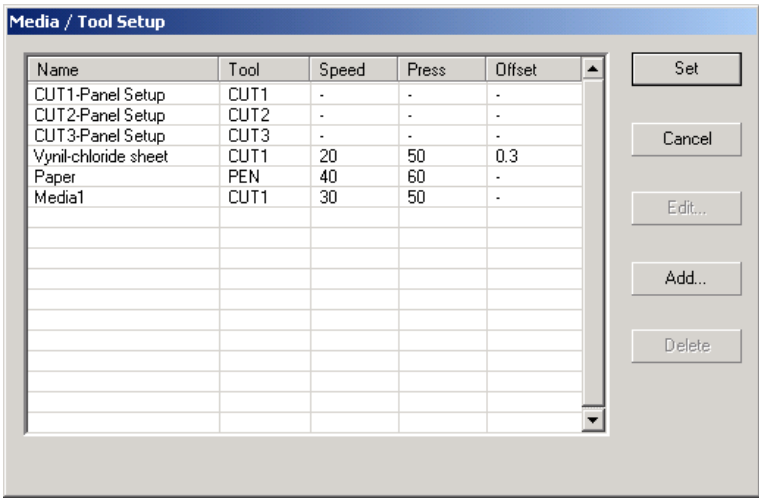
Edit the media setting.



2 Click Add button to add a media on the Edit Media/Tool dialog.



Click OK button to add the media to the list.



Double-click on the target condition to change the setting.
Alternatively, click Edit button.

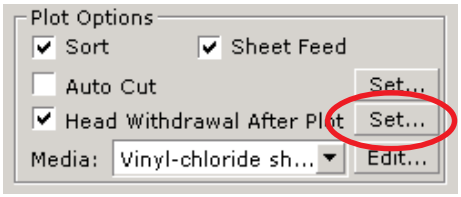
3 Click Set button to save the cut condition.

CAUTION

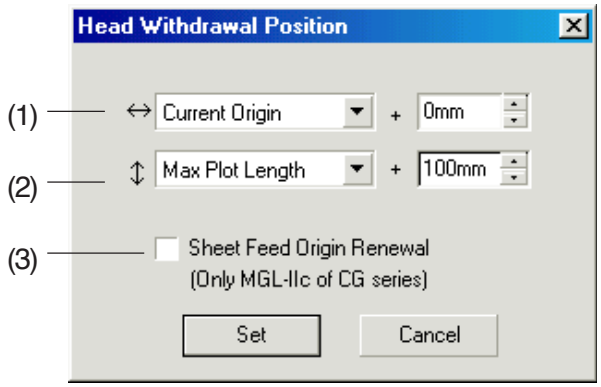
In case any setting value exceeds the limit value on the plotter, plotting is performed based on the limit value of the plotter. For the limit values, refer to the Operation Manual.

Set Head Position and Origin Automatically after Plot

When checking [Head Withdrawal After Plot] check box, the plotter head move to the specified position after plotting the data. When clicking Set button, enable to set up the withdrawal position and Origin Update.
(On the default condition, the withdrawal position is set to the Max.plot length +1 cm without [Sheet Feed Origin Renewal].)



Click Set button to change the head withdrawal position or set the origin to the withdrawal position.
[Head Withdrawal Position] dialog appears.



(1)Set the head withdrawal position for the horizontal direction.

Reference position from either [Current Origin] or [Max Plot Length].
For example, the head is withdrawn to the position at 0 mm from Current Origin for the horizontal direction in the figure above.

(2)Set the head withdrawal position for the length direction.

Reference position from either [Current Origin] or [Max Plot Length].

For example, the head is withdrawn to the position at +100 mm from the Max Plot Length for the length direction in the figure.

(3)Set the head withdrawal position as the origin.

(This function is effective only for the MGL-IIc commands on Mimaki CG series.)

Check this option, for the useful operations like continuous output.

CAUTION

When checking “Sheet Feed Origin Renewal”, [No. Copies] or [Division Cut] function on Mimaki plotter will not perform correctly. Uncheck “Sheet Feed Origin Renewal” before using [No. Copies] or [Division Cut] function.

Make a Seal

The following example shows how to cut the contour of a printed pattern to make a seal or sticker.
FineCut provides you the Contour Extraction function that enables to generate outlines on an object and the Registration Mark Recognition function that enables to perform axial correction and distance correction at once using Mimaki CG-EX series and Mimaki CG-FX series cutting plotter with a mark sensor.

CAUTION

If the entered values differ from the settings on the plotter, the object will not be output correctly.

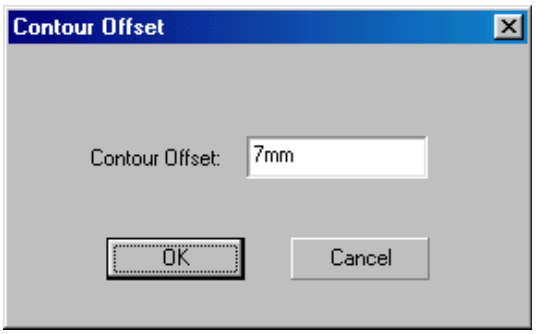
Attach a Contour

This function enables to make outlines automatically .

1 Select the object to attach a contour.

2 Click [Extract Contour] button.

Set the distance from the object to the contour.



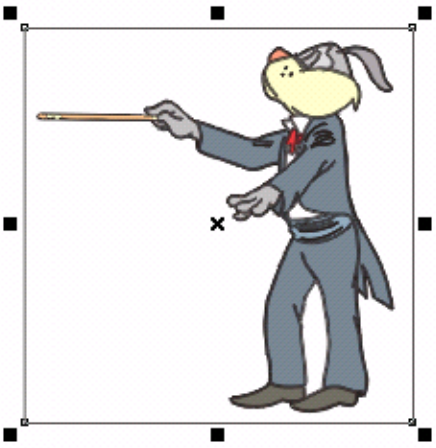
Enter a negative value to perform off-cut.

