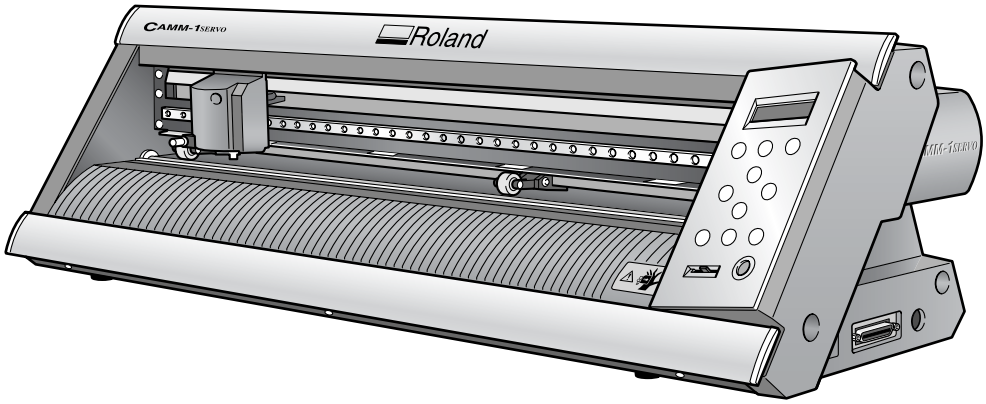
Roland

CAMM-1 SERVO

Desktop Sign Maker by Roland DG Corporation

GX-24



USER'S MANUAL

Thank you very much for purchasing this product.

- 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.
- Roland DG Corp. assumes no responsibility for any direct or indirect loss or damage which may occur through use of this product, regardless of any failure to perform on the part of this product.
- Roland DG Corp. assumes no responsibility for any direct or indirect loss or damage which may occur with respect to any article made using this product.

Roland DG Corporation

For the USA

FEDERAL COMMUNICATIONS COMMISSION RADIO FREQUENCY INTERFERENCE STATEMENT

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules.
These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment.
This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.
Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Unauthorized changes or modification to this system can void the users authority to operate this equipment.

The I/O cables between this equipment and the computing device must be shielded.

For Canada

CLASS A NOTICE

This Class A digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

CLASSE A AVIS

Cet appareil numérique de la classe A respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

For California

WARNING

This product contains chemicals known to cause cancer, birth defects and other reproductive harm, including lead.

For EU Countries

CE

Manufacturer:
ROLAND DG CORPORATION
1-6-4 Shinmiyakoda, Kita-ku, Hamamatsu-shi, Shizuoka-ken, 431-2103 JAPAN

The authorized representative in the EU:
Roland DG Corporation, German Office Halskestr.7 47877 Willich,Germany

For EU Countries

WARNING

This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

Roland DG Corp. has licensed the MMP technology from the TPL Group.

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⚠ To Ensure Safe Use

Improper handling or operation of this machine may result in injury or damage to property. Points which must be observed to prevent such injury or damage are described as follows.

About ⚠WARNING and ⚠CAUTION Notices

⚠WARNING	Used for instructions intended to alert the user to the risk of death or severe injury should the unit be used improperly.
⚠CAUTION	Used for instructions intended to alert the user to the risk of injury or material damage should the unit be used improperly. * Material damage refers to damage or other adverse effects caused with respect to the home and all its furnishings, as well to domestic animals or pets.

About the Symbols

	The △ symbol alerts the user to important instructions or warnings. The specific meaning of the symbol is determined by the design contained within the triangle. The symbol at left means "danger of electrocution."
	The ⃠ symbol alerts the user to items that must never be carried out (are forbidden). The specific thing that must not be done is indicated by the design contained within the circle. The symbol at left means the unit must never be disassembled.
	The ● symbol alerts the user to things that must be carried out. The specific thing that must be done is indicated by the design contained within the circle. The symbol at left means the power-cord plug must be unplugged from the outlet.

⚠ Incorrect operation may cause injury

⚠WARNING

Be sure to follow the operation procedures described in this manual.
Failure to follow the procedures may cause sudden operation or the like of the machine, which may result in unexpected injury.

Never allow children near the machine.
The machine includes locations and components that pose a danger to children, and major accident, including injury, blindness, or choking, may occur.

Do not disassemble, repair, or modify.
Doing so may lead to fire or abnormal operation resulting in injury.

⚠CAUTION

Keep your hands away from the blade protector while the cutting carriage is in motion.
Failure to do so may result in injury.

Install in a level and stable location.
Failure to do so may result in falling of the machine, leading to injury.

⚠ Danger of electrical short, shock, electrocution, or fire

⚠WARNING

Do not use with any electrical power supply that does not meet the ratings displayed on the AC adapter.
Use with any other power supply may lead to fire or electrocution.

Do not use with any power supply other than the dedicated AC adapter.
Use with any other power supply may lead to fire or electrocution.

Never operate the machine or insert or remove its power plug with wet hands.
Doing so may result in electrical shock or electrocution.

Never allow the machine to get wet, or apply gasoline, thinner, or any other flammable material to it.
Current leakage may cause electrical shock, electrocution, or combustion and fire.

Never allow hairpins, coins, matches, or any other object to get inside the machine through the ventilation ports.
Doing so may cause and electrical short, resulting in shock or electrocution, or the inserted object may catch fire.

Never place gasoline, alcohol, thinner, or any other flammable material near the machine, or use an aerosol spray close to the machine.
Doing so may cause fire.

Never damage the power cord or pull it with force.
Doing so may tear the cord's insulation, causing an electrical short and resulting in electrical shock, electrocution, or fire.

Never place any object on the power cord, bend the power cord using excessive force, or allow the power cord to become deformed.
If it becomes deformed, the deformed location may grow hot and cause fire.

Never use the machine with the power cord bound into a bundle or roll.
If the cord is in a bundle or roll, it may grow hot and cause fire.

Never use any power cord other than the power cord included with the machine. Also, never use a power strip or extension cord.
The power strip or extension cord may grow hot and cause fire.

Do not use with a damaged AC adapter, power cord or plug, or with a loose electrical outlet.
Doing so may lead to fire, electrical shock, or electrocution.

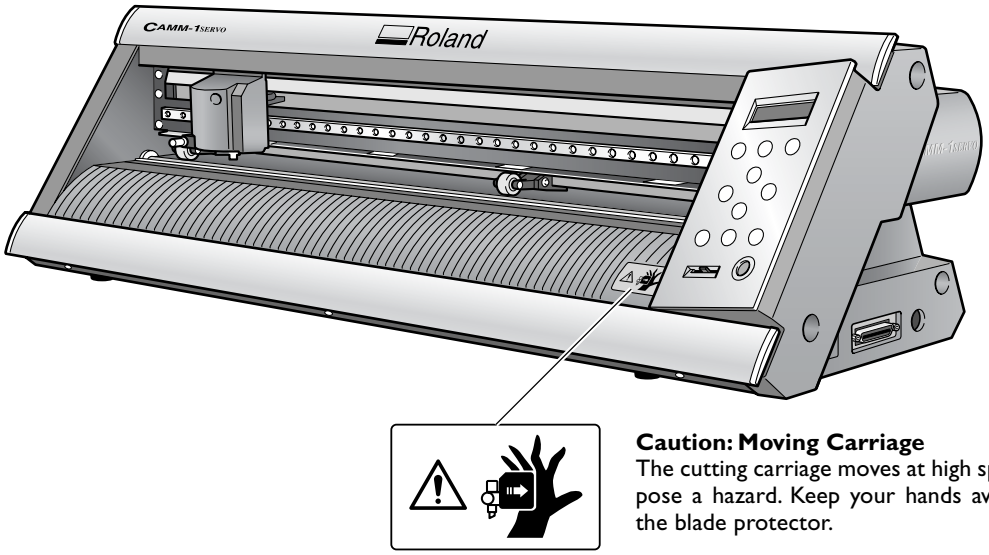
When unplugging the electrical power cord from the power outlet, grasp the plug, not the cord.
Unplugging by pulling the cord may damage it, leading to fire, electrical shock, or electrocution.

In the event of an abnormal state (such as smoke or sparks, odor or burning or unusual noise), immediately unplug the power cord.
Failure to do so may result in fire, electrical shock, or electrocution. Immediately disconnect the power cord and contact your Roland DG Corp. service center.

When not in use for several hours, unplug the power-cord plug from the electrical outlet.
Failure to do so may result in danger of electrical shock, electrocution or fire due to deterioration of electrical insulation.

⚠Warning Labels

Warning labels are affixed to make areas of danger immediately clear. The meanings of these labels are as follows. Be sure to heed their warnings.
Also, never remove the labels or allow them to become obscured.



Caution: Moving Carriage
The cutting carriage moves at high speed and pose a hazard. Keep your hands away from the blade protector.

⚠ Pour utiliser en toute sécurité

La manipulation ou l'utilisation inadéquates de cet appareil peuvent causer des blessures ou des dommages matériels. Les précautions à prendre pour prévenir les blessures ou les dommages sont décrites ci-dessous.

Avis sur les avertissements

⚠ATTENTION	Utilisé pour avertir l'utilisateur d'un risque de décès ou de blessure grave en cas de mauvaise utilisation de l'appareil.
⚠PRUDENCE	Utilisé pour avertir l'utilisateur d'un risque de blessure ou de dommage matériel en cas de mauvaise utilisation de l'appareil. * Par dommage matériel, il est entendu dommage ou tout autre effet indésirable sur la maison, tous les meubles et même les animaux domestiques.

À propos des symboles

	Le symbole △ attire l'attention de l'utilisateur sur les instructions importantes ou les avertissements. Le sens précis du symbole est déterminé par le dessin à l'intérieur du triangle. Le symbole à gauche signifie "danger d'électrocution".
	Le symbole ⃠ avertit l'utilisateur de ce qu'il ne doit pas faire, ce qui est interdit. La chose spécifique à ne pas faire est indiquée par le dessin à l'intérieur du cercle. Le symbole à gauche signifie que l'appareil ne doit jamais être démonté.
	Le symbole ● prévient l'utilisateur sur ce qu'il doit faire. La chose spécifique à faire est indiquée par le dessin à l'intérieur du cercle. Le symbole à gauche signifie que le fil électrique doit être débranché de la prise.

⚠ L'utilisation incorrecte peut causer des blessures

⚠ATTENTION

S'assurer de suivre les procédures d'utilisation décrites dans ce manuel.
Si les procédures indiquées ne sont pas suivies, le fonctionnement de l'appareil peut être déclenché soudainement, ce qui risque de causer des blessures.

Ne jamais laisser d'enfants s'approcher de l'appareil.
Des éléments et des surfaces de l'appareil présentent des risques pour les enfants. Il pourrait se produire un accident grave qui causerait des blessures, ou créerait un risque de cécité ou de suffocation.

Ne pas démonter, réparer ni modifier.
Démonter, réparer ou modifier l'appareil risque de provoquer un incendie ou de causer un fonctionnement anormal entraînant des blessures.

⚠PRUDENCE

Ne pas approcher les mains de la protection de la lame lorsque le chariot de coupe se déplace.
Il est possible de se blesser.

Installer sur une surface stable.
Sinon, l'appareil risque de se renverser et de causer des blessures.

⚠ Risque de décharge ou de choc électrique, d'électrocution ou d'incendie

⚠ATTENTION

Ne pas utiliser avec une source d'alimentation électrique non conforme à la norme indiquée sur l'adaptateur AC.
Utiliser l'appareil avec une autre source d'alimentation risque de provoquer un incendie ou de causer une électrocution.

Utiliser uniquement avec l'adaptateur AC fourni.
Utiliser l'appareil avec une autre source d'alimentation risque de provoquer un incendie ou de causer une électrocution.

Ne jamais utiliser l'appareil, insérer la prise dans le réceptacle ou l'en enlever si on a les mains mouillées.
Il y a risque de décharge électrique ou d'électrocution.

Ne jamais permettre que l'appareil soit mouillé; ne jamais y appliquer d'essence, de diluant ni aucun matériau inflammable.
Une fuite de courant peut causer un choc électrique, l'électrocution ou la combustion et un incendie.

Ne jamais laisser des épingles à cheveux, des pièces de monnaie, des allumettes ni aucun autre objet pénétrer dans l'appareil par les orifices de ventilation.
Cela crée un risque de décharge électrique ou d'électrocution. En outre, les objets peuvent prendre feu.

Ne jamais placer de l'essence, du diluant ni aucun matériau inflammable près de l'appareil; ne jamais utiliser de produits en aérosol près de l'appareil.
Cela crée un risque d'incendie.

Ne jamais endommager le câble d'alimentation ni le tirer vigoureusement.
Cela risque de déchirer l'isolant du câble et de causer un court-circuit, ce qui aurait comme résultat un choc électrique, l'électrocution ou un incendie.

Ne jamais placer d'objets sur le cordon d'alimentation, plier le câble d'alimentation en utilisant une force excessive ni laisser le câble d'alimentation se déformer.
Si le câble se déforme, la section affectée peut surchauffer et causer un incendie.

Ne jamais utiliser l'appareil si le câble d'alimentation est attaché ou enroulé.
S'il est attaché ou enroulé, il peut surchauffer et causer un incendie.

Ne jamais utiliser un cordon d'alimentation autre que celui qui est fourni avec l'appareil. Ne jamais non plus utiliser de bande d'alimentation électrique ni de rallonge.
La bande d'alimentation ou la rallonge peuvent surchauffer et causer un incendie.

