

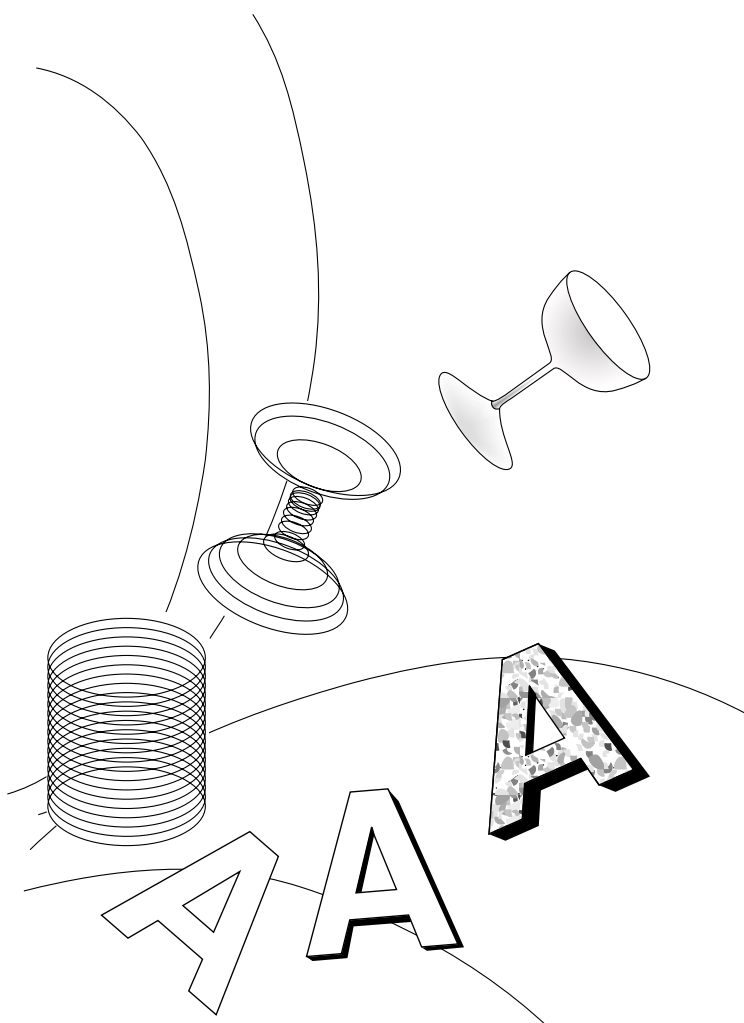
MODELA

3D PLOTTER

User's Manual for MODELA 3D DESIGN MODELA 3D TEXT MODELA PLAYER

Thank you very much for purchasing the MODELA.

- To ensure correct and safe usage with a full understanding of this product's performance, please be sure to read through this manual completely and store it in a safe location.
- Unauthorized copying or transferral, in whole or in part, of this manual is prohibited.
- The contents of this operation manual and the specifications of this product are subject to change without notice.
- The operation manual and the product have been prepared and tested as much as possible. If you find any misprint or error, please inform us.



Operating Environment

- **Computer**
Personal computer running Windows 95, Windows 98, or Windows NT 4.0
- **CPU**
If you're using Windows 95
i486SX or better (Pentium 100 MHz or more recommended)
If you're using Windows 98 or Windows NT 4.0
i486DX or better (Pentium 100 MHz or more recommended)
- **Memory**
If you're using Windows 95
8 Mbytes or more (16 Mbytes or more recommended)
If you're using Windows 98 or Windows NT 4.0
16 Mbytes or more (32 Mbytes or more recommended)
- **Hard disk**
A hard disk with at least 7 Mbytes of free space is required.
- **CD-ROM drive**
- **Operating system**
Windows 95, Windows 98, or Windows NT 4.0

Contents

1. Overview	1	Using MODELA 3D TEXT	11
2. Typographic Conventions	2	■ What to Have Ready	11
3. Installing	2	■ About the Operation Screens and Procedures	11
4. Starting the Software	3	■ Creating the Cutting Data for the Sign	12
Starting the Software	3	Type In the Text	12
About Help	3	Set the Text Font	12
5. How to Use the Included Software	4	Editing the Text	12
Using MODELA 3D DESIGN	4	Saving Your Data	13
■ What to Have Ready	4	■ Set the Cutting Conditions for the "TEA" portion	13
■ About the Operation Screens and Procedures	5	■ What to Do After Cutting Ends	13
■ Creating the Cutting Data for the Banana	5	6. When Using Commercially Available	14
Setting the Positions for the Outer Perimeter	5	Software for Output to MODELA	14
Setting the Shape of the Outer Perimeter	6	■ When Using Commercially Available	
Checking the Shape of the Object	8	3D Software for Output to MODELA	14
Saving Your Data	8	Importing Cutting Data	14
■ Set the Cutting Conditions for the Banana	9	Setting the Cutting Conditions	14
To cut the Top half	9	■ When Using Commercially Available 2D Software for	
To cut the Bottom half	10	Output to MODELA	15
■ Getting Ready for MDX-3	10	Sending Output to the MDX-3	15
■ Sending Cutting Data from the Computer	10	7. What to Do If...	16
■ What to Do After Cutting Ends	10		

Windows®, Windows NT® are registered trademarks or trademarks of Microsoft® Corporation in the United States and/or other countries.
i486 and Pentium are registered trademarks of Intel Corporation in the United States.

Copyright © 1996-2000 Roland DG Corporation

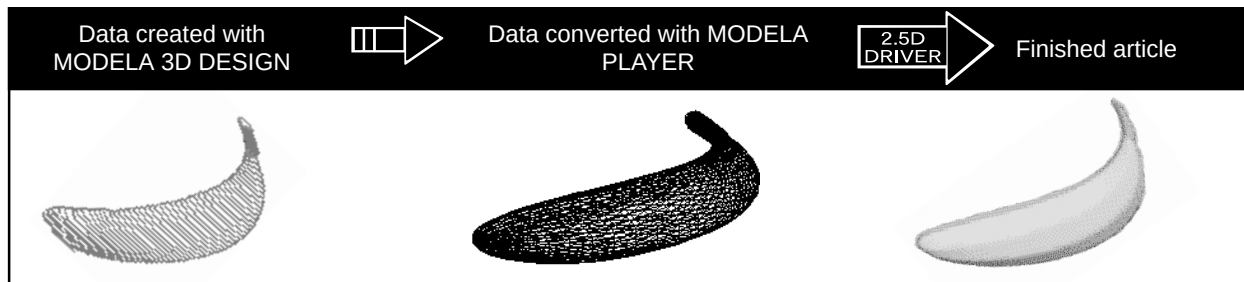
1 Overview

The included Roland Software Package CD-ROM contains several pieces of software for operating the MDX-3. The following programs and drivers are compatible with the MDX-3.

- Creating data for three-dimensional objects for cutting with the MDX-3
MODELA 3D DESIGN, MODELA 3D TEXT
- Cutting with the MDX-3
MODELA PLAYER, 2.5D DRIVER

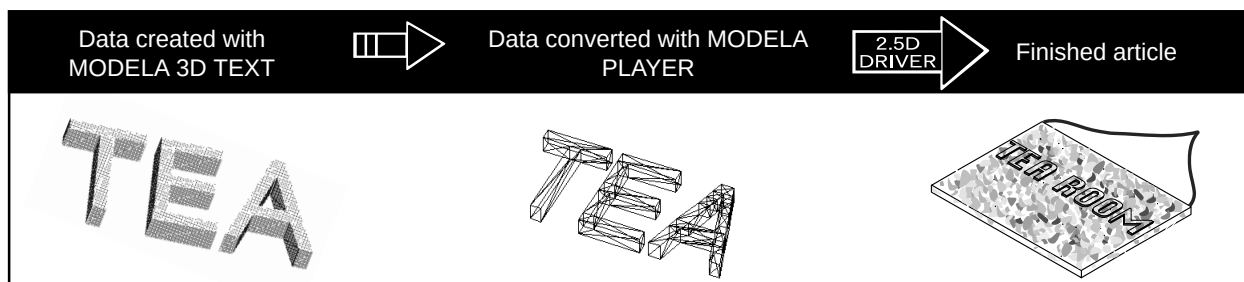
■ MODELA 3D DESIGN

Cylinders, spheres, and other basic shapes can be used to create a wide variety of complex shapes.