3 Click OK. Extract the contour to create a path on FC Contour Layer.

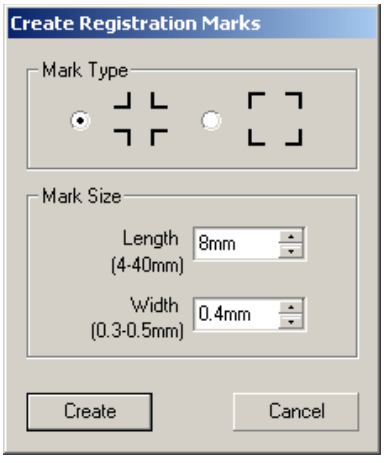
→ Troubleshooting : A part of contour protrudes (See page 41)

Create a Registration Mark

1 Point the position to create a registration mark.
Enclose the object with the rectangle tool.



2 Click [Create Registration Mark] button.



CAUTION

When cutting register marks continuosly, set the register mark size to 8 mm.

Select Mark type and Mark length and click Create button.

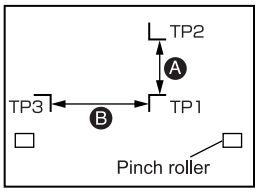
3 The registration mark is created. Output to the printer.

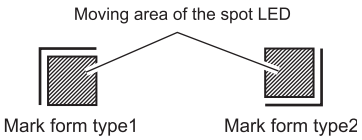
Recognize and cut Registration Mark (in use of CG-EX series)

1 Set the output result on a plotter to perform registration mark detection.

For the procedure of registration mark detection, refer to the Mimaki CG-EX series operation manual.

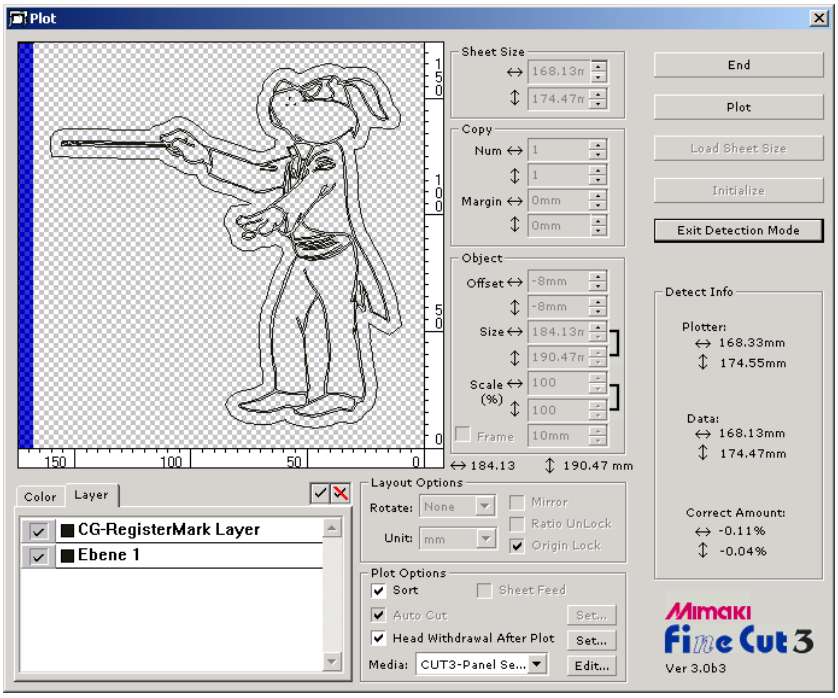
Detection of registration mark (Semi-automatic mode)





1. Place the sheet on the device and turn the sheet set lever toward you.
2. Press [<] or [>] key to perform the sheet detection.
3. Move the cutter blade tip with the Jog key until it rests in the area illustrated on the left.
4. Press [ENTER HOLD] key.
   Registration mark detection starts.
5. After detected the registration mark, length (A) provided between TP1 and TP2 will be shown on the LCD. Press [ENTER HOLD] key.
   The size is calibrated automatically in FineCut mode. No need to input the actual size with the jog key.
6. After detected the registration marks, length (B) provided between TP1 and TP3 will be shown on the LCD. Press [ENTER HOLD] key.
7. The origin is set.

2 Click Detect Mark button in the Plot dialog to identify the registration mark.



Click Exit Detection Mode button to cancel registration mark recognition,.

3 Start plotting.

Check only FC Contour Layer in the layer list to cut only a frame. Click Plot button.

Recognize and cut Registration Mark (in use of CG-FX series)

FineCut enables to detect the registration mark set on the CG-FX at high speed. Perform two cutting patterns: continuous multiple same data cutting on a roll sheet, and continuous multiple same data cutting as exchanging a leaf sheet.

< Cut on a roll sheet continuously >

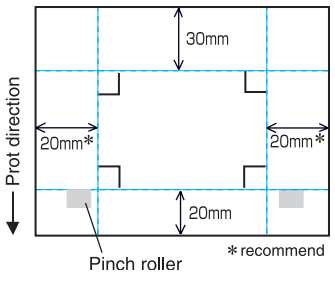
CAUTION

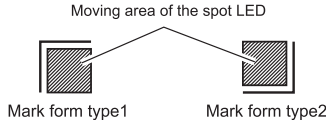
- Only one set of the registration mark data (4 marks) is available to cut continuously. In case two or more sets of the registration marked data exists in a sheet, cannot cut continuously.
- Standardize a shape of the registration mark. In case a different shape of the registration mark mixed, cannot detect the registration mark precisely.
- Set the register mark size to 8 mm or more. (see page 21)
- Set in array the horizontal registration marks within 5.
- Set the same size and position between the output leaf sheet size and the print position.