⚠ATTENTION

Ne pas utiliser avec un adaptateur, un fil ou une fiche endommagés; ne pas brancher dans une prise mal fixée.
Négliger de suivre cette consigne risque de provoquer un incendie ou de causer une décharge électrique ou une électrocution.

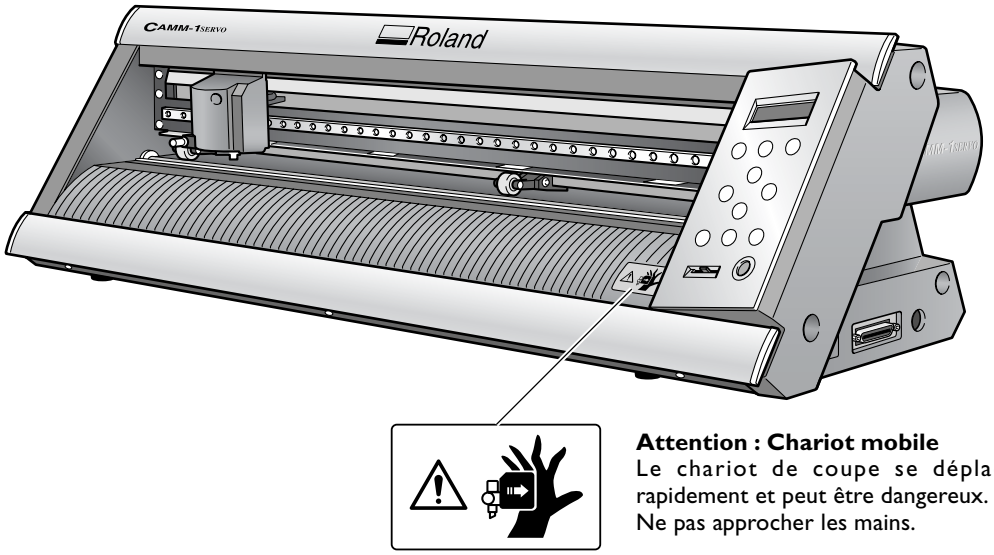
Pour débrancher l'appareil, saisir la fiche et non le fil électrique.
Tirer sur le fil peut l'endommager, ce qui risque de provoquer un incendie ou de causer une décharge électrique ou une électrocution.

Ne pas utiliser l'appareil s'il est dans un état anormal (p.ex., émission de fumée, odeur de brûlé, bruit inhabituel ou autre anomalie).
Ne pas respecter cette consigne risque de provoquer un incendie ou une électrocution.
Débrancher immédiatement la fiche de la prise et communiquer avec le revendeur ou le centre de service autorisés de la société Roland DG.

Si l'appareil reste inutilisé pendant plusieurs heures, débrancher la fiche de la prise électrique.
Négliger de suivre cette consigne peut créer un risque de décharge électrique ou d'électrocution ou provoquer un incendie à cause de la détérioration de l'isolant électrique.

⚠Vignettes d'avertissement

Des vignettes d'avertissement sont apposées pour qu'il soit facile de repérer les zones dangereuses. La signification des vignettes est donnée ci-dessous. Respecter les avertissements. Ne jamais retirer les vignettes et ne pas les laisser s'encrasser.



Attention : Chariot mobile
Le chariot de coupe se déplace très rapidement et peut être dangereux.
Ne pas approcher les mains.

Important Notes on Handling and Use

This machine is a precision device. To ensure the full performance of this machine, be sure to observe the following important points. Failure to observe these may not only result in loss of performance, but may also cause malfunction or breakdown.

Main Unit

This Machine Is a Precision Device

➢ Handle carefully, and never subject the machine to impact or excessive force.

Install in a Suitable Location

➢ Install in a location having the specified temperature and relative humidity.
➢ Install in a stable location offering good operating conditions.

Important Notes on Connecting the Cables

➢ Connect the power cord and the computer's input and output cables securely.

When Moving the Machine

➢ When moving the machine, be sure to support the machine at its bottom, using both hands. Attempting to move the machine by holding it at a different location may damage the machine.

About the Documentation

Included Documentation

The following documentation is included with the machine.

Printed Document

GX-24 User's Manual (This document)

This describes how to install and set up the machine, basic cutting operations, and other such matters.

Online Help (Manuals in Electronic Format)

These describe how to use the programs, drivers, and other software. Each is installed automatically whenever you install and set up the corresponding program or driver.

➢Roland CutStudio Online Help (Windows)
This describes in detail the operation and features of Roland CutStudio, the included Windows-based cutting program.
➢CAMM-1 Driver Online Help (Windows)
This describes in detail the operation and features of the driver.
➢CutStudio Plug-in for Adobe Illustrator Online Help (Windows/Macintosh)
This describes in detail the operation and features of the software plug-in. The content of the version for the Macintosh is slightly different.

Operation Manuals (Manuals in Electronic Format)

The following operation manuals are included. To view them, first install them on your computer.
For information on how to install the operation manuals, refer to the following page.

☞ p 29 "Installing the Operation Manuals" (Windows)
☞ p 33 "If You're Using a Macintosh" (Macintosh)

The manuals you view differ depending on whether you're using Windows or a Macintosh.

Operation Manuals for Windows

➢GX-24 Reference Guide
This describes the features and details of the machine, lists the menu items, and provides detailed information about matters not covered in this document, such as what to do to resolve any problems that may occur.
➢CutStudio Plug-in for Adobe Illustrator/CorelDRAW Setup Guide
This describes how to set up the CutStudio plug-in.
➢Printing and Cutting Guide (Guide to cutting using crop marks -- Windows version)
This describes how to print an image on a printer and cut contour lines on this machine using the crop-mark feature that lets you align an image and contours.

Operation Manuals for Macintosh

➢GX-24 Reference Guide
This describes the features and details of the machine, lists the menu items, and provides detailed information about matters not covered in this document, such as what to do to resolve any problems that may occur.
➢Macintosh Cutting Guide
This describes such matters as how to carry out cutting using this machine with a Macintosh.

For detailed information about the include programs and other software, refer to the following page.

☞ p 26 "Included Software"

Viewing the Manuals in Electronic Format

If you encounter a problem, then along with this document, also take a look at the manuals in electronic format. Read on to learn how to view the electronic-format manuals.

Windows

➢ Roland CutStudio Online Help (Windows)
After you start CutStudio, go to the menu bar and click [Help], then [Contents].
Alternatively, click [Start], point to [Programs] (or [All Programs]), then point to [Roland CutStudio].
Click [CutStudio Help].

➢ CAMM-1 Driver Online Help (Windows)
Go to the driver's window and click the [Help] button.

➢ CutStudio Plug-in for Adobe Illustrator Online Help
At the [Roland CutStudio] palette, click the ▶ button, then click [Help].
For more information, refer to the "CutStudio Plug-in for Adobe Illustrator/CorelDRAW Setup Guide."

➢ Operation Manuals
Click [Start], point to [Programs] (or [All Programs]), then point to [Roland GX-24 Operation Manuals].
Click the electronic-format manual you want to view.

Macintosh

➢ CutStudio Plug-in for Adobe Illustrator Online Help
At the [Roland CutStudio] palette, click the ▶ button, then click [Help].
For more information, refer to the "Macintosh Cutting Guide."

➢ Operation Manuals
On the desktop, double-click the icon for the manual.

Chapter 1: Getting Started

1-1 Machine Features

This is a USB/Serial compatible high-performance cutting machine that offers features like those described below.

Quiet

➢Quiet cutting achieved through use of servo motors

Easier to Use

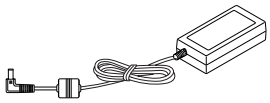
➢Two-line backlit display for clear visibility even in dark locations
➢Operation panel and menus organized with a simple, easy-to-understand layout
➢Comes with Roland CutStudio which is a Windows-based cutting program enabling high-quality cutting with easy operation

Versatile Range of Practical Applications

➢Included software plug-ins that enable CutStudio to cut data created using commercially available programs
➢Crop-mark feature that can align an image and contour lines when printing an image on a printer and cutting the contours on this machine

1-2 Included Items

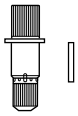
The following items are packed together with the unit. Make sure they are all present and accounted for.



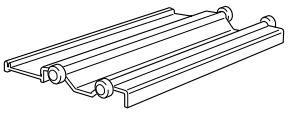
AC adapter: 1

Power cord: 1

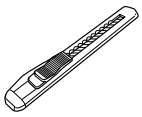
Blade: 1



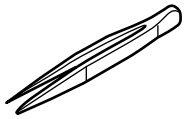
Blade holder: 1
Pin: 1



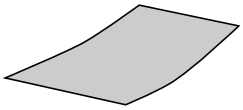
Roller base: 1



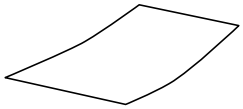
Separating knife: 1



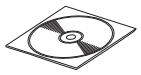
Tweezers: 1



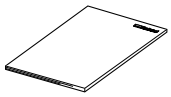
Test-use material: 1
(Colored material)



Apprication tape: 1
(Transparent tape)



CD-ROM: 1

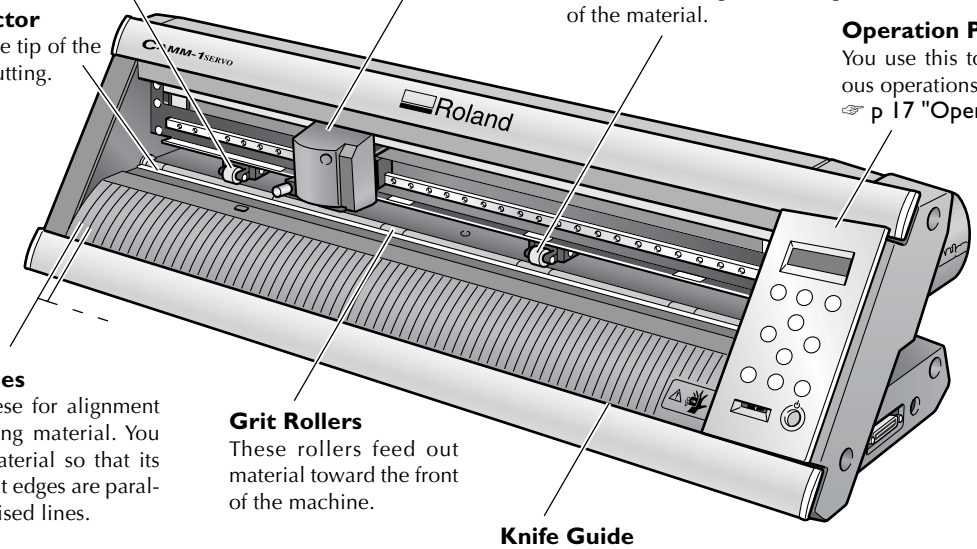


User's Manual
(This document): 1

USB cable: 1

1-3 Part Names and Functions

Main Unit



Left Pinch Roller
This clamps the material when the loading lever is raised. You set this at the left-hand edge of the material.

Cutting Carriage
This is where you install the blade holder. It moves to the left and right to cut the material.

Right Pinch Roller
This clamps the material when the loading lever is raised. You set this at the right-hand edge of the material.

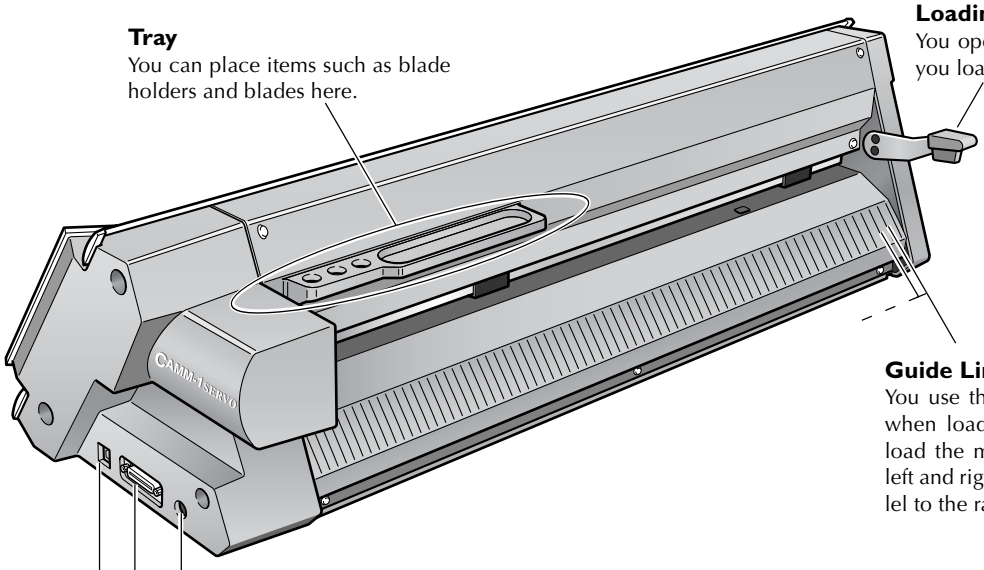
Blade Protector
This protects the tip of the blade during cutting.

Operation Panel
You use this to perform various operations.
☞ p 17 "Operation Panel"

Guide Lines
You use these for alignment when loading material. You load the material so that its left and right edges are parallel to the raised lines.

Grit Rollers
These rollers feed out material toward the front of the machine.