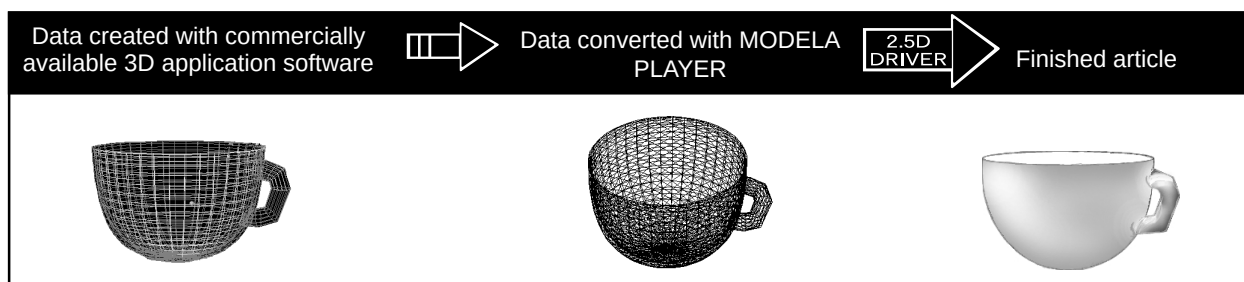
■ MODELA 3D TEXT

Three-dimensional text can be created simply and easily.



■ MODELA PLAYER

The MODELA PLAYER can be used to cut data created with a commercially available 3D program.



■ When using commercially available 2D application software

The 2.5D DRIVER can be used to cut data created with a commercially available 2D program.



2 Typographic Conventions

The explanations in this manual assume that you are already familiar with the basic operation of Windows.

The explanations in this manual may abbreviate the names of the software as follows.

- MODELA 3D DESIGN	: 3D DESIGN
- MODELA 3D TEXT	: 3D TEXT
- MODELA PLAYER	: PLAYER
- 2.5D DRIVER for Windows 95/98/NT4.0	: DRIVER

The symbols used in this manual are as follows.



= An on-screen area to be clicked.



= After clicking, the next operation screen is displayed.

3 Installing

* If you are installing under Windows NT 4.0, you need full access permissions for the printer settings.
Log on to Windows NT as a member of the "Administrators" or "Power Users" group.

1 Switch on the computer and start Windows .

2 Insert the Roland Software Package CD-ROM into the CD drive.

5 The Setup program starts. Follow the messages to carry out setup and finish setting up the program.



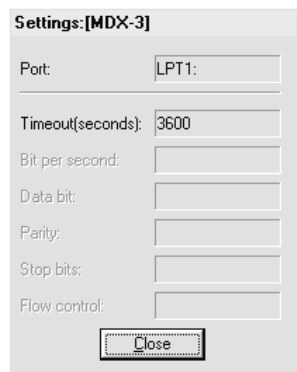
To view the description of a program, click the button. To view the manual, click the button. (There are manuals in PDF format for the programs that the button references. Acrobat Reader is required to view PDF files.)

If there are programs you don't want to install, then clear their check boxes before you click [Install].

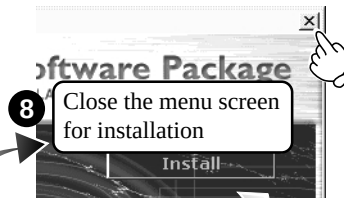
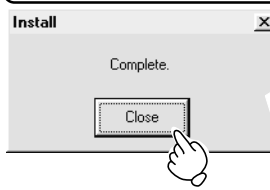
* When the setup for one program finishes, the setup for the next program starts.
In the interval until the next setup starts, a dialog box showing the progress of processing is displayed.

Continued on the next page

- 6 The following driver settings are made automatically. Check the values, click [Close], and finish installing the driver.



- 7 When all installation finishes, the screen at right appears.

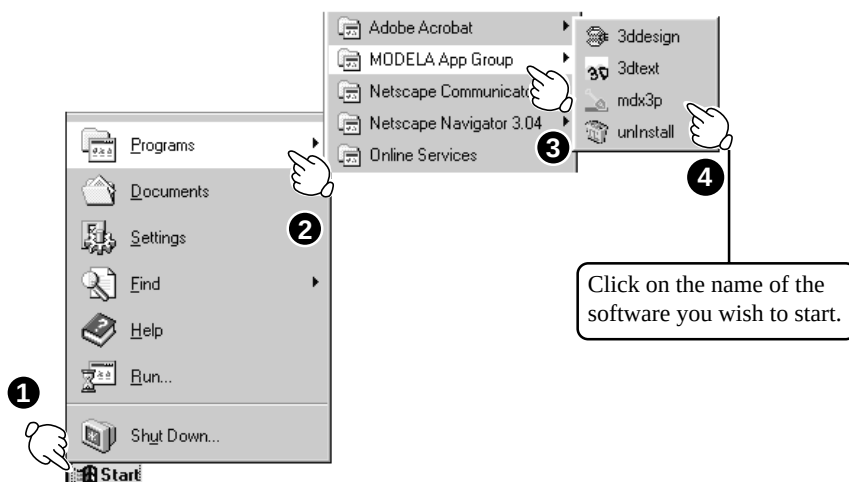


- 8 Close the menu screen for installation

- 9 Remove the CD-ROM from the CD-ROM drive.
If the MDX-3 does not operate when you send data from the program, take a look at "7 What to do if...." This may help you resolve the problem.

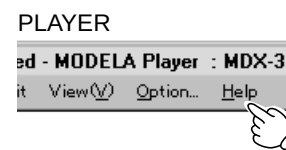
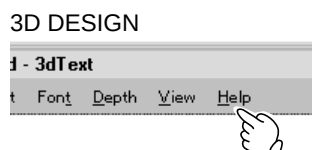
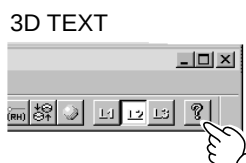
4 Starting the Software

Starting the Software



About Help

If you're unsure how perform an operation while you're working, taking a look at Help can find the answer. If you're using MODEL A for the first time, please be sure to read the Help screens. You can call up Help from the software menus or by clicking on the [Help] button.

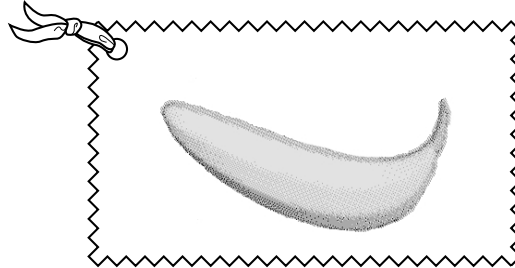


5

How to Use the Included Software

Using MODELA 3D DESIGN

This section explains the steps for using MODELA 3D DESIGN to create data and cut material using the tool included with MODELA. Let's make an ornamental banana

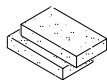


What to Have Ready

Tool included with
MODELA



Material included with MODELA
(100 x 150 x 15 mm : 2 pieces)
(3-15/16" x 5-7/8" x 9/16")



Double sided tape included
with MODELA



Commercially available
adhesive for wood



The items shown below are required for finishing the ornament. If you just want to cut out the shape, then there is no need to have these items on hand.