1 Set a output result on a plotter to detect registration mark.

For the procedure of registration mark detection, refer to the Mimaki CG-FX series operation manual.

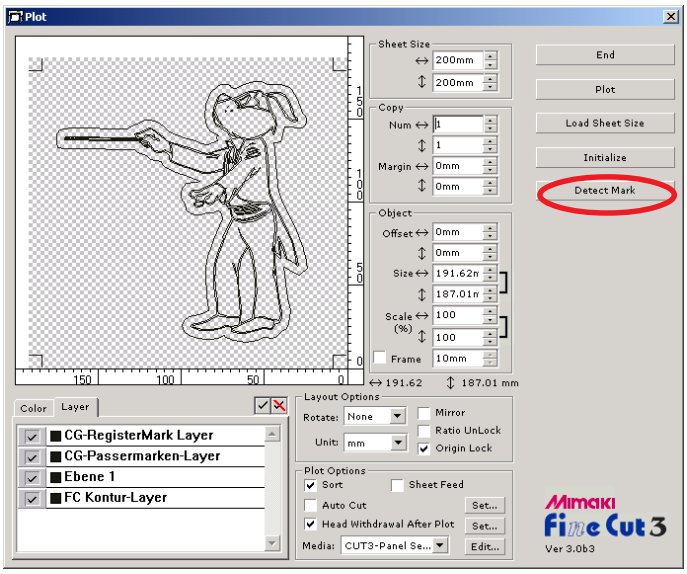
Detection of registration mark (Semi-automatic mode)



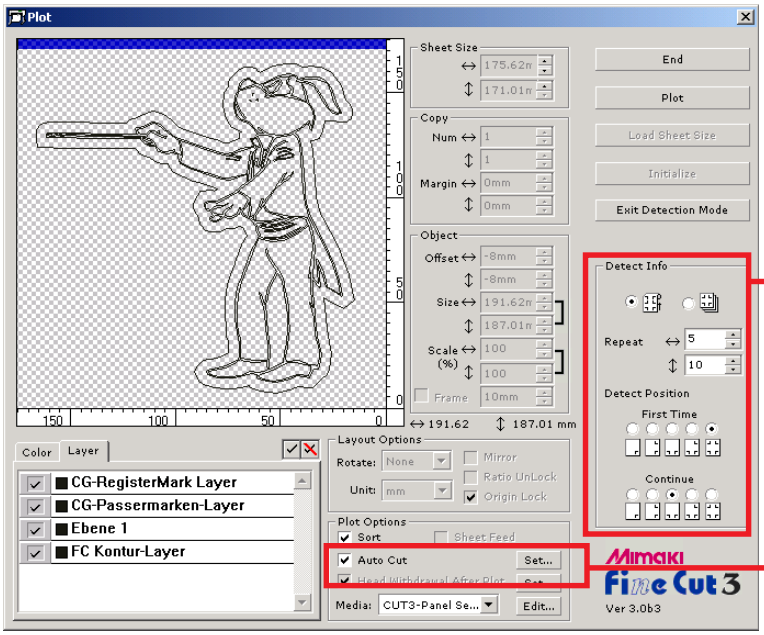


1. Enable “MARK DETECT” function on the plotter. Set the registration mark information: size, shape, and so on. Select “1pt” as detecting mark number.
2. Place the sheet on the plotter turn the sheet set lever toward you.
3. Press Jog key to detect the placed sheet.
4. Move the spot LED into the area illustrated on the left figure.
5. Press [ENTER / HOLD] key.
6. Return to LOCAL mode after detecting the registration mark.

2 Click Detect Mark button in the Plot dialog.



Recognize the registration marks.

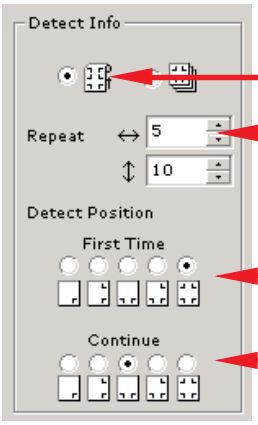


STEP3
Set the register mark to recognize continuously.

STEP4
Set the " Auto Cut" information.

Click Exit Detection Mode button to cancel registration mark recognition.

3 Set the registration mark to recognize continuously.



Select “Roll sheet” (left) icon.

Set the continuous numbers to each direction, vertical and horizontal. In case the continuous number is indeterminacy, input the maximum numbers, “9999”.

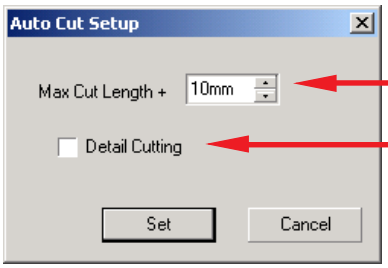
Select the first detect points of the register mark.

Select the second and the subsequent detect points of the register mark.

- When detecting a larger data, set more detect points for the second and the subsequent detect points to cut more precisely.
- When detecting a smaller data, set less detect points on the second and the subsequent detect points to reduce the detecting time.

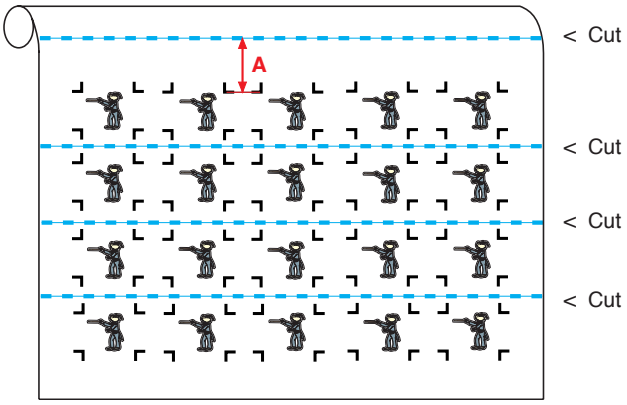
4 Check [Auto Cut] to enable sheet cut automatically after completing each cutting operation.