Knife Guide
This lets you cut off a piece of material without first removing the material from the machine, by inserting the separating knife and moving it along the guide.



Tray
You can place items such as blade holders and blades here.

Loading Lever
You operate this when you load material.

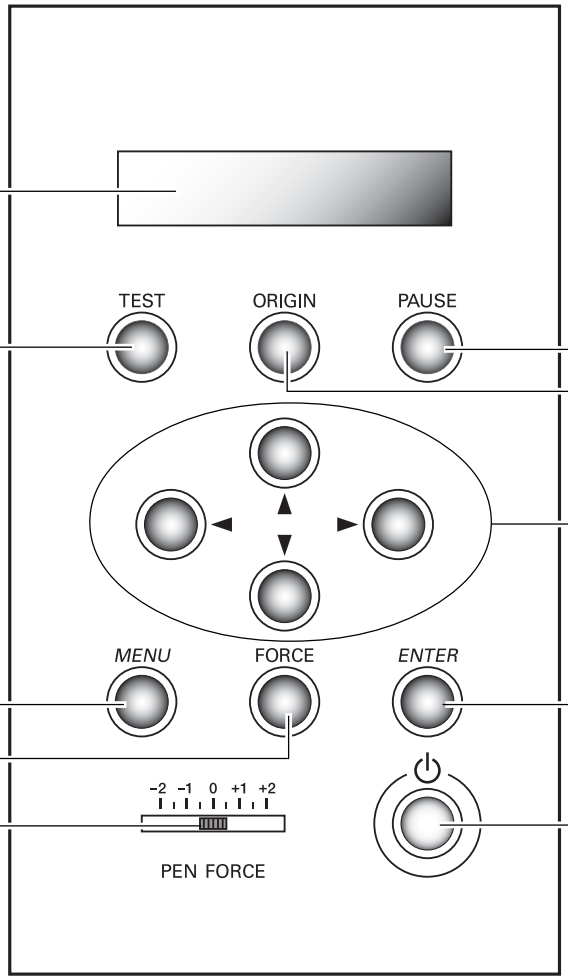
Guide Lines
You use these for alignment when loading material. You load the material so that its left and right edges are parallel to the raised lines.

Power-cord Connector
This supplies power to the machine.

Serial(RS-232C) Connector
This connects a serial cable.

USB Connector
This connects a USB cable.

Operation Panel



Display
This displays various setting menus and other information.

TEST Key
Pressing and holding this for one second or longer cuts a pre-registered test pattern.

MENU Key
Pressing this repeatedly switches sequentially among the presently set cutting conditions, the menu mode, and the width-display screen.

FORCE Key
This displays the menu for adjusting the blade force.

PEN FORCE Slider
This lets you fine-tune the blade force. You can even perform adjustment while cutting is in progress.

PAUSE Key
This interrupts the operation in progress. Pressing it a second time resumes the operation.

ORIGIN Key
Pressing and holding this for one second or longer sets the origin point at the present location of the blade.

Cursor Keys
You use these to perform such operations as moving the cutting carriage or material, and selecting and setting various menu items.

ENTER Key
This is used to choose menu items and confirm settings.

POWER Button
Pressing this switches on the power, making the button light up blue. To switch off the power, you hold it down for one second or longer.

Panel Notation

In this document, the keys on the control panel are indicated by the following images.

MENU MENU Key
FORCE FORCE Key
ENTER ENTER Key
TEST TEST Key
ORIGIN ORIGIN Key
▲ ▼ ◄ ► Cursor Keys
PAUSE PAUSE Key

Chapter 2: Preparing the GX

This describes how to set up and prepare the machine, including how to install it and make the cable connections.

2-1 Installing

Deciding On an Installation Site

Install in a stable location offering good operating conditions. An unsuitable location can cause accident, faulty operation, or breakdown.

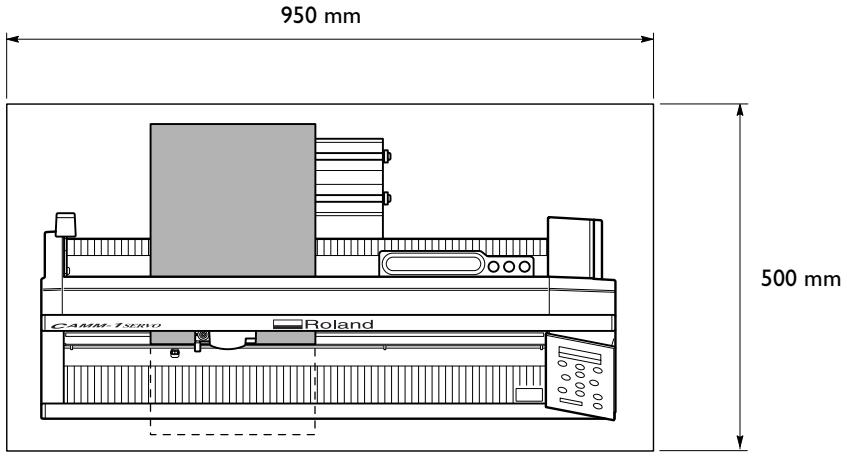
⚠WARNING **Install in a level and stable location.**
Otherwise the machine may tip over and cause injury.

Unsuitable Installation Sites

- ➢Locations subject to shaking or vibration
- ➢Locations where the floor is tilted, not level, or unstable
- ➢Locations exposed to direct sunlight or near air-conditioning or heating equipment
- ➢Locations within 1 m (39-3/8 in.) of strong illumination
- ➢Dusty locations
- ➢Locations exposed to considerable electrical or magnetic noise, or other forms of electromagnetic energy
- ➢Locations with poor heat radiation

Installation Space

The space shown in the figure is required in order to use this machine.



Height: 300 mm
(When using a special stand: 1000 mm)

Place in a location that has no wall or other obstruction to the rear.

The material moves during cutting. Never place any object at the front or rear of the machine.

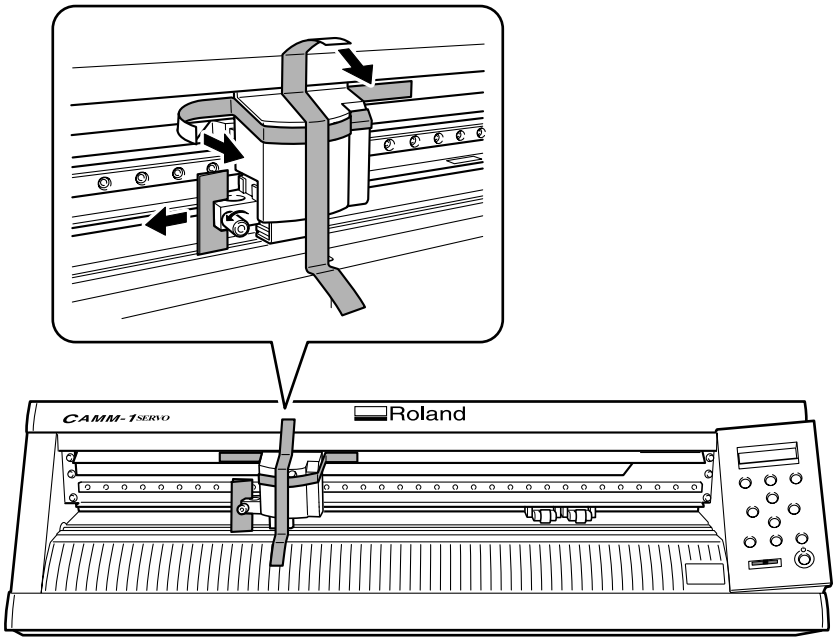
Use a special stand (sold separately)

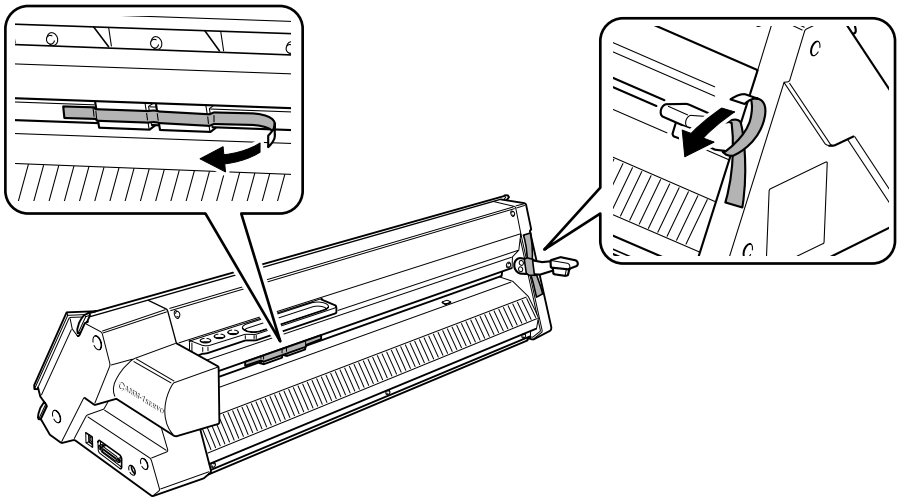
The special stand (part number PNS-24) is sold separately. For more information, contact your vendor or the nearest authorized Roland DG Corp dealer.

Removing the Packing Materials

Tape and packing materials are attached to the machine to protect it from vibration during transportation. When installation is complete, remove these.

➢Remove all packing materials. Any that remain may cause faulty operation or breakdown when the power is switched on.

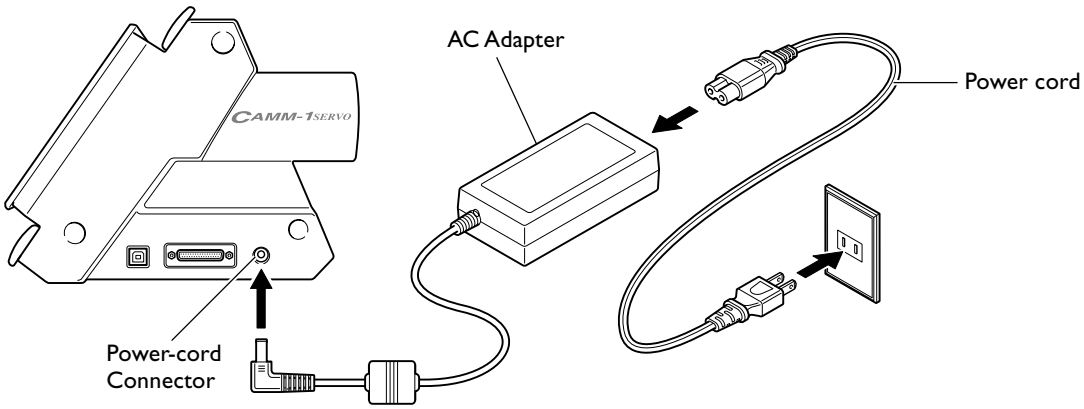




2-2 Connecting the Cables

Connecting the Power Cord

⚠WARNING **Do not use with any electrical power supply that does not meet the ratings displayed on the AC adapter.**
Use with any other power supply may lead to fire or electrocution.



Important Notes on the Power Cord

⚠WARNING **Never damage the power cord or pull it with force.**
Doing so may tear the cord's insulation, causing an electrical short and resulting in electrical shock, electrocution, or fire.

⚠WARNING **Never place any object on the power cord, bend the power cord using excessive force, or allow the power cord to become deformed.**
If it becomes deformed, the deformed location may grow hot and cause fire.

⚠WARNING **Never use the machine with the power cord bound into a bundle or roll.**
If the cord is in a bundle or roll, it may grow hot and cause fire.

⚠WARNING **Never use any AC adapter and power cord other than the AC adapter and power cord included with the machine. Also, never use a power strip or extension cord.**
The power strip or extension cord may grow hot and cause fire.

⚠WARNING **Do not use with a damaged AC adapter, power cord or plug, or with a loose electrical outlet.**
Doing so may lead to fire, electrical shock, or electrocution.

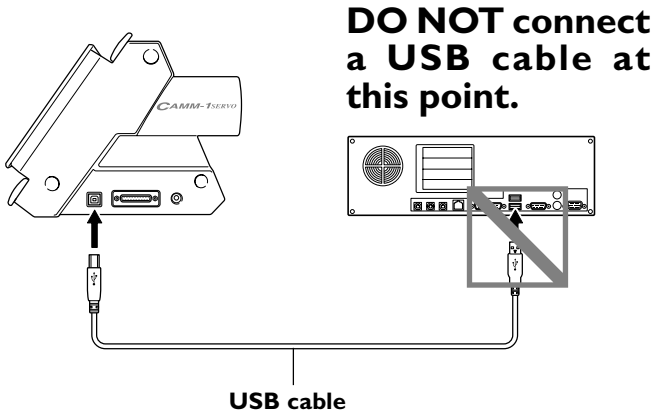
Connecting to the Computer

You make the connection to the computer using the included USB cable.
(If you're using Windows, you can also use a serial cable.)

USB Connection

Be sure to make the connection between the machine to the computer during the course of installing the driver. Driver installation may fail and the machine may become unusable If you connect a USB cable before starting installing the driver.

☞ p 28 "Installing the Driver"

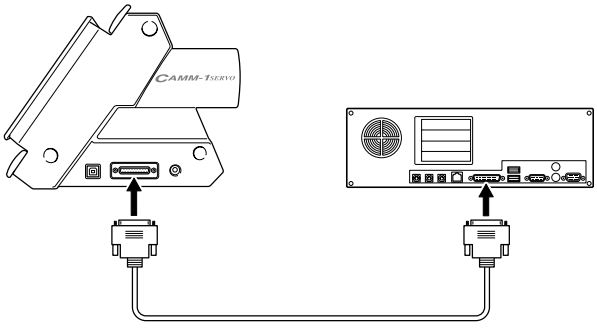


Important Notes on USB Connection

➢Never use a USB hub or the like.