* Obtain paints
which are suitable
for the material
used.

Commercially available
water-based acrylic paint



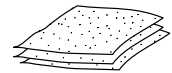
Commercially
available Lacquer



Commercially
available Brush



Commercially available
Sandpaper

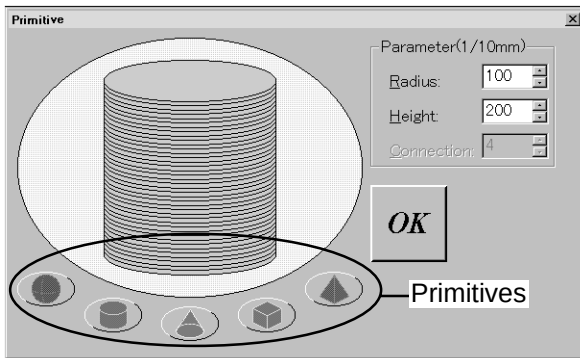


About the Operation Screens and Procedures

Follow the steps described under "3. Starting the Software" to start 3D DESIGN. Operation proceeds mainly along four screens.

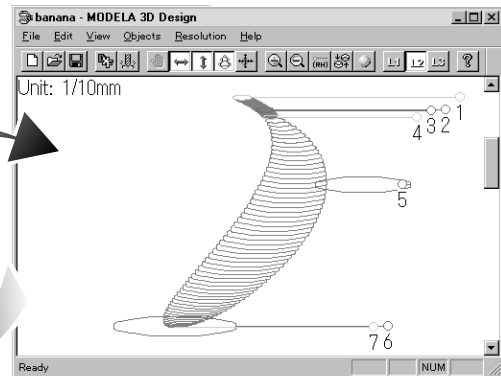
1. Select the primitive Primitive Selection Screen

When 3D DESIGN is started, a cylinder is selected automatically, and operation advances to "2. Shape Design Screen". If you want to work with some shape other than the cylinder, select [New] from the File menu and choose one of the five types of Primitives from the screen shown below.



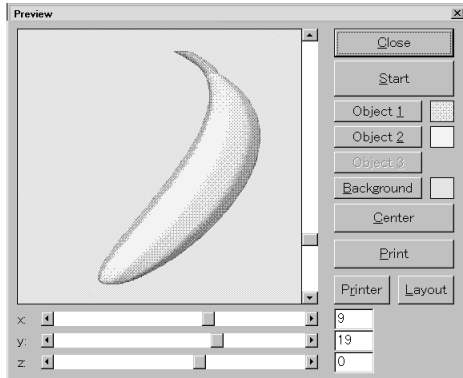
2. Change the Primitive to the Desired Shape Shape Design Screen

Work with the Primitive shown on-screen to change it into the shape you want.



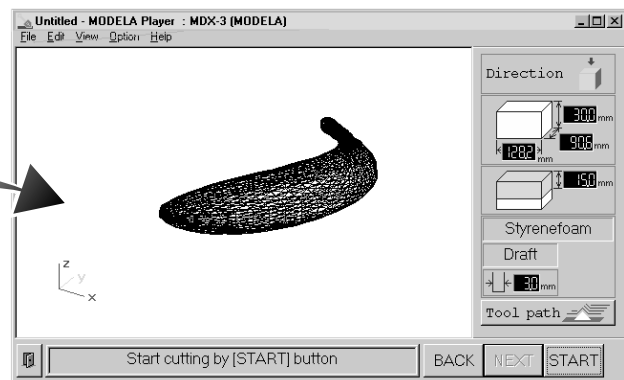
3. Perform Rendering and Check the Final Shape Rendering Screen

You can examine the shape you've created from a wide range of angles. This screen lets you check the details.



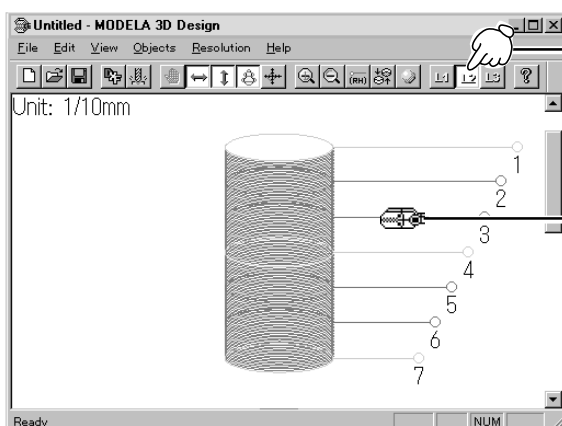
4. Perform Cutting Cutting Condition Setting Screen

Set the conditions for cutting the data you've created.



Creating the Cutting Data for the Banana

Setting the Positions for the Section



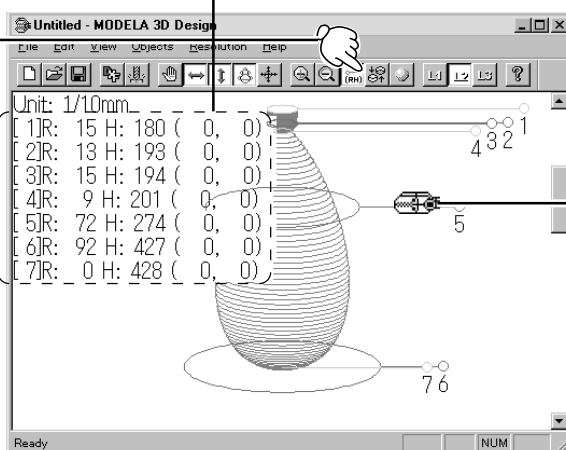
1
Select "Level2" and set seven reference lines.

2
You can see the shape of the object change when you drag any of the reference lines. Manipulate the reference lines to change the shape to the desired shape.

Continued on
the next page

Continued from the previous page

1
This displays the coordinate values.



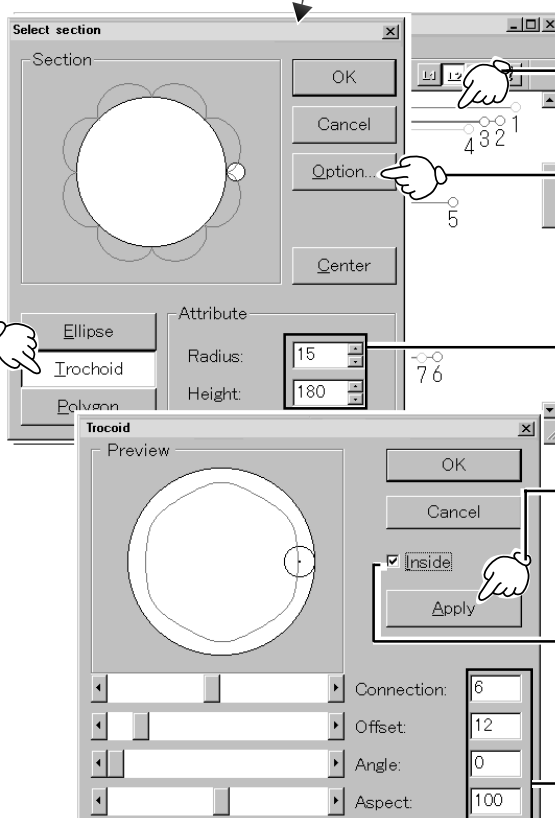
Inch:

Unit:	1/100inch
1R:	5 H: 70
2R:	4 H: 75
3R:	5 H: 76
4R:	3 H: 79
5R:	26 H: 107
6R:	33 H: 168
7R:	0 H: 168

2
Change the shape by dragging reference lines 1 through 7 until you get the same coordinates as the ones shown inside the broken lines on the left-hand side of the screen.