Click Set to set the Auto Cut Setup information.



Set the maximum length from the last line to the cutting point. (See the figure A below.)

Check [Detail Cutting] to cut a data at every line.

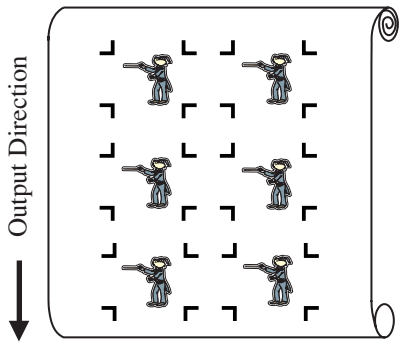


Click Set.

5 Click Plot button in the Plot dialog.

- **In case the printed data by a take-up functioned plotter (Mimaki JV series etc.) rolled as a paper tube**

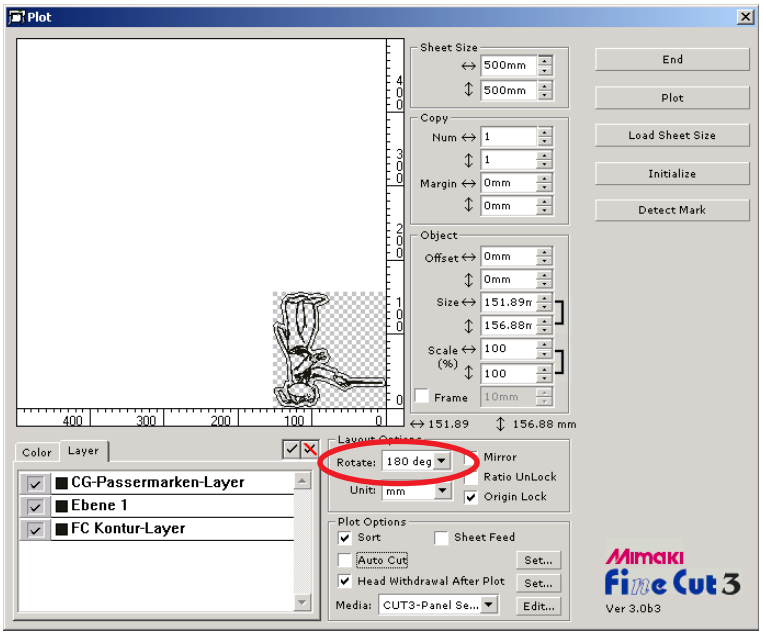
  Rotate the data to 180-degree in the FineCut, and set the paper tube on the CG-FX directly: Enables to cut the data continuously. (No need for rewinding the roll)



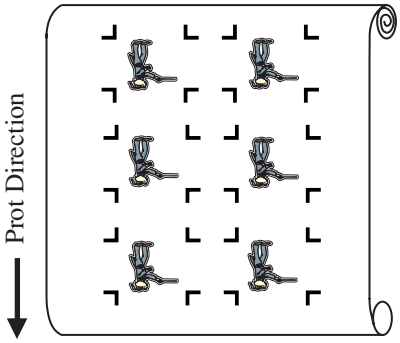
Output to the printer

Confirm the margins on the sheet.
(see page 25)

Rotate the data to 180-degree before recognizing a register mark in the FineCut.

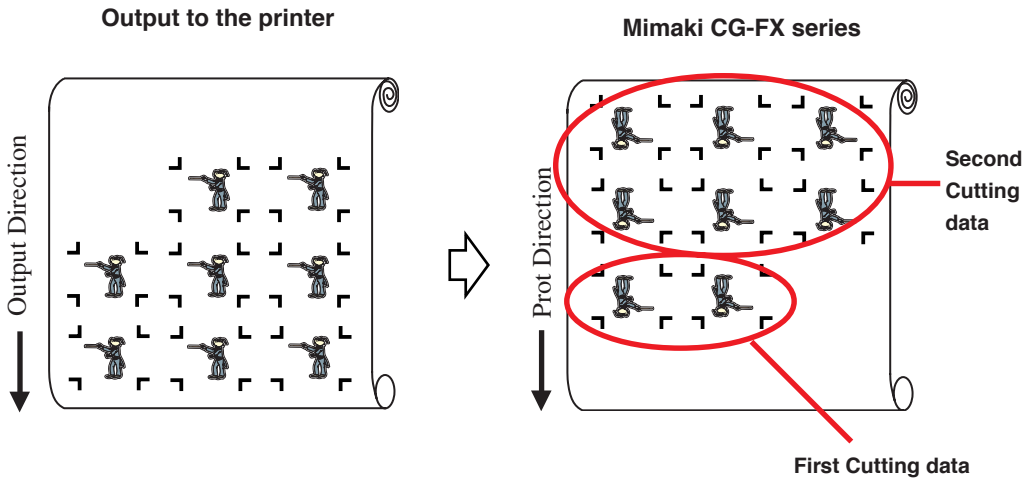


Mimaki CG-FX series



• In case the continuous printed data exist to the middle of the line

Perform cutting in twice to cut all the data.



< Cut a Leaf sheet continuously >

CAUTION

- Only one set of the registration marked data (4 marks) is available to cut continuously. In case two or more sets of the register marked data exists in a sheet, cannot cut continuously.
- Set the same size and position between the output leaf sheet size and the print position.