Serial Connection(Windows only)

The serial cable is sold separately. Use a cable suited to your computer.
For more information about the specifications of the serial interface, refer to the "GX-24 Reference Guide" (electronic-format manual).



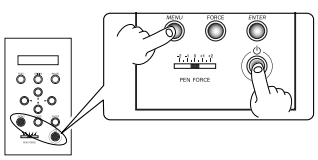
Serial cable (sold separately)
(RS-232C-compliant crossover serial cable)

2-3 Changing the Language Used for the Display

Change the language used for the display to match your preference.

Procedure

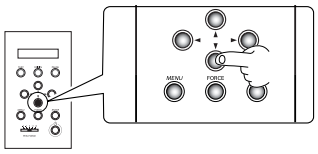
❶



Operation Panel

Hold down (MENU) and press the power button.
The power comes on.

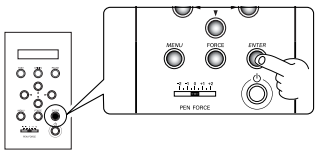
❷



LANG. ENGLISH
* ENGLISH

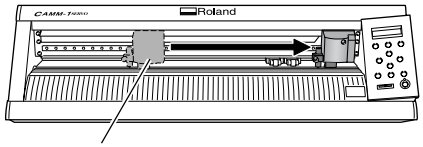
Press (▼) to choose the language you want to use for the display.
In this example, we'll choose [ENGLISH].

❸



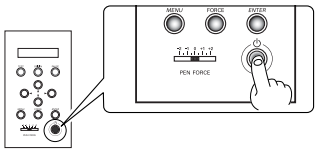
SELECT SHEET
*ROLL

Press (ENTER).
The cutting carriage moves to the right edge.
Be careful not to touch it.



Cutting carriage

❹



Hold down the power button for one second or longer.
The power is switched off.

Chapter 3: Installing/Uninstalling Software

This describes how to install, set up and uninstall the included programs and other software.

3-1 About the Included Software

Included Software

The included CD-ROM contains the following software.

Software for Windows

■ Windows Driver

This is a Windows-based driver required for sending data from a computer to the machine. Be sure to install it

■ Roland CutStudio

This is a Windows-based cutting program that enables you to accomplish high-quality cutting through easy operation.

■ CutStudio Plug-in for Adobe Illustrator

This is a software plug-in that lets you send data created using Adobe Illustrator directly to CutStudio.

■ CutStudio Plug-in for CorelDRAW

This is a software plug-in that lets you send data created using Corel CorelDRAW directly to CutStudio.

Software for Macintosh

■ CutStudio Plug-in for Adobe Illustrator

This is a software plug-in that lets you create and cut cutting data using Adobe Illustrator.

3-2 If You're Using a Windows

System Requirements for USB Connection

Making a USB connection with Windows requires use of a computer that meets all of the following system requirements. Please note that other configurations cannot be supported.

Operating system	Windows 98 SE (Second Edition)/Me/2000/XP
Computer	1) Computers preinstalled with Windows 98 SE/Me/2000/XP at the time of purchase (This includes such computers later upgraded to Windows Me/2000/XP.) 2) Computers on which USB operation is assured by the manufacturer of computers

System Requirements for the Roland CutStudio

Operating system	Windows 98 SE (Second Edition)/Me/2000/XP
Computer	Computer running Windows
Drive	CD-ROM drive
Monitor	Windows-compatible monitor capable of displaying of 16 bit color (High Color) or more
Memory (RAM)	128 MB or more recommended
Free hard-disk space required for installation	10 MB

System Requirements for the Windows Driver

Operating system	Windows 98 SE (Second Edition)/Me/2000/XP
Computer	1) Computers preinstalled with Windows 98 SE/Me/2000/XP at the time of purchase (This includes such computers later upgraded to Windows Me/2000/XP.) 2) Computers on which USB operation is assured by the manufacturer of computers

Installing the Software

Installing the Driver

Never make the connection to the computer before installing.

Keep the machine and the computer unconnected until you carry out this installation operation. Failure to follow the correct procedure may make installation impossible.

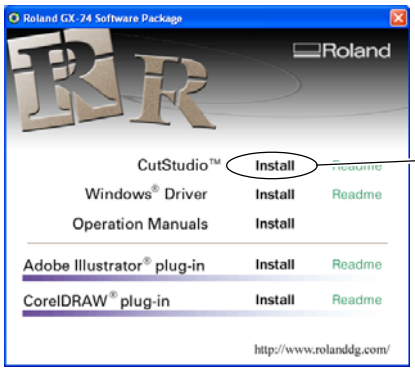
☞ p 30 "What to Do If Installation Is Impossible"

❶ Before you start installation and setup, make sure the USB cable is not connected.

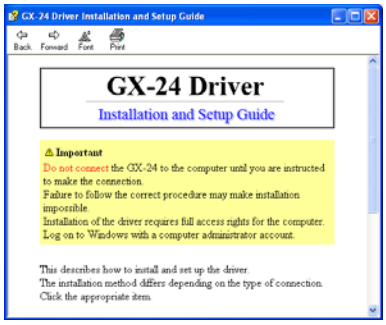
❷ Log on to Windows. If you are installing under Windows 2000/XP, log on as "Administrators" right.

❸ Insert the included CD-ROM into the CD-ROM drive.
After a short wait, the setup menu shown at left appears.

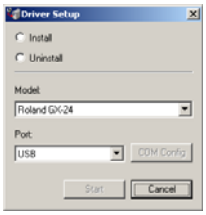
❹ Click this.
The Installation and Setup Guide appears.
If you're using Windows 98 SE, Windows Me, or Windows 2000, the Installation and Setup Guide and the Setup program appear.



❺ Follow the instructions in the Installation and Setup Guide to finish installing.



Installation and Setup Guide



Setup program
(Windows 98 SE/Me/2000)

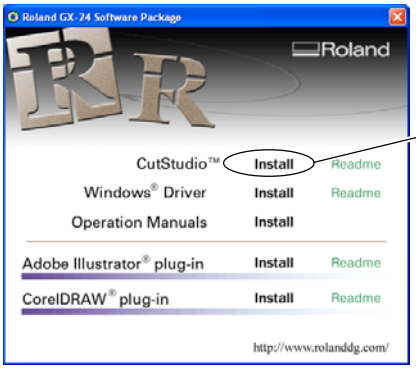
If the [Driver Setup] Window Doesn't Appear

If you're using Windows 98 SE, Windows Me, or Windows 2000 and the Setup program doesn't appear, first check the taskbar at the bottom of the screen. If [Driver Setup] is displayed, the program is running. Go to the taskbar and click [Driver Setup] to display the window for the Setup program.

Installing CutStudio

Install the Windows-based cutting program "CutStudio."

❶ Display the setup menu of the Roland GX-24 Software Package.



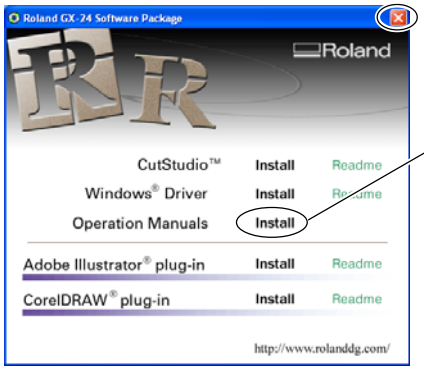
❷ Click [Install].
The setup window appears.

❸ Thereafter, follow the instructions in the messages to complete installation and setup.

Next, you install the operation manuals.

Installing the Operation Manuals

❶ Display the setup menu of the Roland GX-24 Software Package.



❷ Click [Install].
The setup window appears.

❸ Thereafter, follow the instructions in the messages to complete installation and setup.

❹ At the setup menu, go to the upper right and click the [X] to close the window.

This completes the installation and setup for the software.

Installing CutStudio Plug-in

For information about how to install and set up the CutStudio Plug-in, refer to the "CutStudio Plug-in for Adobe Illustrator/CorelDRAW Setup Guide" (electronic-format manual).

What to Do If Installation Is Impossible (USB connection)

If installation quits partway through, or if the wizard does not appear when you make the connection with a USB cable, take action as follows.

Windows 2000/XP

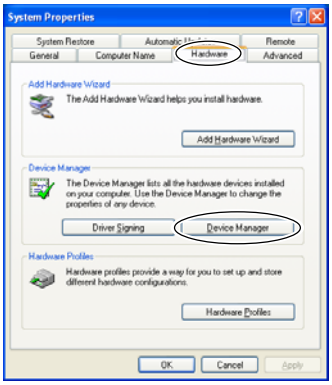
❶ If the [Found New Hardware Wizard] appears, click [Finish] to close it.

❷ Display [System Properties].

Windows XP
Click the [Start] menu, then right-click [My Computer]. Click [Properties].

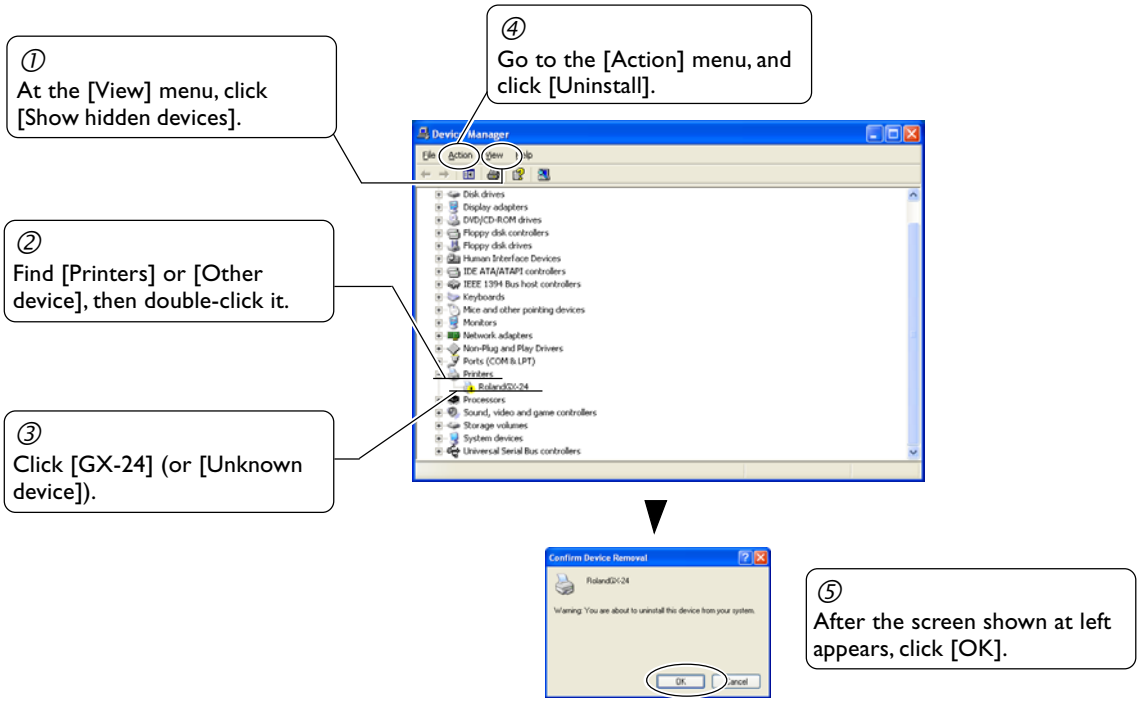
Windows 2000
Right-click [My Computer] on the desktop. Click [Properties].

❸



Click the [Hardware] tab, then click [Device Manager].
The [Device Manager] appears.

❹ Delete [GX-24] (or [Unknown device]).



❺ Close the [Device Manager] and click [OK].

❻ Detach the USB cable connected to the computer.

❼ Restart Windows, then uninstall the driver.

☞ p 32 "Uninstalling the Driver"

❽ Redo the installation from the beginning.

☞ p 28 "Installing the Driver"

Windows 98 SE/Me

❶ Refer to "Uninstalling the Driver" on the following page and uninstall the driver.

☞ p 32 "Uninstalling the Driver"

❷ Redo the installation from the beginning.

☞ p 28 "Installing the Driver"

Uninstalling the Driver

When uninstalling the driver, perform following operation.

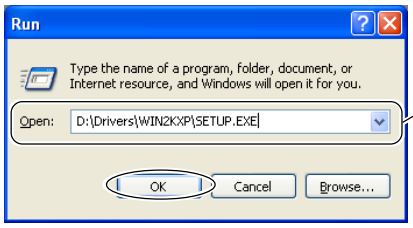
Procedure

❶ Before you start uninstallation of the driver, unplug the USB cables from your computer.

❷ Log on to Windows. If you are installing under Windows 2000/XP, log on as "Administrators" right.

❸ Insert the included CD-ROM into the CD-ROM drive.
The setup menu appears.
Go to the upper right and click the [X] to close the setup menu.

❹



In this illustration, drive D is specified as the CD-ROM drive.

From the [Start] menu, click [Run].
The screen shown at left appears.