Setting the Shape of the Section

2
Select "Trochoid".



1
Click the right mouse button on reference line 1.

3
Click on the [Option] button.

The radius and height of the Section can also be entered directly as numerical values here.

6
Click on the [Apply] button.

4
Put a check-mark in the "Inside" check box.

5
Type in this value or use the scrollbar to make the setting.

8
Type in this value or use the mouse to move the red dot (●) and make the setting.

Inch:

X:	-3	Y:	0
----	----	----	---

Offset

X:	-10	Y:	-1
----	-----	----	----

inch

X:	-3	Y:	0
----	----	----	---

10
Click [OK].

7
Click on the [Center] button.

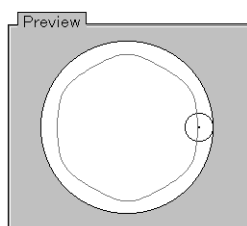
9
Click on the [Apply] button.

Continued on the next page

Continued from the
previous page

Using the same procedure that you followed to make the section settings for reference line 1, make the settings for the other section reference lines.

**Reference
line 2**
Shape : Trochoid



Option...

Trochoid

Connection: 6

Offset: 12

Angle: 0

Aspect: 100

Center

Sift Center

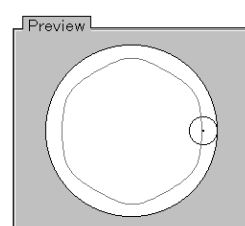
Offset

X: 15 Y: -1

inch

X: 6 Y: 0

**Reference
line 3**
Shape : Trochoid



Option...

Trochoid

Connection: 6

Offset: 12

Angle: 0

Aspect: 100

Center

Sift Center

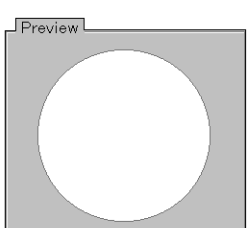
Offset

X: 15 Y: -1

inch

X: 6 Y: 0

**Reference
line 4**
Shape : Ellipse



Option...

Ellipse

Aspect: 100

Center

Sift Center

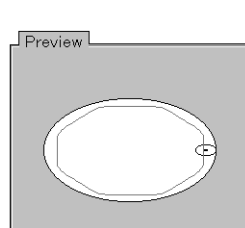
Offset

X: 21 Y: 0

inch

X: 8 Y: 0

**Reference
line 5**
Shape : Trochoid



Option...

Trochoid

Connection: 8

Offset: 18

Angle: 0

Aspect: 139

Center

Sift Center

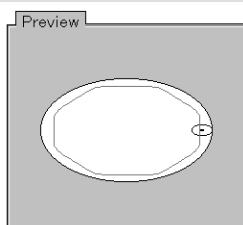
Offset

X: 117 Y: 0

inch

X: 46 Y: 0

**Reference
line 6**
Shape : Trochoid



Option...

Trochoid

Connection: 8

Offset: 18

Angle: 0

Aspect: 139

Center

Sift Center

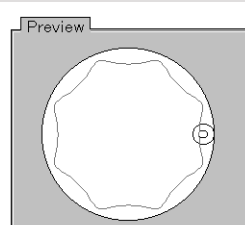
Offset

X: -80 Y: 0

inch

X: -30 Y: 0

**Reference
line 7**
Shape : Trochoid



Option...

Trochoid

Connection: 8

Offset: 44

Angle: 0

Aspect: 100

Center

Sift Center

Offset

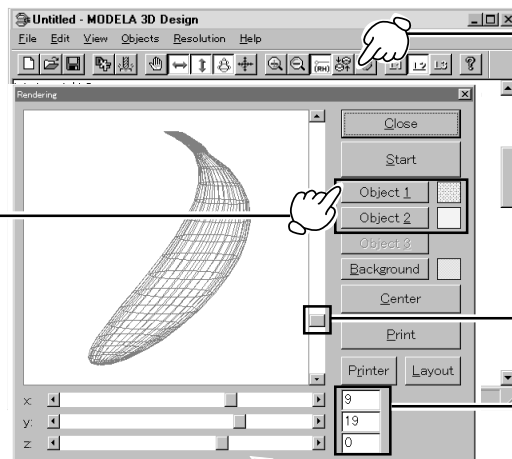
X: -80 Y: 0

inch

X: -30 Y: 0

You're done making the settings for the Section. Now let's perform rendering for this layered object.

Checking the Shape of the Object



1 Click on the "Rendering" Button

2 Use the scrollbar to adjust the size.

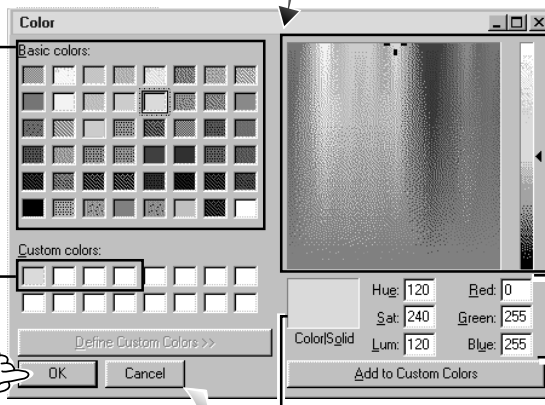
3 Use the numeric keypad to type in the values or use the scrollbar to set the position.

4 Color-coding as objects 1, 2, and 3 is performed for each stage of [Level]. Click to display the screen for the object's color settings. For the banana, the button for object 3 is not available.

Choose the colors you have on hand.

The colors selected for objects 1, 2, and 3 and for the background are displayed.

5 Once you've decided on the color, click [OK].

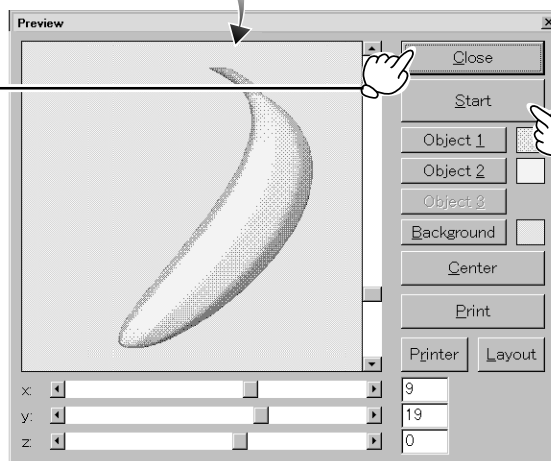


Choose a color from the scratch pad or type in the values to obtain the desired color.

This is not available.

The currently selected color is shown here.

7 Click this to return to the Shape Design screen.



6 Click on this button to color the object you've created.

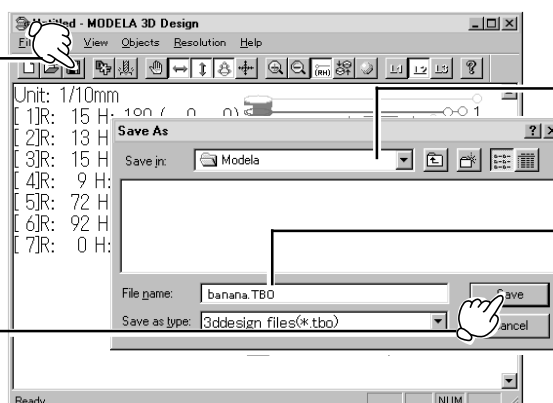
Saving Your Data

1 Click on the [Save] button.

2 Select where the file is to be saved.

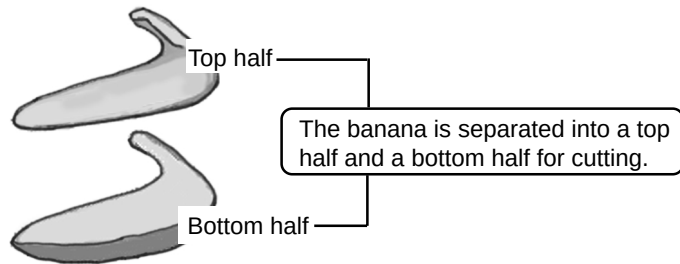
3 Type in the file name. Files created with 3D DESIGN have ".TBO" as the extension.