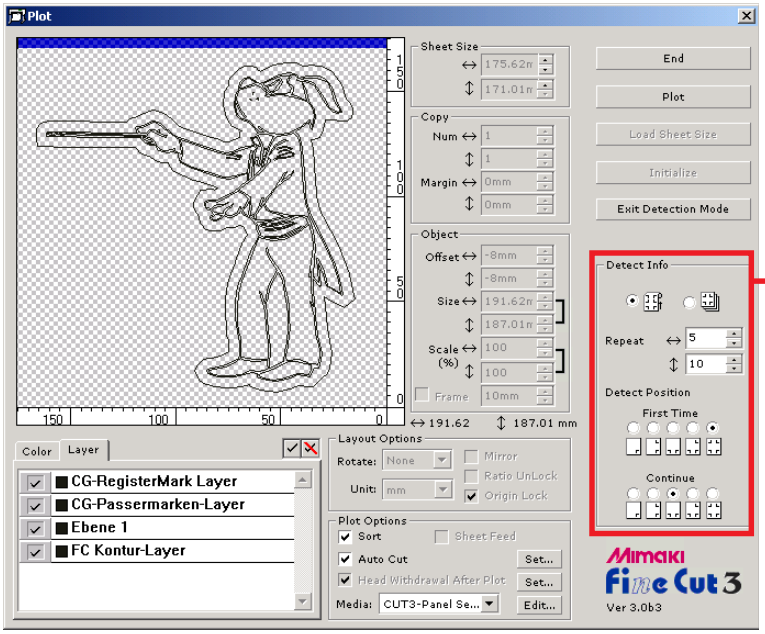
1 Set a output result on a plotter to detect registration mark.

(Refer to page 25)

For the procedure of registration mark detection, refer to the Mimaki CG-FX series operation manual.

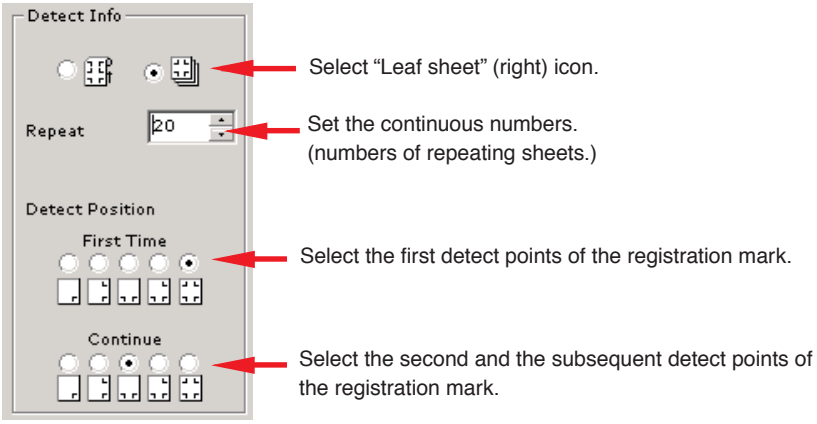
2 Click Detect Mark button in the Plot dialog.

Recognize the registration marks.



STEP3
Set the register mark to recognize continuously.

3 Set the registration mark to recognize continuously.

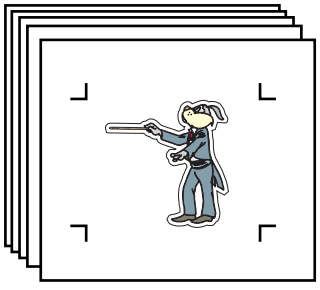


4 Click Plot button to start plotting.

5 The following message appears on the “CG-FX series” plotter panel after cutting the first sheet.

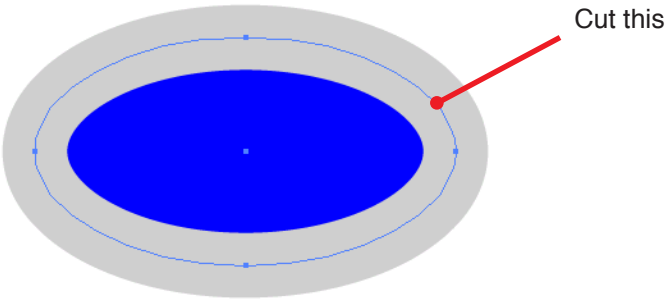
CHANGE SHEET

6 Set the next sheet. Detects the registration mark automatically to perform cutting.

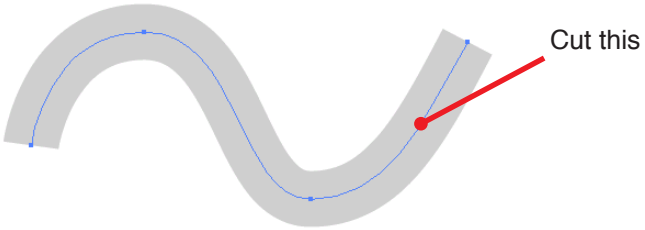


Fill and Outline of an Object

In the figure below, the fill of the ellipse is set and outline are made thicker.
Cutting is performed not by the outline but the fill.



In case an object is not filled with a color, the outline is cut.
In this case, outline is cut regardless of the thickness.
Check it when selecting the object or on the CorelDRAW Wire flame mode.