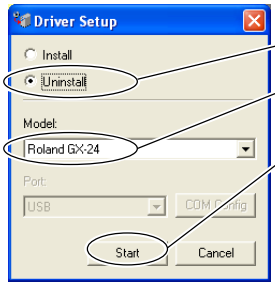
❺ For [Open], type in the information shown below, then click [OK].

Windows 2000/XP
(CD-ROM drive letter):\Drivers\WIN2KXP\SETUP.EXE

Windows 98 SE/Me
(CD-ROM drive letter):\Drivers\WIN9X\SETUP.EXE

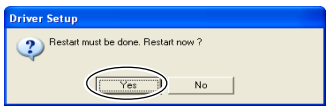
The Setup program starts and the [Driver Setup] window appears.

❻



Choose [Uninstall].
Choose [Roland GX-24].
Click [Start].

❼



Click [Yes] to restart the computer.

3-3 IfYou're Using a Macintosh

The included CD-ROM contains the "Mac OS Installation and Setup Guide," which explains how to install and set up the software and operation manuals for the Macintosh. If you're using a Macintosh, follow the steps below to display the file, then follow the explanation to perform installation and setup.

Procedure

❶ Insert the included CD-ROM into the CD-ROM drive.

❷ Double-click the [Roland GX-24] icon that appears on the desktop.

❸ Double-click the "Install_e.html" icon.
The [Mac OS Installation and Setup Guide] appears.

❹ Thereafter, follow the instructions in the [Mac OS Installation and Setup Guide] to install and set up the software and operation manuals.

Chapter 4: Performing Cutting

This describes basic cutting operations under Windows, using the included test-use material in the examples of cutting operations. It also describes the main operations when using other materials. For other operations not covered in this chapter, refer to the "GX-24 Reference Guide" (electronic-format manual).

If you're using a Macintosh, refer to the "Macintosh Cutting Guide" (electronic-format manual).

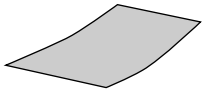
4-1 Practicing Cutting Using the Test-use Material

Now let's learn basic cutting operations while creating a sticker like the one shown in the figure below, using the included test-use material and CutStudio cutting program. Follow the procedure below to carry out the operations.

SALE

Step 1: Load Material

Load the included test-use material on the machine.

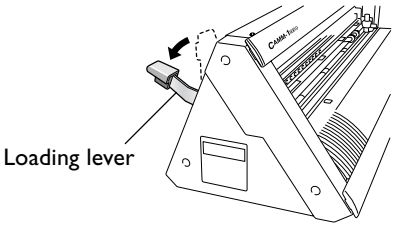


Test-use material
(Colored material)

Procedure

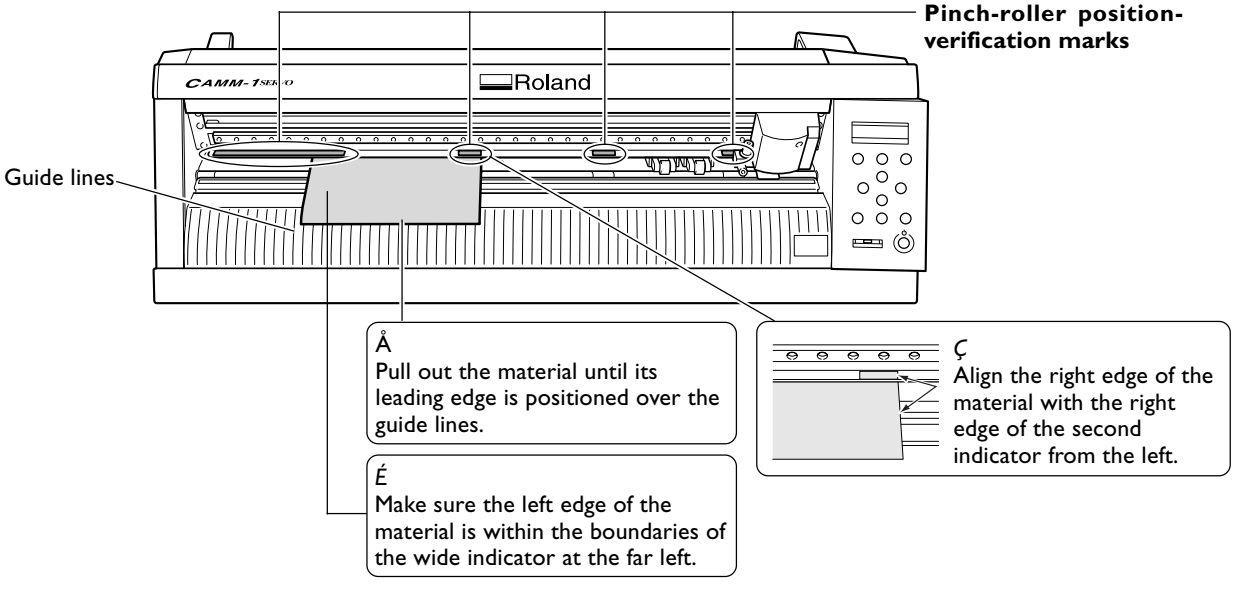
1. Load the material.

❶

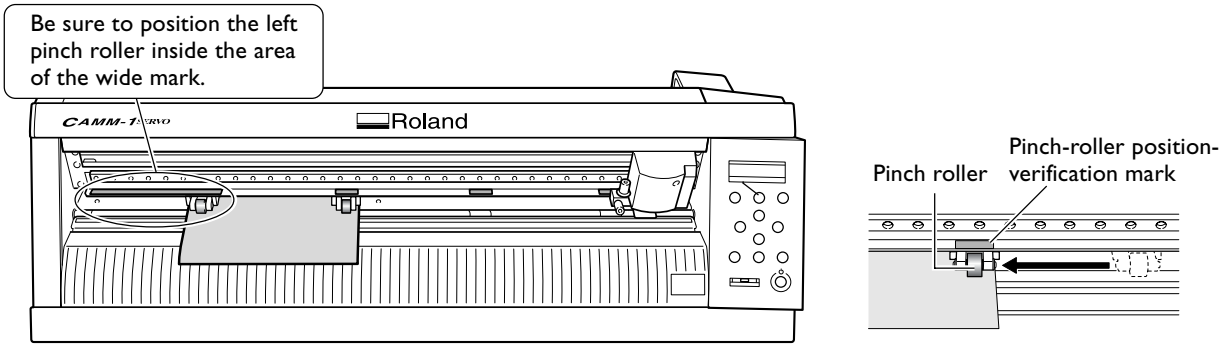


Make sure the loading lever is lowered.

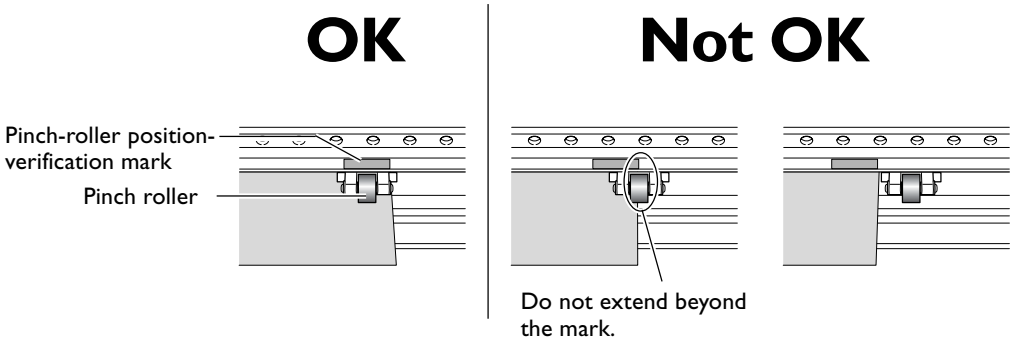
❷ Pass the test-use material through the machine as shown in the figure below.
Pass the material through so that its short side is at the front, toward you.



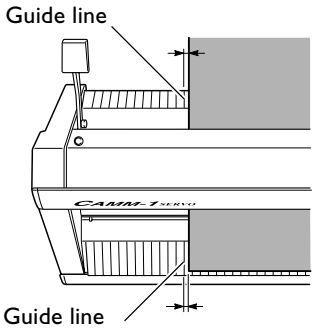
❸ Move the pinch rollers so that they are positioned at the edges of the material and also inside the areas of the pinch-roller position-verification marks.



Be careful to position the pinch rollers so that they are not too close to the edges of the material and do not extend beyond the edges of the material.

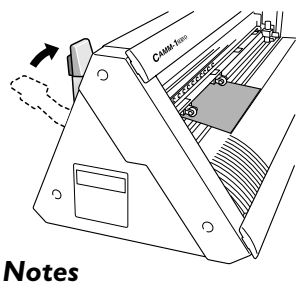


❹



Align the left edge of the material so that it lies parallel to the guide lines.

❺



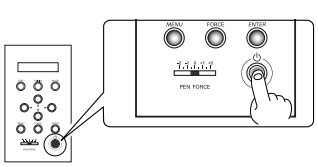
Raise the loading lever.
The material is secured in place.

Important Notes

➢Do not use excessive force when moving the loading lever. Doing so may damage it.
➢If the condition of the material is as described below, then stretch or flatten it before use.
•The material is curled upward.
•The leading edge of the material is bent or creased.

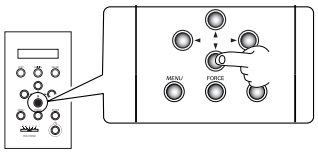
2. Switch on the power to the machine and make it ready to receive data from the computer.

❶



Press the power button.
The power comes on.

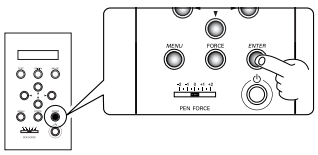
❷



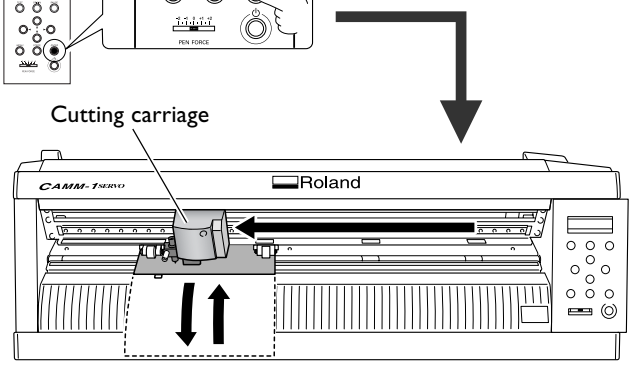
SELECT SHEET
* PIECE

Press ▼ to choose "PIECE."

❸



Press ENTER.
The cutting carriage moves to the left edge and the material moves forward and backward.



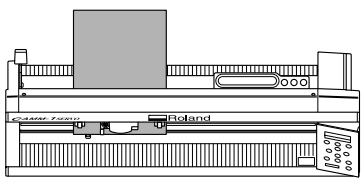
Width	W : 175mm
Length	L : 233mm

Then, the cuttable width and length appear on the display.

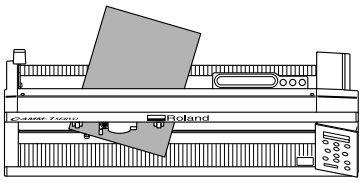
* These values are examples for reference only. The actual width and length vary according to the positions of the pinch rollers and other factors.

After operation stops, be sure to check and make sure the material has not come loose.

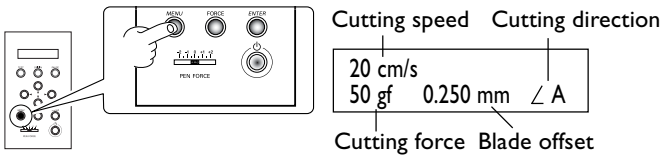
OK



Not OK



❹



Make sure that material feed was performed correctly, then press MENU.
Make sure the values for the items are displayed as shown in the figure. For detailed information about the values displayed, refer to the "GX-24 Reference Guide" (electronic-format manual).

This completes the procedure for loading the material. Go on to "Step 2: Install the Blade."

☞ p 40 "Step 2: Install the Blade"

If the material comes loose

If the material comes loose from the pinch rollers, take action as described below, then redo the procedure from the beginning of Step 1.

☞ p 36 "Step 1: Load Material"

❶ Hold down the power button for one second or longer.
The power is switched off. If this does not switch off the power, then disconnect the AC adapter from the machine.

❷ Lower the loading lever and remove the material.

If You're Using Lengthy Flat Material

Material such as the test-use material that is pre-cut to a certain length is called "flat material." When you're using ordinary flat material, choosing [PIECE] displays the width and length. However, if the length exceeds 1.6 meters, the length is not displayed when [PIECE] is chosen. If you're using flat material whose length is more than 1.6 meters, choose [ROLL], then make sure the material does not come loose.
For more information, refer to the page indicated below.

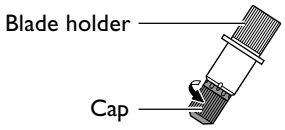
☞ p 53 "Using Roll Material or Lengthy Flat Material"

Step 2: Install the Blade

⚠CAUTION **Do not touch the tip of the blade with your fingers.**
Doing so may result in injury.

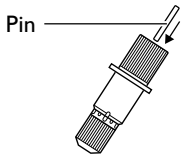
1. Insert a blade into the blade holder.