4 Click on the [Save] button.



Now you're finished with creating the cutting data. Next let's set the cutting conditions with PLAYER.

■ Set the Cutting Conditions for the Banana



To cut the bottom half, first follow the steps on the next page to finish cutting the top half, make the settings, then repeat the steps from "- Getting Ready for MDX-3" to "- Sending Cutting Data from the Computer" to cut the bottom half.

To cut the Top half

- Click the start button for PLAYER.
- The PLAYER setting screen is displayed.

Make sure MDX-3 appears in the title bar.
If it is not displayed, then from the [Options] menu, choose [Select models] and specify the MDX-3 as the output unit.

Set the direction of object
This surface is taken to be the top surface.

Object rotation
This is used to check the rotation of the object.

Set the Dimension
Use the mouse to spin the dial or click on a numerical value to set this value.

Tool Width Setting
Use the mouse to spin the dial or click on a numerical value to set the width of the tool included with MODELA.
When using a tool with a diameter of 1/8", set tool diameter to "0.125 inch or 3.17 mm."

Material Type Setting
Set the type of the included material.

Cutting Method Setting
Set "Draft" for the first pass and "Finish" for the second pass.

Set the maximum cutting depth
The value shown at right is only a guide. Make the setting for the thickness of the included material by using the mouse to change the displayed value with the spin boxes, or by clicking on the number and inputting a new value.

Clicking this button makes the settings sequentially from "Set the direction of object" to "Cutting Method Setting".

This displayed the path the tool takes during cutting.

Start cutting by [START] button

BACK NEXT START

Height: 300 mm
Length: 90.7 mm
Width: 128.3 mm
Resize

Height: 1.181 inch
Length: 3.570 inch
Width: 5.041 inch

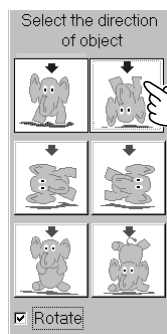
Depth: 0.591 inch
Left: 0.591 inch

Depth: 150 mm
Left: 150 mm
Center

Tool dia.: 30 mm
Material: Styrenefoam
Finish: Draft

To cut the Bottom half

The settings for everything except the cutting surface are the same as the conditions for cutting the top half.



This surface is taken to be the bottom surface.

Getting Ready for MDX-3

Load the included material and install the included tool. The steps for doing this are described in the "MODELA (MDX-3) Main unit User's Manual".

Sending Cutting Data from the Computer

- 1 From the [File] menu, click [Print Setup...].
- 2 Choose [Roland MODELA MDX-3]. It's not necessary to make settings for [Properties].

Start cutting by [START] button

- 4 When the sending of the data for "Draft" has finished, then change the setting to "Finish" and click on the [START] button again.
- 5 Click on the [START] button.

Cutting starts.

What to Do After Cutting Ends

Remove the material that has been cut from the MDX-3. Follow the steps below to complete the object.

Use the wood adhesive to glue the top in the bottom halves together.

After the wood adhesive dries and the two halves are securely bonded together, use the sandpaper to smooth the surface.

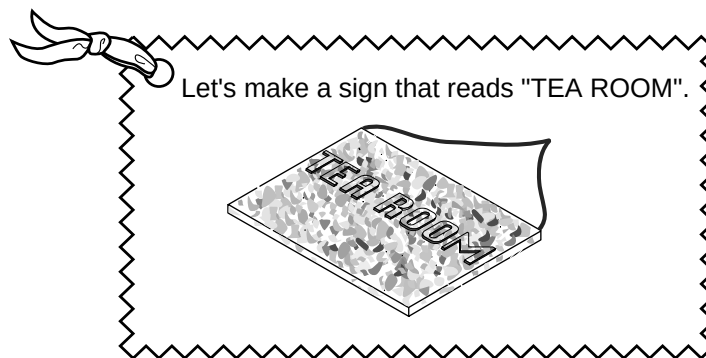
Use the water-based acrylic paints to apply a base coat. After the base coat dries, mix and apply the lacquer colors.

You're done!



Using MODELA 3D TEXT

This section provides an overview of the MODELA 3D TEXT menu and explains the steps for creating data.

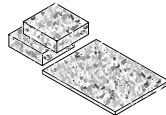


What to Have Ready

Tool included with
MODELA



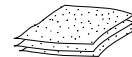
Commercially available
corkboard and cork blocks
(4 x 40 x 140 mm :2 pieces
3/16" x 1-9/16" x 5-9/16")



Double sided tape included
with MODELA



Commercially
available Sandpaper



Commercially available
adhesive for wood

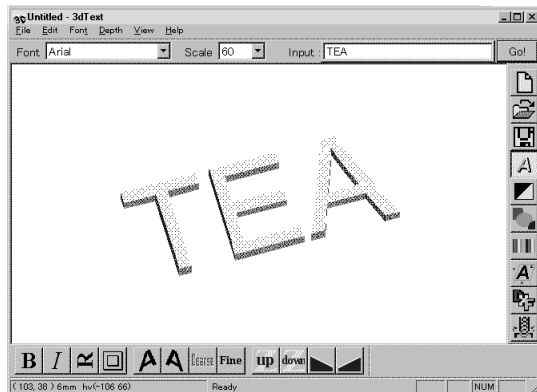


About the Operation Screens and Procedures

Follow the steps described under "3. Starting the Software" to start 3D TEXT. Operation proceeds mainly along three screens.

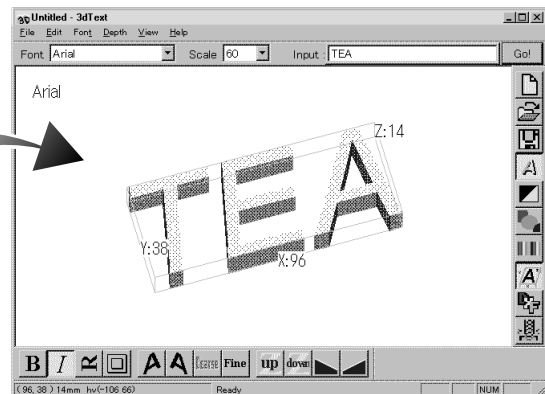
1. Type In the Text

Use the keyboard to enter the text to be cut.



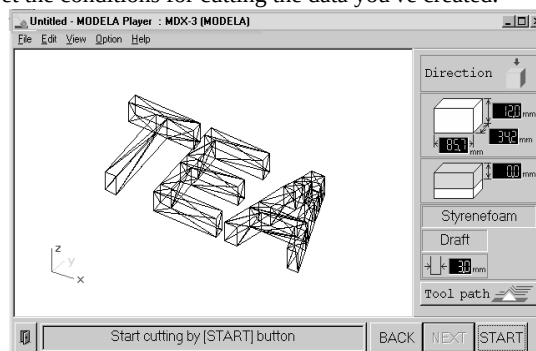
2. Design the Text

While watching the screen, set the type and style for the text.



3. Perform Cutting Cutting Condition Setting Screen

Set the conditions for cutting the data you've created.