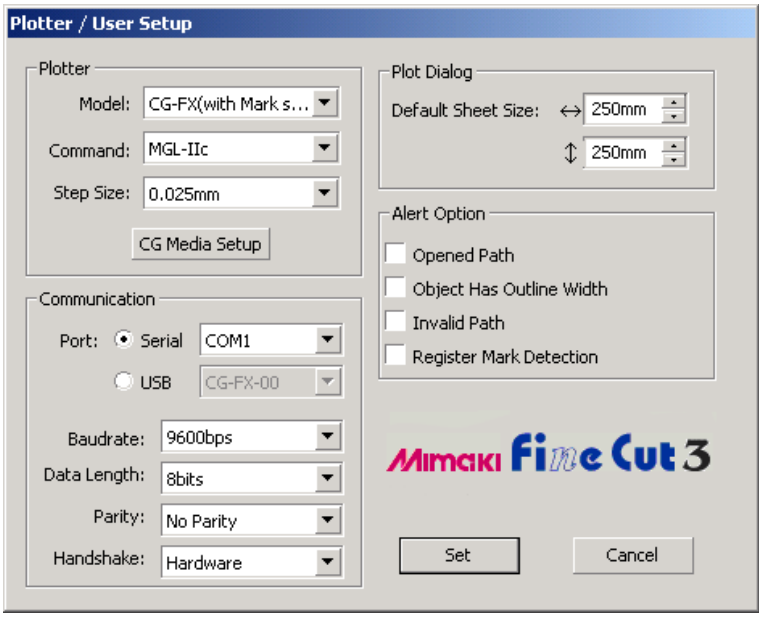
Plotter/User Setup

Set the communication conditions to enable communication between FineCut and the plotter.

CAUTION

If the entry value differs from the setting on the plotter, object is not output normally.

Click [Plotter/User Setup] button in the FineCut menu.



- **Plotter**

  Select the plotter model connected, the command set by the plotter, and the step size.

  Click Media Setup button to display the media setup screen. (see page 15)

- **Communication**

  Select the communication conditions set by the plotter connected.

- **Plot Dialog**

  Default Sheet Size : When FineCut displays the Plot dialog, it loads the sheet size from the plotter. If this load operation is not performed normally, the preview size refers to the default sheet size set on this dialog.

- **Alert Option**

  Check this option to display the following warnings.

  Opened Path : The path is not closed.
  (The start and stop points are not set to the same point.)

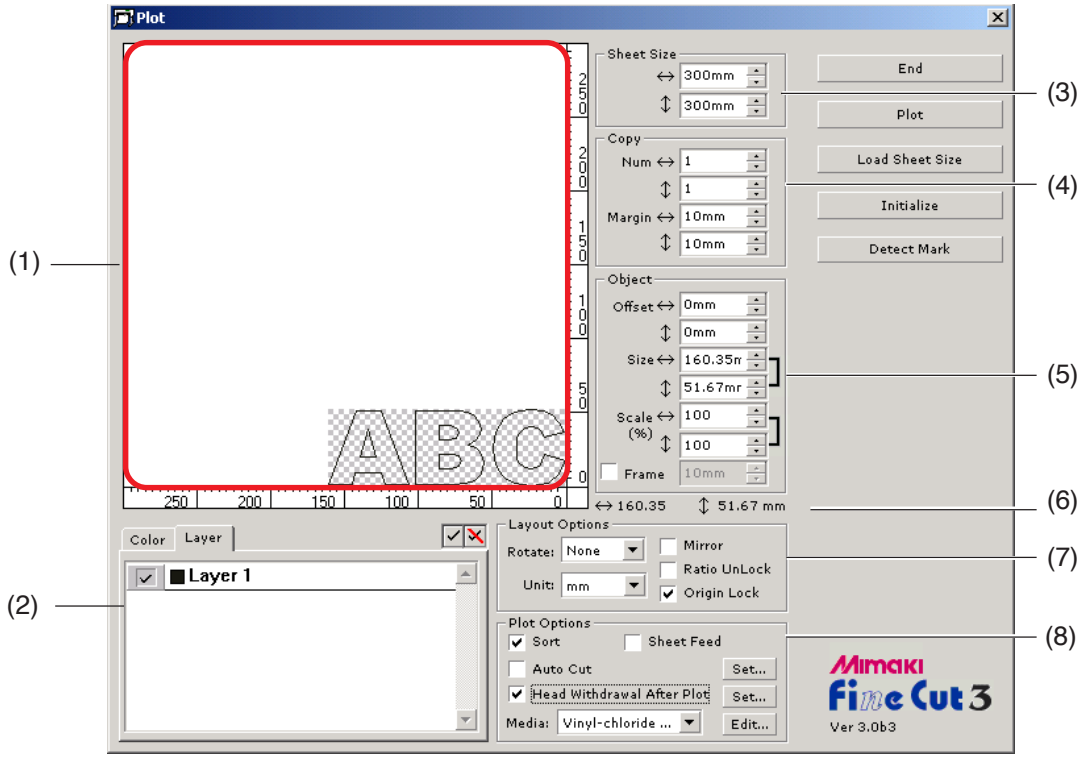
  Object Has Outline Width : There is a path that the outline width is specified.

  Invalid Path : Some figures such as Artistic Media cannot correctly be cut by FineCut.

  Registration Mark Detection : Registration mark recognition is performed at the two detect points.

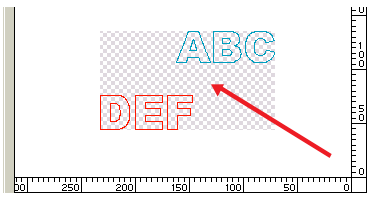
Plot Dialog

The following describes the Plot dialog.



(1)Layout Area

The white portion is the effective cutting area loaded from the sheet. In this area, the sheet width is displayed along the horizontal axis and the sheet length along the vertical axis. The cutting area displays a colored object which was created by CorelDRAW. White object is displayed as the hatched pattern to recognize it easily. With a LCD or a monitor screen with low contrast, it may not be easy to recognize the hatched pattern.



Enable to move the object by dragging it with the mouse.

If the object overflows from the cutting area, the ⚠ mark appears to the left of Plot button. Click the ⚠ mark to display the error detail.