❶



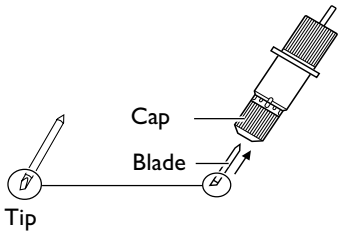
Turn the blade-holder cap to tighten completely (tighten until the cap cannot be turned further).

❷



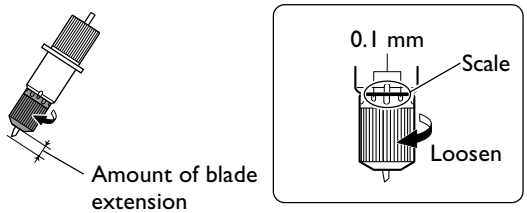
Insert the pin.
Leave the pin inserted.

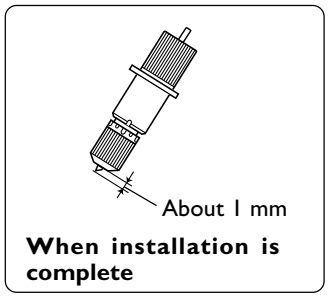
❸



Insert the blade.

❹





Adjust the amount of blade extension to match the material.
In this example, to adjust the amount of blade extension to the test-use material, turn the cap counterclockwise until the blade is extended by about 1 millimeter.
A change in extension of 0.5 mm can be made by rotating the cap one full turn.

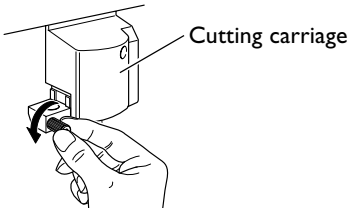
When You're Using a Variety of Materials

Depending on the type of material (such as when you're using material that has thin backing paper), it may become necessary to adjust the amount of blade extension. Also, when stable cutting results aren't obtained, changing the amount of blade extension may produce better results. For more information, refer to the page indicated below.

☞ p 56 "Adjusting the Cutting-in Amount"

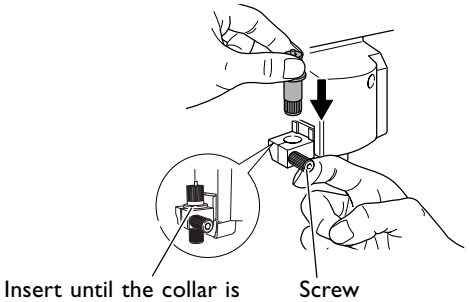
2. Install the blade holder.

❶



Loosen the screw of the cutting carriage.

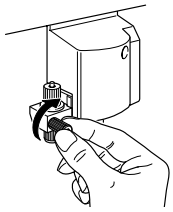
❷



Support the screw from below and insert the blade holder.

If installed without supporting the screw in this way, cutting quality may become poor.

❸



Tighten the screw.

Tug the blade holder upward to make sure it does not come loose.

This completes the procedure for installing the blade. Go on to "Step 3: Optimizing the Cutting Quality for the Material."

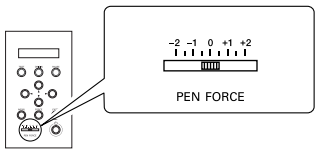
☞ p 42 "Step 3: Optimizing the Cutting Quality for the Material"

Step 3: Optimizing the Cutting Quality for the Material

To obtain high-quality cutting results, then before you perform the actual cutting, carry out a cutting test to check the cutting quality for the material.

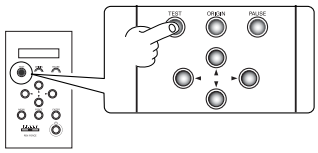
Performing a Cutting Test

❶



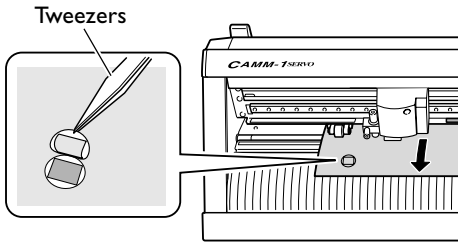
Make sure the [PEN FORCE] slider is centered (at "0" on the scale).

❷



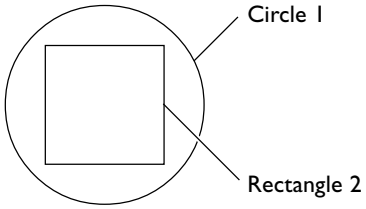
Hold down (TEST) for one second or longer.
The test pattern is cut.

❸



Press (▼) to feed the material toward the front, then use the included tweezers to peel off the cut shapes and check the cutting quality.

❹



Peel off circle 1.

Circle 1 peels off alone.
Proceed to ❺.

Rectangle 2 also peels off.
Refer to "Changing the Blade Force" on the following page and increase the blade force.

❺ Peel off rectangle 2.

The blade leaves faint traces on the material's backing paper.
The blade force is correct. Go on to "Step 4: Set the Origin Point."
☞ p 45 "Step 4: Set the Origin Point"

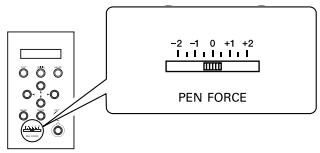
The blade trace is indistinct.
Refer to "Changing the Blade Force" on the following page and increase the blade force.

The blade trace is too deep and cuts into the backing paper.
Refer to "Changing the Blade Force" on the following page and reduce the blade force.

If the two shapes peel off together or show other problems with cutting, adjust the blade force and perform a cutting test a second time. First, change the blade force.

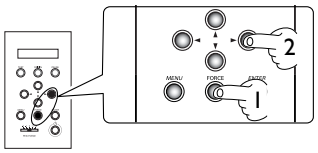
Changing the Blade Force

❶



Make sure the [PEN FORCE] slider is centered (at "0" on the scale).

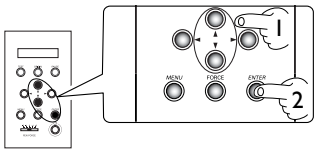
❷



FORCE 50 gf

Press FORCE.
Press ►.

❸

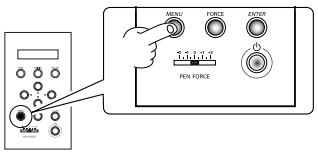


FORCE 50 gf
*60 gf

FORCE 60 gf

USE ▲ ▼ to make the setting for the value.
Press ENTER to enable the setting.

❹



20 cm/s
60 gf 0.250 mm ∠ A

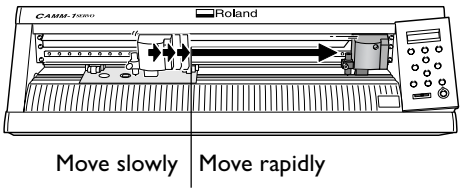
Press MENU or ◄ to go back to the screen shown at left.

After you have changed the blade force, to avoid wasting material, move the cutting carriage to the location right next to where you just performed the cutting test.
To move the cutting carriage, use the cursor keys.

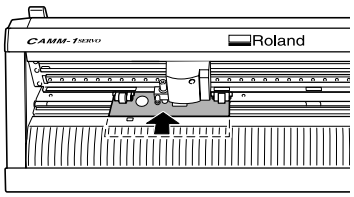
▸▸ Continued on the next page

Moving the Cutting Carriage

Pressing ◄ ► moves the cutting carriage, and pressing ▲ ▼ moves the material.
When you want to adjust the position a little at a time, press the key repeatedly, holding it down for only a short time with each press.
To move continuously for a long distance, hold down the key.
When you press and hold down the key, movement proceeds slowly for the first 20 millimeters of movement distance.
When the movement distances exceeds 20 millimeters, movement speeds up.

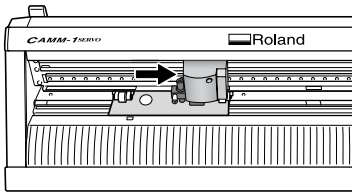


❶



Hold down ▲ until the material reaches the location where its movement stops.
The material moves toward the rear.

❷



Use ► to move the cutting carriage to the location where the cutting test can be performed.
Position at a location away from where you peeled off the material earlier.

Now you're ready to perform a cutting test again. Carry out the cutting test and check the cutting quality for the material.

☞ p 42 "Performing a Cutting Test"

Repeat the procedure described above until the test results are acceptable.
When you obtain acceptable results, go on to "Step 4: Set the Origin Point."

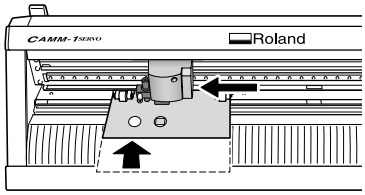
☞ p 45 "Step 4: Set the Origin Point"

Step 4: Set the Origin Point

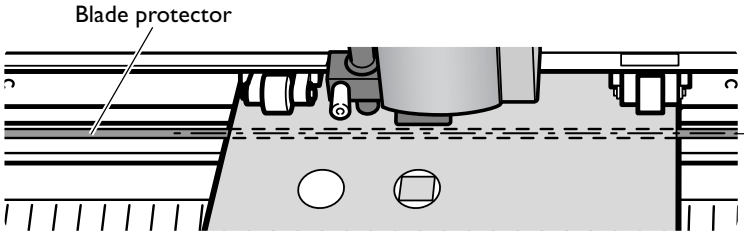
Set the origin point for determining the cutting position. If you have performed a cutting test, then move the cutting carriage to a location where it does not overlap with the test area. Doing this lets you use the material with minimal waste.

Procedure

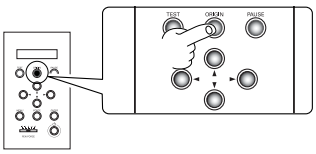
❶



Use ◄ to move the cutting carriage to the left edge.
Use ▲ to move the material to the rear, positioning the traces from the cutting test toward the front of the blade protector.



❷



ORIGIN SET

Screen 1

20 cm/s
50 gf 0.250 mm ∠ A

Screen 2

Hold down ORIGIN for one second or longer.
First, Screen 1 flashes, then when the settings are completed Screen 2 appears.

This completes all the preparations for cutting. Go on to "Step 5: Create Cutting Data."

☞ p 46 "Step 5: Create Cutting Data"

Step 5: Create Cutting Data

Use the Windows-based cutting program "CutStudio" to create cutting data.

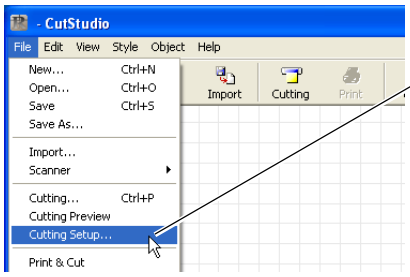
Important Note

If you are using Windows 2000/XP, log on to Windows as "Administrators" right.

1. Start CutStudio.

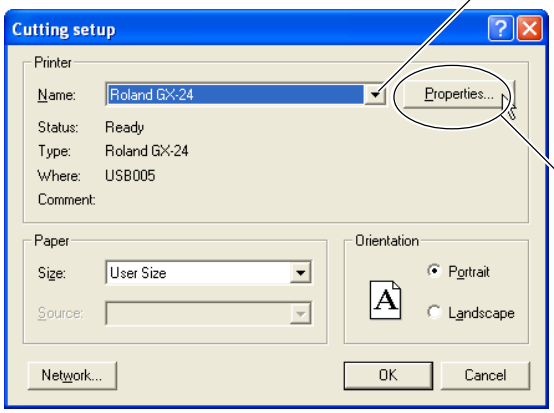
Click [Start], then point to [All Programs] (or [Program]).
Point to [Roland CutStudio], then click [CutStudio].

2. Make the settings for the cutting range.

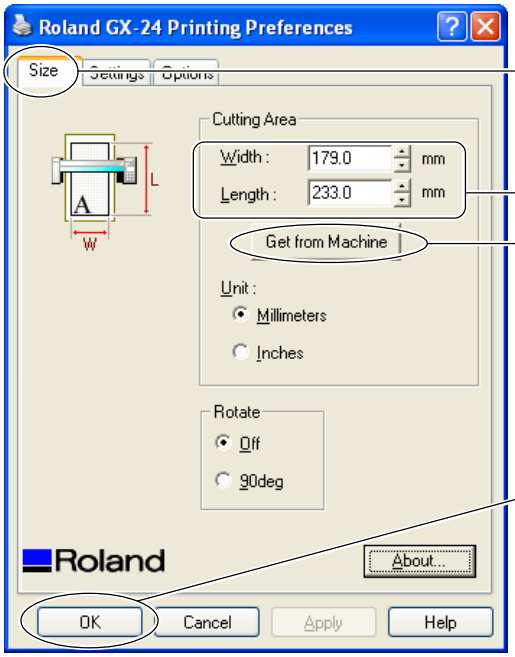


❶ **Click [File], then click [Cutting Setup].**
The [Cutting setup] screen appears.

❷ **For [Name], choose "Roland GX-24."**



❸ **Click [Properties].**
The [Roland GX-24 Printing Preferences] screen appears.