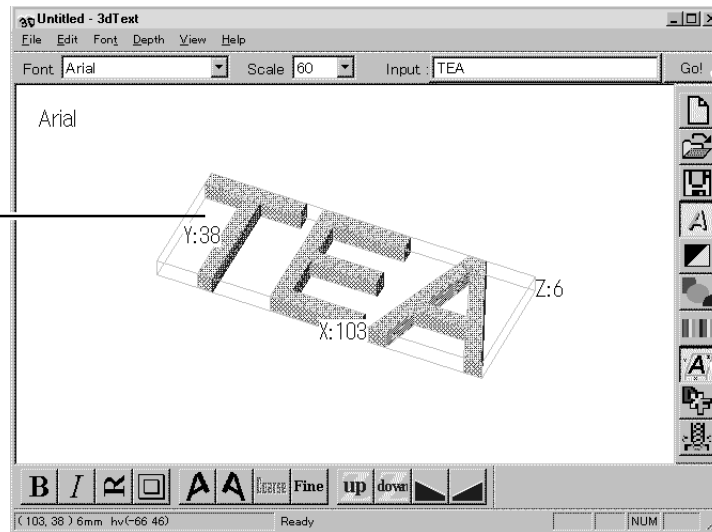
■ Creating the Cutting Data for the Sign

Because this sign has many letters, we'll create data separated into two parts -- "TEA" and "ROOM".

Type In the Text

2

Move the mouse to the middle of the text, then drag. The text you have entered moves as you drag the mouse. Check the overall shape.



1

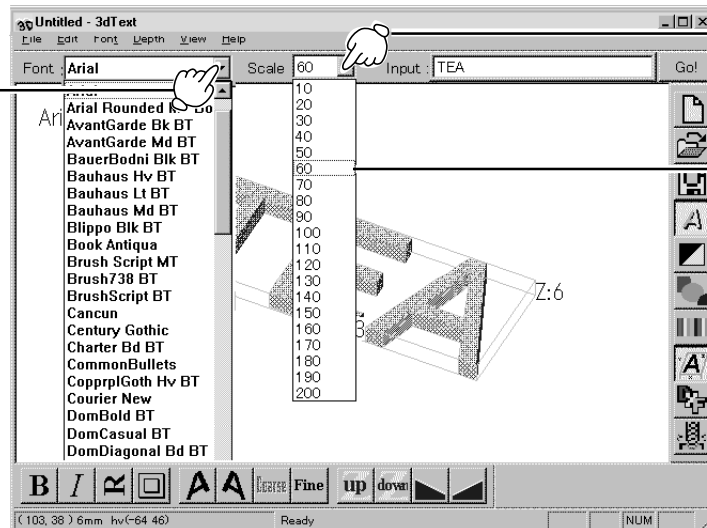
Type in the letters "TEA" and click the [GO] button.

3

Click here to display the size of the entire text.

Set the Text Font

Click on "▼" to select "Arial".

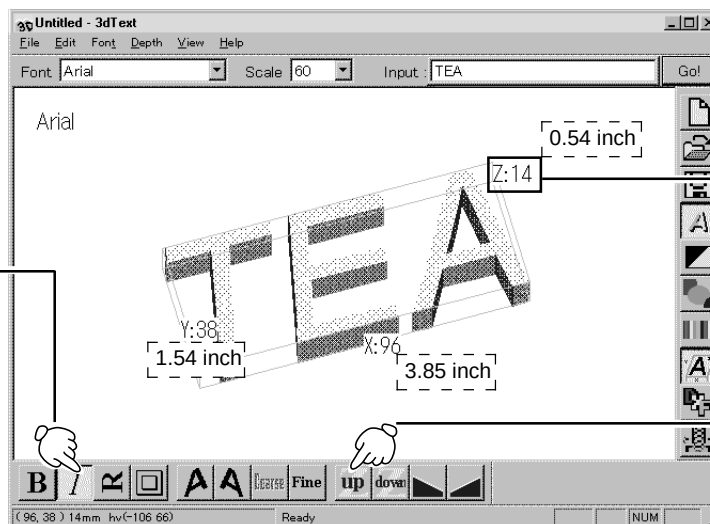


Click on "▼" or type in a value directly to set the size.

Make the setting for "60" (unit:inch " 2.4") .

Editing the Text

Click this button for slanted text.

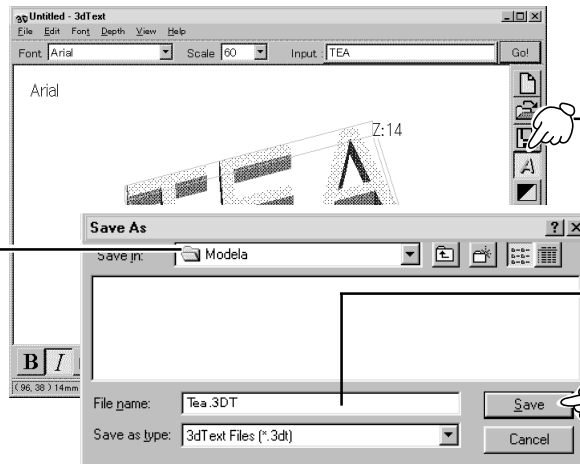


Set the depth by clicking the button until this value is reached.

Saving Your Data

2

Select where the file is to be saved.



1

Click on the [Save] button.

3

Type in the file name. Files created with 3D TEXT have ".3dt" as the extension.

4

Click on the [Save] button.

Set the Cutting Conditions for the "TEA" portion

1

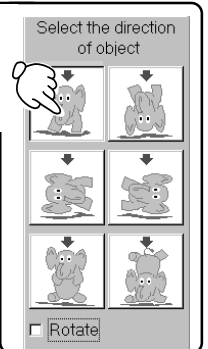
The PLAYER setting screen is displayed.

2

Click the start button for PLAYER.

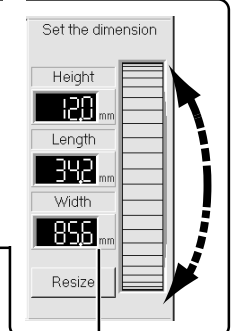
Set the direction of object

This surface is taken to be the top surface.

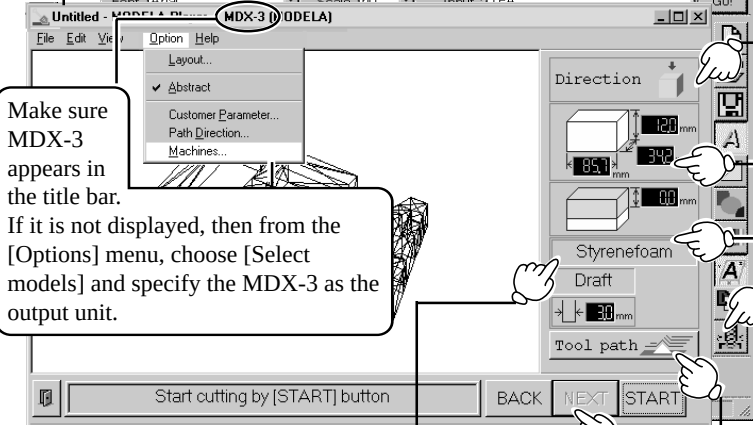


Set the Dimension

Use the mouse to spin the dial or click on a numerical value to set this value. When cutting the "ROOM" portion, set only the height to 11 mm (0.433").



Make sure MDX-3 appears in the title bar. If it is not displayed, then from the [Options] menu, choose [Select models] and specify the MDX-3 as the output unit.



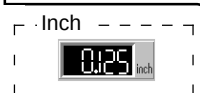
Tool Width Setting

Use the mouse to spin the dial or click on a numerical value to set the width of the tool included with MODEL3.

When using a tool with a diameter of 1/8", set tool diameter to "0.125 inch or 3.17 mm."

Clicking this button makes the settings sequentially from "Set the direction of object" to "Cutting Method Setting".

This displayed the path the tool takes during cutting.

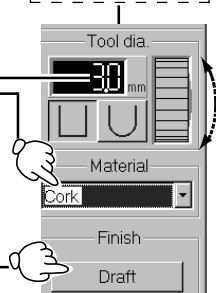


Material Type Setting

Set to match the type of material.