(2) Selection List (see page 12,13)

Select color-based or layer-based object cutting pattern. The selected option is displayed in the bottom list.

Only the checked objects are cut. In the color list, select the fill color and outline color to display each object information.

(3) Sheet Size

Displays the cutting area based on the sheet size set in the plotter. Enter the sheet size (width and length of the cutting area).

(4) Copy (see page 10)

Num (Number)

Enter the number of copies along the vertical and horizontal directions.

Margin

Set the margin between objects along the vertical and horizontal directions.

(5) Object

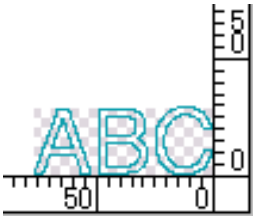
Offset

The origin point is set at the bottom right corner (Mimaki CG series) or the left corner (Mimaki CF series) of the layout area. The default origin point is positioned at 0 mm (both vertically and horizontally) of the layout area. Change the value of the origin to move the object.

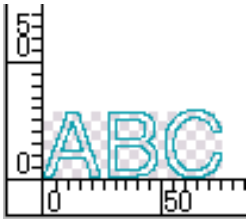
When using the MGL-IIc commands, the large-size object may overflow.

(see page 40)

Mimaki CG series



Mimaki CF series



Size (see page8)
Enable to change the vertical and horizontal lengths of an object. When the values of the vertical and horizontal lengths are interlocked (the] mark is supplied to the right of Size and Scale), the aspect ratio is retained. Check the [Ratio Unlock] check box to change the vertical and horizontal lengths separately.

Scale (see page 8)
Set the magnification of the vertical and horizontal lengths. When the value of vertical and horizontal lengths are interlocked (the] mark is supplied to the right of Size and Scale), the aspect ratio is retained. Check the [Ratio Unlock] check box to change the vertical and horizontal lengths separately.

Frame (see page 19)
Cut a frame around the target object. In addition, settable the distance between the object and the frame. It enables to peel the purpose portion of the cutting sheet easily.

(6) Total Length

Usually the width and the height of an object are displayed. When entering the number of copies in the copy function, the total lengths along the vertical and horizontal directions for all the copies are displayed. If margins and frames are set, the length values of them are included.

(7) Layout Option

Rotate
Rotates the object clockwise in unit of 90 degrees.

Unit
Select cm, mm, inch, or pt.

Mirror
Inverts the object in mirror image to cut it.

Ratio Unlock (see page 8)
The size of the object can be changed with variable aspect ratio.

Origin Lock (see page 12)
Lock the origin to retain the object position. Unlock the origin to cut an object with the selected color (or layer) without wasting sheets.

8) Plot Option

Sort

Performs sort operation with minimized useless head movement, allowing efficient cutting. Mimaki CF series cuts figures in order of size (from the smallest figure to larger ones).

Sheet Feed

Before cutting, feed the sheet to confirm the performance whether the entire data can be cut.

CAUTION

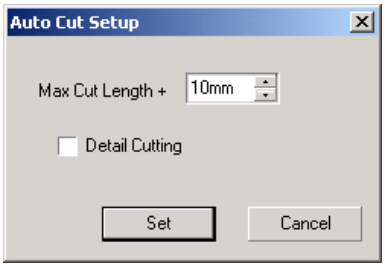
If fails to plot, an error is displayed on the plotter. Stop plotting, reset the sheet, then restart plotting.

Auto Cut (see page 27)

When in use of Mimaki CG-FX series, the function is effective.

When performing continuous cutting on a roll sheet, cut off the sheet automatically after completing the performance.

Click Set button to set the follwing information.

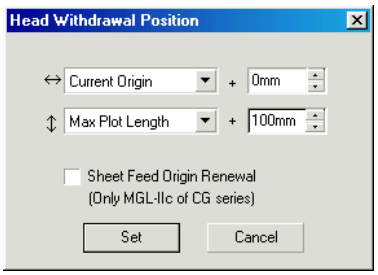


Max Cut Length + : Set the maximum length from the last line to the cutting point.

Detail Cutting : Check the box to cut a data at every line.

Head Withdrawal After Plot (see page 17)

After data output, the head moves to check the data easily. Click Set button to set the head withdrawal position and the details on Origin Update.



Horizontal direction

Set the head withdrawal position for the horizontal direction.

Reference position from either [Current Origin] or [Max Plot Length].

Length direction

Set the head withdrawal position for the length direction.

Reference position from either [Current Origin] or [Max Plot Length].

Sheet Feed Origin Renewal

Set the head withdrawal position as the origin.

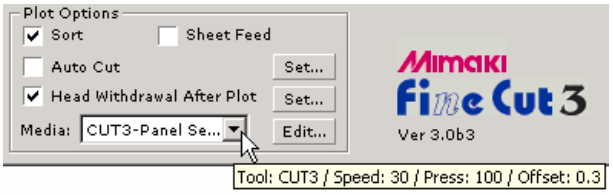
Check this option, for the useful operations like continuous output.

CAUTION

Origin Update is effective only with MGL-IIc for Mimaki CG series.

Media /MGL-IIc only (see page 15)

Select a media. Parameter of the selected media is displayed to the pop-up window in several seconds.



Click Edit button to display the Media Edit Dialog. (see page 15)

CAUTION

Set the plotter priority to Host to reflect the selected media. The media setting is effective only for the MGL-IIc commands.

< Buttons >

End Button

Closes the Plot dialog.

Plot Button

Starts cutting. When the ⚠ mark is displayed to the left of Plot button, the object overflows from the cutting area. Move the object to fit it into the cutting area.

Load Sheet Size Button

Loads the sheet size set to the plotter.

When the ⚠ mark is displayed to the left of Load Sheet Size button, the sheet size of the plotter cannot be loaded.