4 Click the [Size] tab.

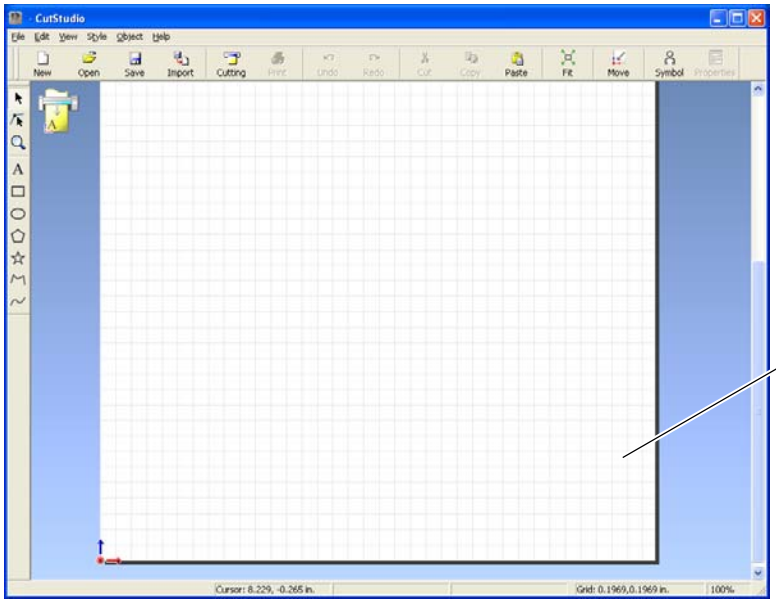
5 (*)Click [Get from Machine].
The cuttable range is displayed.

*** If you're using a serial connection, enter manually the values of the width (W) and length (L) displayed on the machine's display.**

6 Click [OK].

7 Click [OK] again to close the [Cutting setup] window.

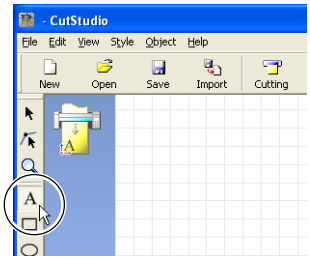
The cutting range has now been set.



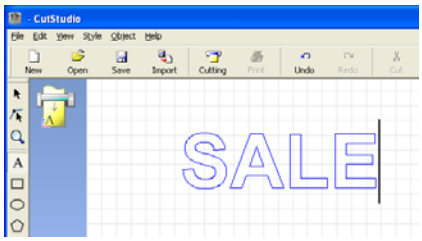
The white area is the cutting range. Text or shapes drawn outside this range are not cut.

3. Insert text and shapes to create the cutting data.

In this example, we'll enter the word "SALE" as the text and draw a frame around it to make it easier to peel off later.

❶ 

Click [A].

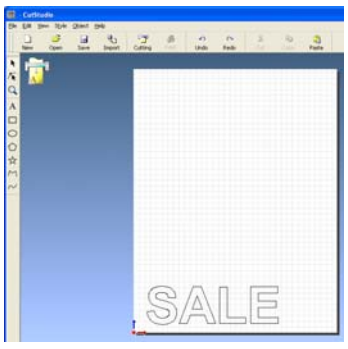
❷ 

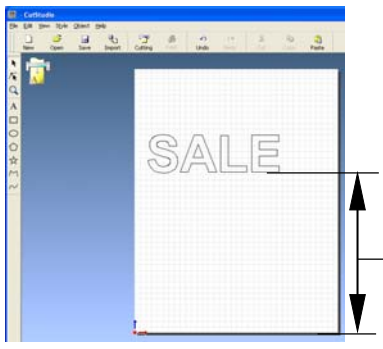
Click anywhere in the white area, then type in "SALE."

Arrange the text and shapes at the bottom of the window.

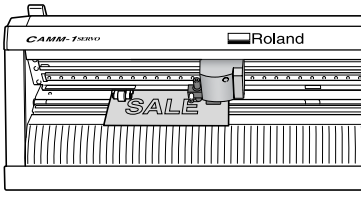
When you lay out text and shapes using CutStudio, it is a good idea to arrange them at the bottom of the window. This can prevent wasteful feed of material.
In the CutStudio window, the leading edge of the loaded material corresponds to the bottom edge of the cutting range. This means that when you lay out text at the bottom of the CutStudio window, the text is cut close to the leading edge of the material.

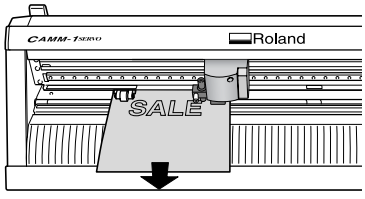
CutStudio screen





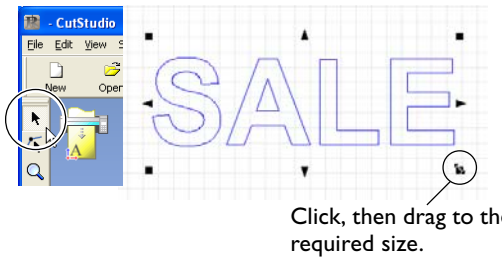
Actual cutting position





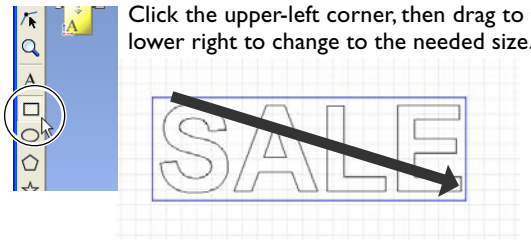
The material is fed over a distance equal to this length, then cutting starts.

❸



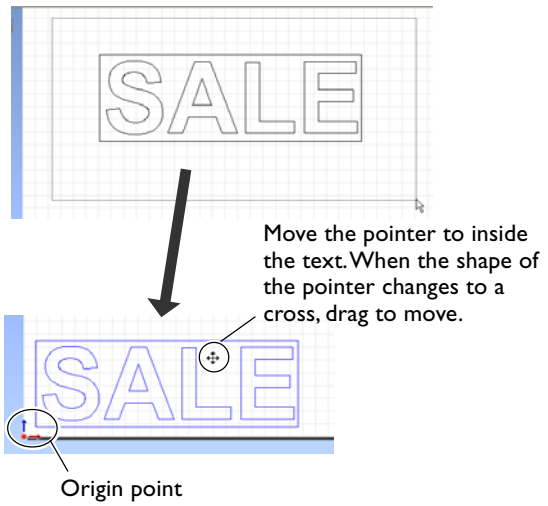
Click [ ].
Displayed around the text are ■ and ▼ symbols.
Drag the ■ and ▼ symbols for the text box to change the size of the text.

❹



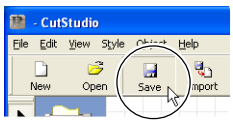
Click [ ].
Draw a rectangle around the "SALE" text.

❺



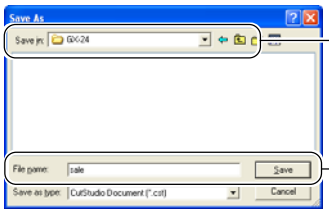
Click [ ].
Select an area containing the text and the rectangle.
When you select this, the line turns blue.
Move the position to the bottom of the window, near the origin point.

❻



Click the [Save] button.
The [Save As] screen appears.

❼



For "Save in," choose the folder you want.
Enter the file name, then click [Save].
The data you created is saved.

After the data is prepared, go on to "Step 6: Perform Cutting."

☞ p 46 "Step 5: Create Cutting Data"

Important Note When Saving Data

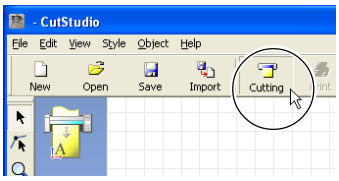
The cutting range you set here is not saved. The next time you import data, go to the [Cutting Setup] menu and redo the setting for the cutting range.

Step 6: Perform Cutting

After the data is prepared, you're finally ready to start cutting.

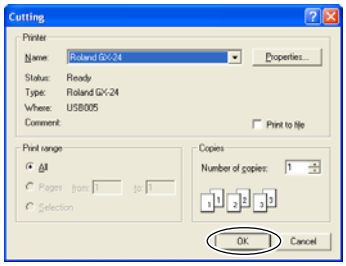
Procedure

❶

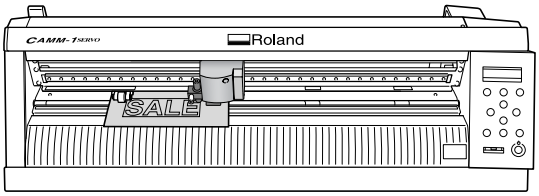


Click the [Cutting] button.

❷



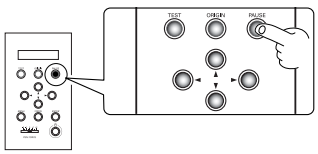
Click [OK].
The cutting data is sent from the computer and cutting starts.



Cutting of the "SALE" text and the box ends.
Go on to "Step 7: Remove the Material."
☞ p 51 "Step 7: Remove the Material"

To Stop Cutting While in Progress

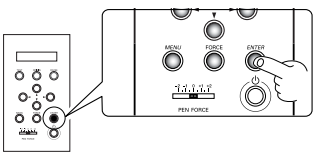
❶



CONTINUE ▸ PAUSE
STOP ▸ ENTER

Press PAUSE.

❷



CANCEL...

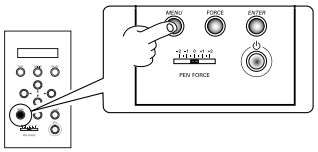
20 cm/s
50 gf 0.250 mm ∠ A

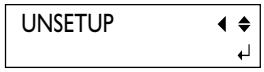
Press ENTER.
The data is canceled.

Step 7: Remove the Material

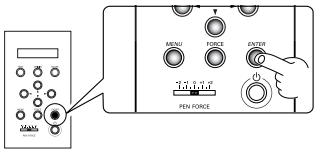
When cutting has ended, remove the material.

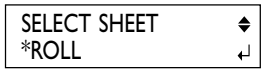
Procedure

❶ 

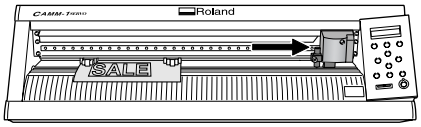


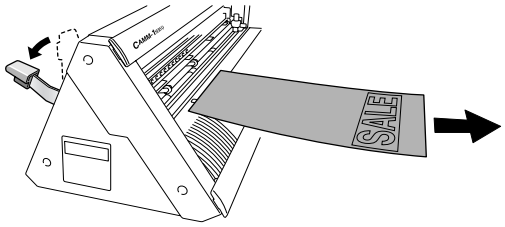
Press (MENU) several times to display the screen shown in the figure.

❷ 

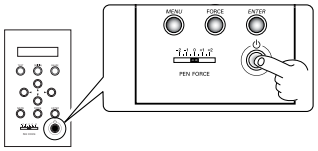


Press (ENTER).
The cutting carriage returns to the standby position.



❸ 

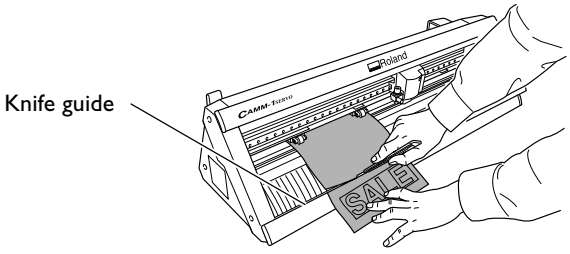
Lower the loading lever.
Remove the material.

❹ 

Hold down the power button for one second or longer.
The power is switched off.

When You Want to Cut Off Only the Portion That Has Been Cut

Draw the included knife along the knife guide to cut off the material.



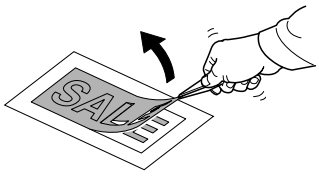
⚠CAUTION **Do not touch the tip of the blade with your fingers.**
Doing so may result in injury.

Step 8: Apply the Cut Material

To apply the material you have cut, you use the included application tape. Cut it to the required size for use. Before applying, thoroughly clean the surface where you want to affix the material to remove any dust or grease.

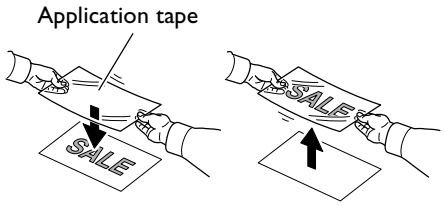
Procedure

❶



Use tweezers to peel off any excess material, leaving only the text.

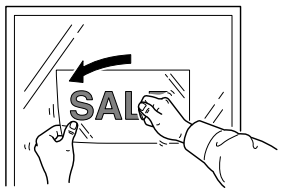
❷



Cut the application tape to the required size. Cover the cut material flush with the application tape to prevent any air from getting underneath, then transfer the material.

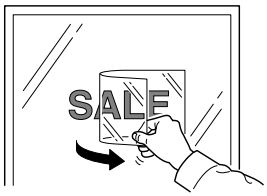
You can transfer the material easily by using a commercially available squeegee or the flat part of a ruler or the like to rub the cut material from above the application tape.

❸



Affix the material together with the joined application tape to the target object, then press down on it from above.

❹



Make sure the material is affixed to the object, then slowly peel off the application tape.

If air becomes trapped between the material and the application surface, forming an air bubble, then use a needle to pop the bubble and press out the air to form a complete seal.

❺

Applying the cut material ends.

Material After Cutting

Transfer the cut material to the application tape and affix it to the object as soon as possible. Any dust that builds up on the surface of the material can make it difficult for the application tape to stick.