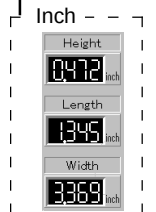
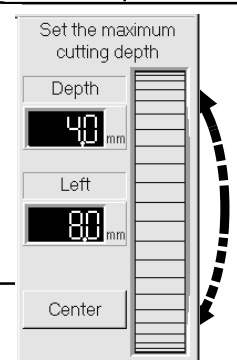
Cutting Method Setting

Set "Draft" for the first pass and "Finish" for the second pass.



Set the maximum cutting depth

Use the mouse to spin the dial or click on a numerical value to set this value.



When you've finished making the settings described above, follow the steps from "Getting Ready for MDX-3" to "Sending Cutting Data from the Computer" to cut the "TEA" portion. When the cutting for the "TEA" portion has finished, follow the same steps to cut the "ROOM" portion.

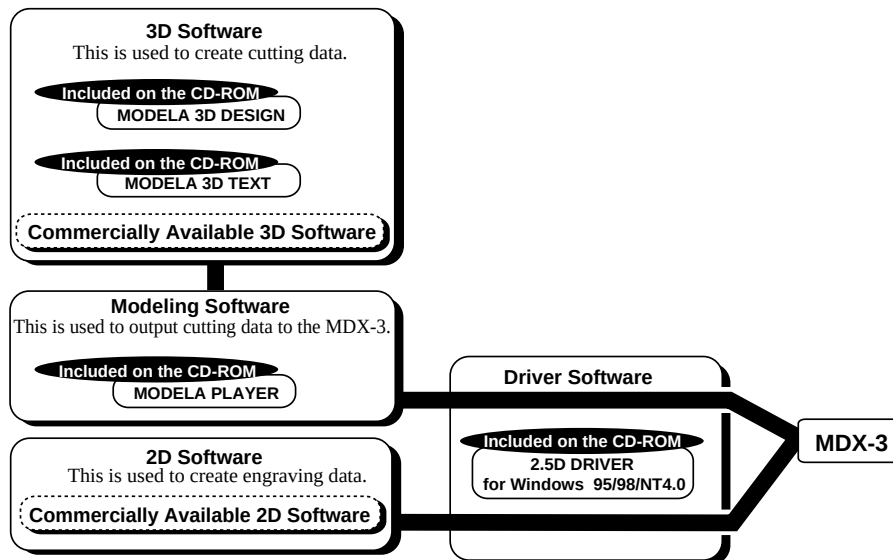
What to Do After Cutting Ends

After the text has been cut, use sandpaper to smooth the cut letters and glue them to the corkboard with wood adhesive.

6

When Using Commercially Available Software for Output to MODELA

There are a total of four types of programs compatible with the MDX-3. Their uses and the ways they can be combined with commercially available programs are shown below.

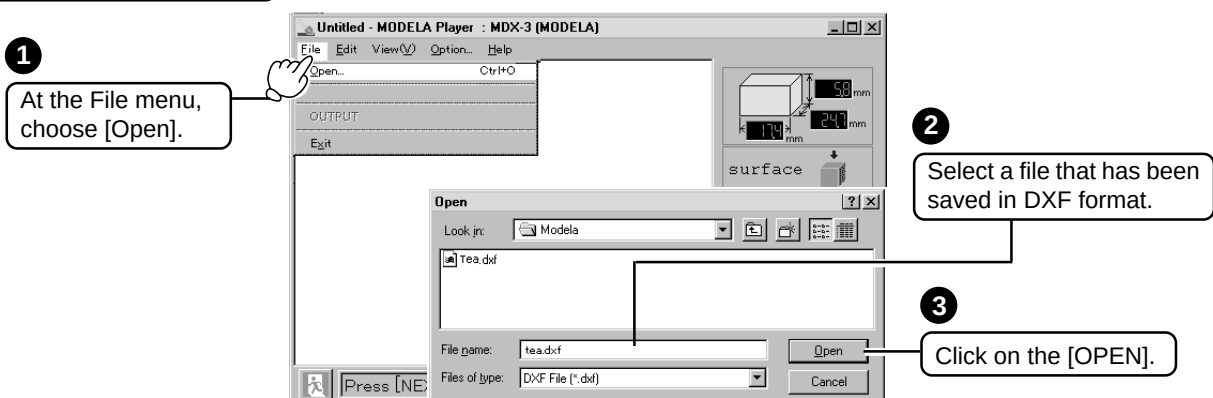


MODEL 3D DESIGN can be called up directly from the MODEL 3D DESIGN and MODEL 3D TEXT screens. MODEL 3D DESIGN sends output to the MDX-3 via the 2.5D DRIVER.

When Using Commercially Available 3D Software for Output to MODELA

MODEL 3D DESIGN can only open files in DXF format. When using commercially available software, be sure to use software that can save files in DXF format, and be sure to select DXF as the format for saving the files you work with. However, this is not necessary when MODEL 3D DESIGN is launched directly from MODEL 3D DESIGN or MODEL 3D TEXT.

Importing Cutting Data



Setting the Cutting Conditions

After importing the file, set the conditions to match the shape of the data to be cut. For information on how to make these settings, see "■ Set the Cutting Conditions for the Banana" or "■ Set the Cutting Conditions for the "TEA" portion".

When Using Commercially Available 2D Software for Output to MODELA

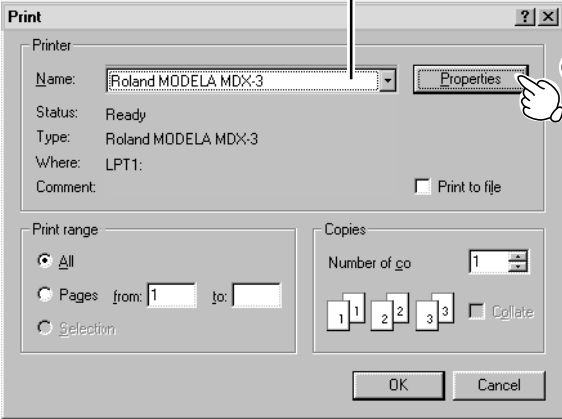
The 2.5D DRIVER is used when you wish to output data created with commercially available engraving software on the MDX-3.

Sending Output to the MDX-3

In the 2D software that was used to create the data, select the "Print" command to display the "Print" dialog box shown below for the data created with your 2D software. (The configuration of the dialog box may differ according to the software used.)

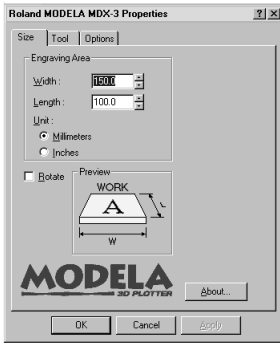
1 Select [ROLAND MODELA MDX-3] as the printer to be used.

2

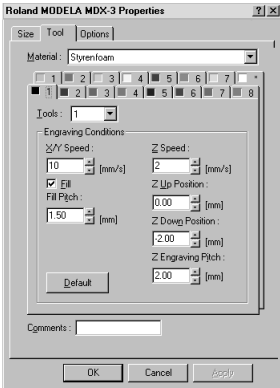


The 'Print' dialog box shows the printer selection dropdown set to 'Roland MODELA MDX-3'. The 'Properties' button is highlighted with a hand icon. The 'Print range' section has 'All' selected. The 'Copies' section shows 'Number of go' set to 1.

Make the settings to match the conditions for engraving. The methods use to load material and install a tool on the MDX-3 are the same as for three-dimensional cutting. Refer to Help for information on available commands.