Set the plotter to the REMOTE mode before clicking Load Sheet Size button to load the sheet size.

Initialize Button

Initialize the condition.

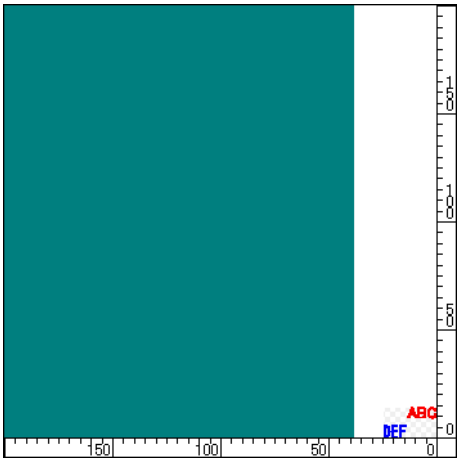
Detect Mark Button

By performing registration mark detection using Mimaki CG-EX series and Mimaki CG-FX series cutting plotter with mark sensor, automatic size correction is performed for the read registration mark.

- Other information is in FAQ folder in CD-ROM. Please open FAQ.htm with your browser.

For more information on the troubles, browse the FAQ.htm in the CD-ROM.

The layout area displayed is thinner than the normal size.



When using a roll sheet, the plotter does not detect the sheet length.
Therefore, the displayed layout area is the default value entered in Default Sheet Size in the Plotter/User Setup dialog. Decrease the value of Default Sheet Size. (see page 33)

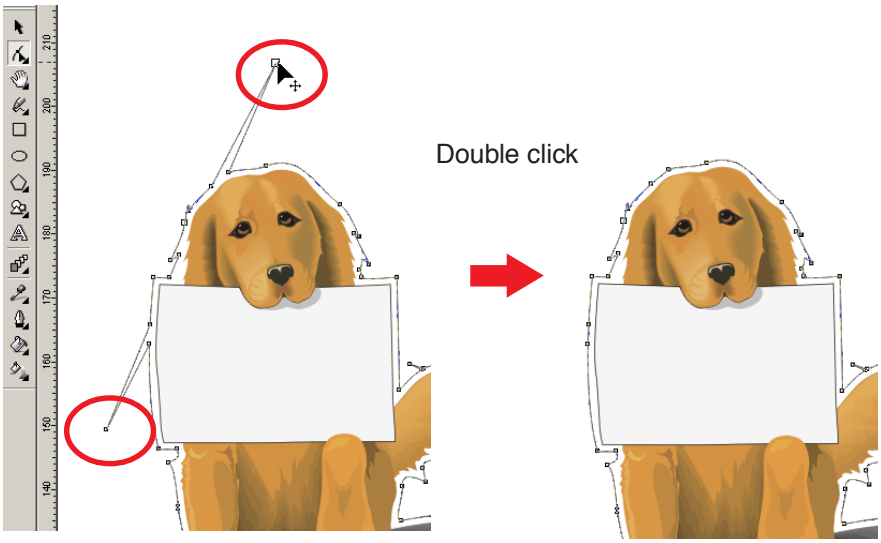
Cannot change the sheet size.

When the MGL-IIc commands are used, the sheet size remains unchanged even if shifting the origin on the plotter and click Load Sheet Size button. In this case, the sheet size set in the plotter is always displayed. Even if the data fits into the cutting area in the layout area, the data may cut overflowed.
When the MGL-Ic commands are used, the effective cutting area is displayed. Therefore, even if shifting the origin on the plotter, it can be cut normally so long as the data fits into the cutting area.

A part of contour protrudes

When a contour is created using the Contour Extraction function, a part of the contour may protrude. Double-click on the protruded node to delete the protruded part with the Shape tool of CorelDRAW.

For other node editing functions, refer to CorelDRAW operation manual.



When using CorelDRAW, the FineCut functions cannot be activated. / A warning message appears.

CorelDRAW is provided with the setting to disable an operation and display a warning message in response to operations of Visual Basic for Applications.
If a FineCut function cannot be activated or a warning message appears, check the following setting.

< CorelDRAW9 >

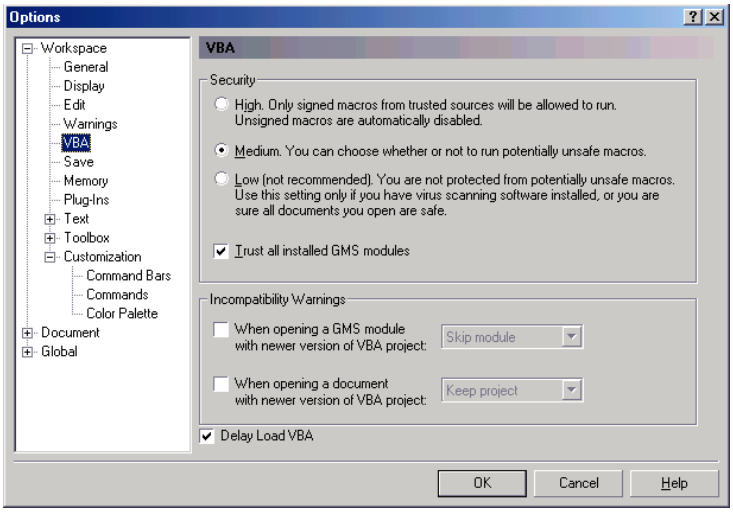
Select [Security] from the [Visual Basic] - [Tools] menu of Corel DRAW9.
If the setting is different from the default setting of CorelDRAW, change the setting as follows.

< CorelDRAW10 >

Select [Options...] from the [Tools] menu of Corel DRAW10.

Select [VBA] from the list on the left.

If the VBA setting is different from the default setting of CorelDRAW, change the setting as follows.



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