The 'Size' tab of the 'Roland MODELA MDX-3 Properties' dialog box shows 'Engraving Area' with 'Width' set to 100.0 and 'Length' set to 100.0. The 'Unit' is set to 'Millimeters'. A 'Preview' window shows a 'WORK' area with dimensions 'W' and 'H'.



The 'Options' tab of the 'Roland MODELA MDX-3 Properties' dialog box shows 'Material' set to 'Styrofoam'. The 'Engraving Conditions' section has 'X/Y Speed' set to 10, 'Z Speed' set to 2, 'Z Up Position' set to 0.00, 'Z Down Position' set to 2.00, and 'Z Engraving Pitch' set to 2.00.

7

What to do if...

● I can't open a file.

There is not enough memory available for processing.

Close all other applications, or restart Windows. Also, Windows normally uses a portion of the hard disk for virtual memory, and it may be that there is not enough space left on the hard disk. If this is the case, free up space on the hard disk by deleting unneeded files or moving them to another disk. If the messages about insufficient memory still appears after doing this, it is recommended that you increase the amount of memory in your computer.

Make sure the file you want to open is a MODELA 3D DESIGN file.

Files which have been written using the [File] - [Output in DXF Format] command cannot be opened.

● The included software doesn't function.

- Does the computer you're using provide the correct operating environment for the included software?

Check the conditions for the included software operating environment printed on the front cover of this manual and make sure that the computer offers a suitable environment.

- Was the software installed using the setup program?

Be sure to use the setup program when installing the software.

The setup program puts the files for each software package in the necessary locations to enable the software to be used under Windows.

● The MDX-3 doesn't function.

Is the STANDBY LED not flashing?

The LED flashes slowly (every 0.5 sec)

An excessive load has been placed on the tool. Switch off the power and check the combination of tool and material.

The LED flashes rapidly (every 0.1 sec)

A communication error has occurred. Switch off the power and check the cable connections and port settings for the drivers.

- Is the VIEW LED dark?

Cutting data cannot be received when the MDX-3 is in the VIEW mode. Press the VIEW key to cancel the VIEW mode.

- Was the correct port selected for the printer driver?

The port for data output is set using the printer driver. See below for the methods for setting the output port.

If you're using Windows 95/98 See "Installing the 2.5D DRIVER for Windows 95/98" in this document.

If you're using Windows NT 4.0 See "Installing the Driver" in the Roland Software Package.

- Is the dust tray not full of cuttings?

If the dust tray is more than half-full of cuttings, press the VIEW key to stop cutting, then pull out the dust tray and empty it.

- Is the cable connected?

Switch off the power to the computer and the MDX-3, and use a parallel cable to connect the two devices.

- Is the correct type of cable used?

The type of parallel cable (printer cable) may vary according to the computer model. Make the connection with the correct type of cable for the computer. Be sure the computer and the MDX-3 are both switched off before attempting to attach or disconnect the parallel cable (printer cable).

- During cutting, the tool strikes an uncut area of the material.

Do not use a piece of material that is unnecessarily large in comparison with the object to be cut.

The material should be about 3 mm (1/8") larger than the object to be cut.

Check the Measurement system setting on the Number tab under [Control Panel] - [Regional Setting], and set this to 3 mm when the measurement system is to "Metric" or to 1/8" when the measurement system is "U.S."

- Are the settings for the driver correct?

If the port setting is different from the port connected to the MDX-3, make the setting for the connect port. If [Send Retry Time] is set to a value shorter than 3600 seconds, set it to 3600 seconds.

- The workpiece plate is cut.

Check the setting for cutting depth. Do not set a depth that is greater than the thickness of the loaded material.

If the workpiece plate is not severely damaged, there is no problem. However, if the damage prevents the plate from gripping the material securely, it should be replaced with a new plate.

- The shape is incomplete.

- Is material of appropriate size loaded?

The loaded material should be about 3 mm (1/8") larger than the object to be cut.

If material of the same size as the object to be cut has been loaded (with no margin), the material should be positioned 3 mm (1/8") inward from the normal loading position. Check the Measurement system setting on the Number tab under [Control Panel] - [Regional Setting], and set this to 3 mm when the measurement system is to "Metric" or to 1/8" when the measurement system is "U.S."

- Is the size of the object within the cutting range for the MDX-3?

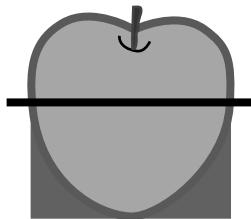
Set the size of the object to a value within the cutting range for the MDX-3.

- Is the setting for the cutting surface correct?

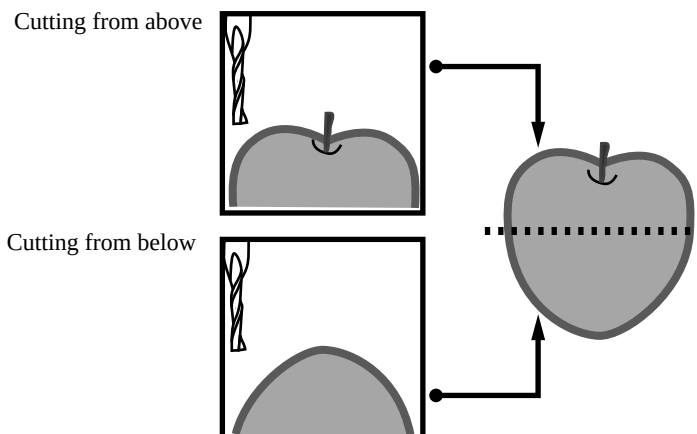
Because the tool moves only up and down, side areas which are angled inward cannot be cut. Choose the cutting surface appropriately to avoid attempting to cut such portions.

Example:

When seen of the top, the bottom half of the apple is angled inward, and so it cannot be cut from above. The portion below the line is not cut.



In such cases, the apple should be cut as separate top and bottom halves which are then glued together.



Please read this agreement carefully before opening the sealed package or the sealed disk package

Opening the sealed package or sealed disk package implies your acceptance of the terms and conditions of this agreement. If you do NOT accept this agreement, retain the package UNOPENED. (This product is just one of included items. Please be aware that any amount of the purchase price will not be refunded for return of this product as a single item, regardless of whether the package is opened or unopened.) The enclosed Roland product is a single user version.

Roland License Agreement	
Roland DG Corporation ("Roland") grants you a non-assignable and non-exclusive right to use the COMPUTER PROGRAMS in this package ("Software") under this agreement with the following terms and conditions.	
1. Coming into Force	This agreement comes into force when you purchase and open the sealed package or sealed disk package. The effective date of this agreement is the date when you open the sealed package or sealed disk package.
2. Property	Copyright and property of this Software, logo, name, manual and all literature for this Software belong to Roland and its licensor. The followings are prohibited : (1) Unauthorized copying the Software or any of its support file, program module or literature. (2) Reverse engineering, disassembling, decompiling or any other attempt to discover the source code of the Software.
3. Bounds of License	Roland does not grant you to sub-license, rent, assign or transfer the right granted under this agreement nor the Software itself (including the accompanying items) to any third party. You may not provide use of the Software through time-sharing service and/or network system to any third party who is not individually licensed to use this Software. You may use the Software by one person with using a single computer in which the Software is installed.
4. Reproduction	You may make one copy of the Software only for back-up purpose. The property of the copied Software belongs to Roland. You may install the Software into the hard disk of a single computer.
5. Cancellation	Roland retains the right to terminate this agreement without notice immediately when any of followings occurs : (1) When you violate any article of this agreement. (2) When you make any serious breach of faith regarding this agreement.
6. Limitations on Liability	Roland may change the specifications of this Software or its material without notice. Roland shall not be liable for any damage that may caused by the use of the Software or by exercise of the right licensed by this agreement.
7. Governing Law	This agreement is governed by the laws of Japan, and the parties shall submit to the exclusive jurisdiction of the Japanese Court.