4-2 Using a Variety of Materials

Using Roll Material or Lengthy Flat Material

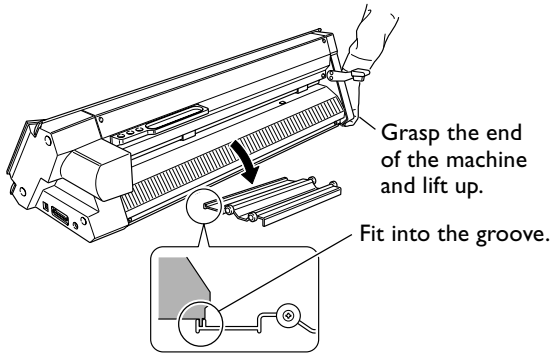
With this machine, you can use not only such standard-size material as the test-use material, but also lengthy flat material, as well as roll material (sold separately). To use flat material or roll material whose length is more than 1.6 meters, follow the steps below.

Procedure

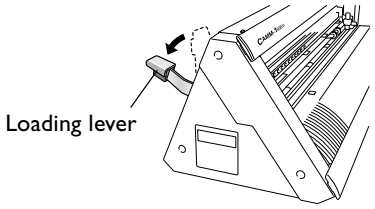
1. (For roll material) Install the roller base, then secure the roll material in place.

If you're using flat material that is longer than 1.6 meters, refer to "Step 1: Load Material" on page 36 to secure the material in place, then go on to the next page.

❶ Install the roller base.

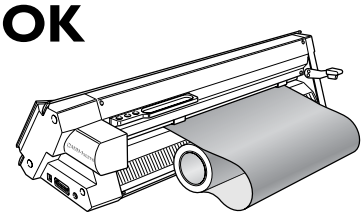


❷ Make sure that the loading lever is lowered.



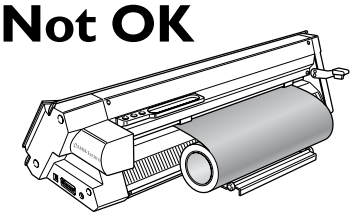
❸ Place the roll material on the roller base.
Pull out material, then pass its leading edge through the machine and out to the front of the machine.
Pull out a length of material that is slightly longer than the amount needed for cutting, leaving some slack.

OK



Be sure to pull out the material.
Loading material without pulling it out makes correct material feed impossible.

Not OK

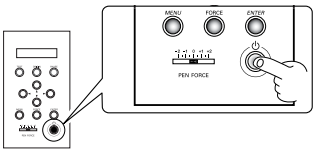


❹ Go to "Step 1: Load Material" on page 36 and carry out the operations from "1. Load the material. -- ❷" and after to secure the material in place.

▸▸ Continued on the next page

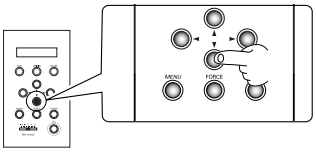
2. Switch on the power to the machine and make it ready to receive data from the computer.

❶



Press the power button.
The power comes on.

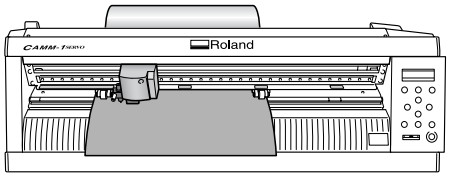
❷



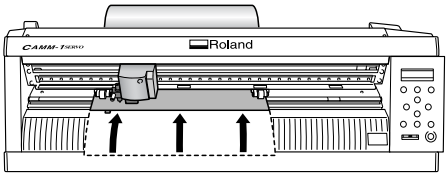
SELECT SHEET
* ROLL

Press ▼ and choose "ROLL" or "EDGE."

➢ Choosing "PIECE" here causes 1.6 meters of the material to be fed out and immediately pulled back.

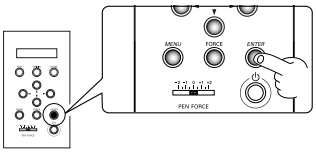


ROLL:
Cutting starts at the location where the material is secured in place.



EDGE:
The material moves to the rear and cutting starts at the leading edge of the roll.

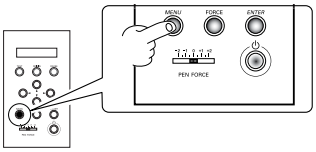
❸



W : 250mm
L : -----

Press ENTER.
The cuttable width is detected and appears on the display.

❹



Cutting speed
Cutting direction

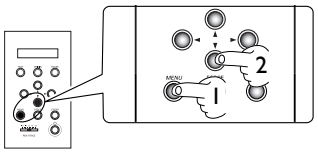
20 cm/s
50 gf 0.250 mm ∠ A

Cutting force
Blade offset

Press MENU.
Make sure the values for the items are displayed as shown in the figure.

3. Check whether the material comes loose.

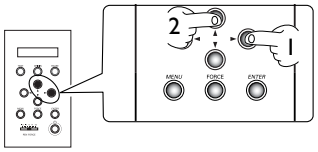
❶



CONDITION

Press MENU.
Press ▼.

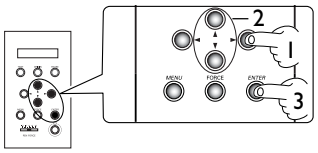
❷



AREA 1.0 m

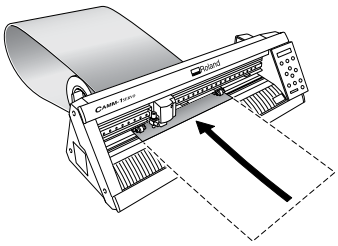
Press ►.
Press ▲.

❸

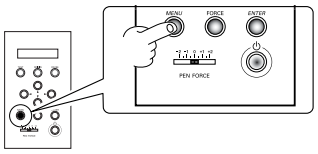


AREA 1.0 m
0.5 m

Press ►.
Use ▲ and ▼ to set the value for the required length of the material.
It is a good idea to set a value that is about 0.2 meters longer than the required material length.
Press ENTER to enable the setting.
The set length of the material moves out to the front, then is immediately pulled back and taken up again.



❹



20 cm/s
50 gf 0.250 mm ∠ A

Press MENU to go back to the screen in the figure.

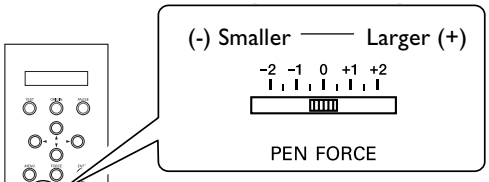
If the material comes loose from the pinch rollers, press the [PAUSE] key to stop operation. Then reload the material, starting over from the beginning.

Be sure to check the material feed. Starting cutting without checking this first may not only make correct cutting results impossible if a problem occurs in the material feed, but may also cause an error or malfunction, or damage the material.

Now you're finished loading the material. After carrying out a cutting test and adjusting the blade force, you can perform cutting.

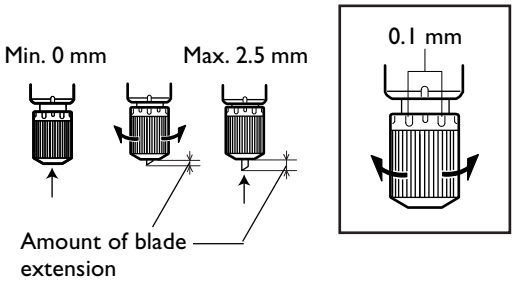
Fine-tuning the Blade Force

After you set the blade force using the [FORCE] menu, you can further fine-tune the blade force using the PEN FORCE slider. You operate this when you want to make the blade force slightly larger or smaller than the setting made using the menu.
Before you set the blade force using the [FORCE] menu, be sure to first move the PEN FORCE slider to its center setting (at "0" on the scale).



Adjustable range ±30 gf
➢ This value is only a suggestion. The accuracy of the value is not assured.

Adjusting the Cutting-in Amount

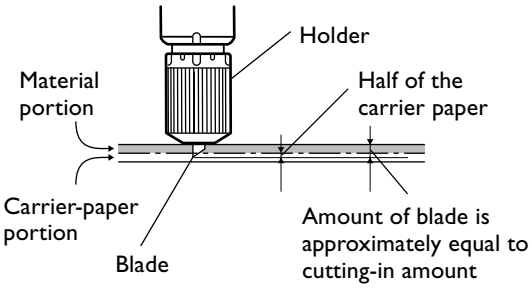


When you want to perform accurate and fine adjustment of the cutting-in amount, such as when cutting media with thin carrier paper, you can obtain good results by adjusting the tip of the blade.
Turn the cap portion of the blade holder to adjust the amount of blade extension.
A change in extension of 0.5 mm can be made by rotating the cap one full turn.

Rough Estimate for the Amount of Blade Extension

Use the following dimension as a rough estimate for setting the amount of blade extension.

$$\text{Amount of blade extension} = \text{Thickness of the media portion} + \frac{\text{Thickness of the carrier paper}}{2}$$



Other Features

For descriptions and more information about other features and menu items, refer to the "GX-24 Reference Guide" (electronic-format manual).

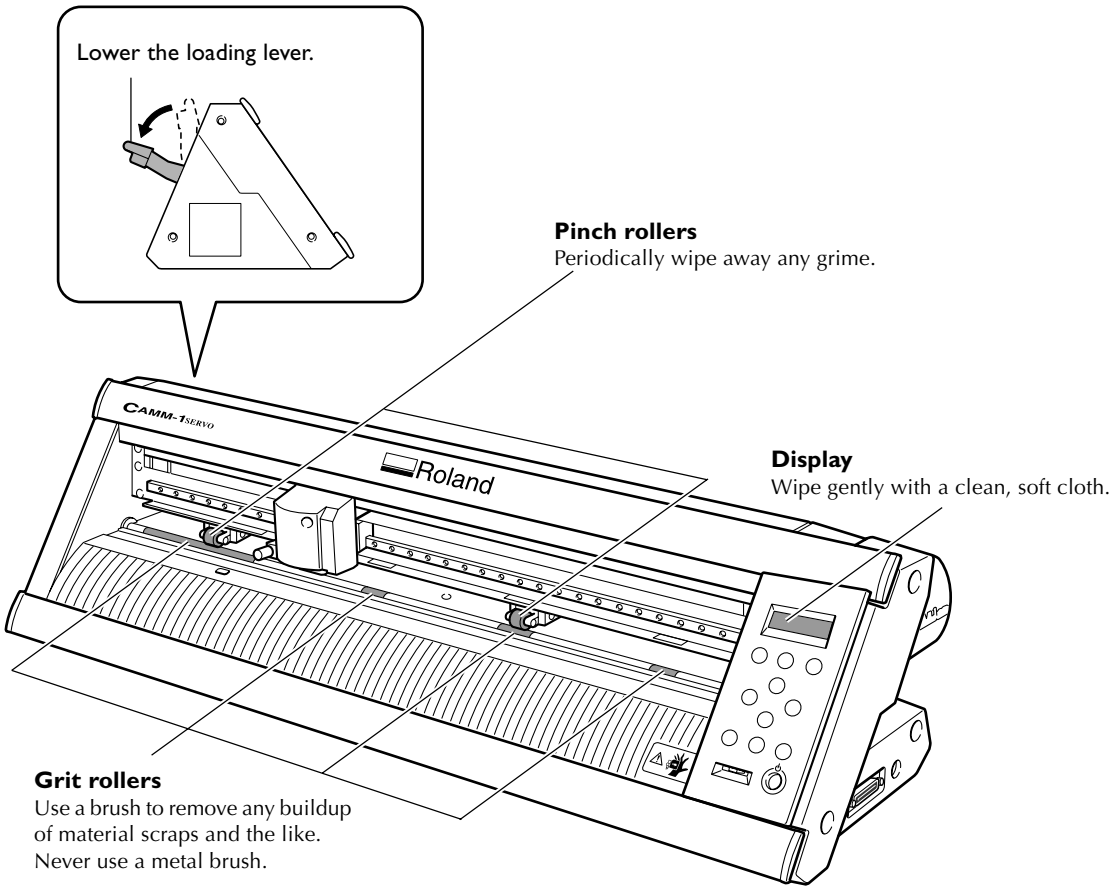
☞ p 11 "About the Documentation"
☞ p 29 "Installing the Operation Manuals"

Chapter 5: Maintenance

This describes how to clean the machine and replace the blade.

5-1 Cleaning

Before attempting cleaning, lower the loading lever and remove the material.
Clean by wiping with a cloth moistened by water then wrung dry.



Notes

➢Never use a solvent such as thinner or benzine.
➢Never attempt to oil or lubricate the machine.

⚠CAUTION **Before attempting cleaning, switch off the power.**
Sudden movement of the machine may cause injury.

5-2 Replacing the Blade

If the blade becomes dull, replace it with the included replacement blade.

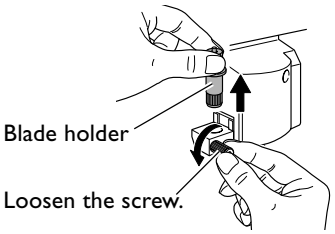
Before replacing the blade, remove the material.

☞ p 51 "Step 7: Remove the Material"

⚠CAUTION **Do not touch the tip of the blade with your fingers.**
Doing so may result in injury.

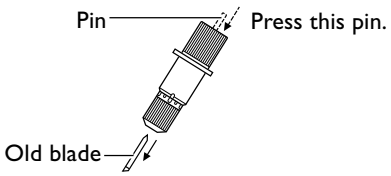
Procedure

❶



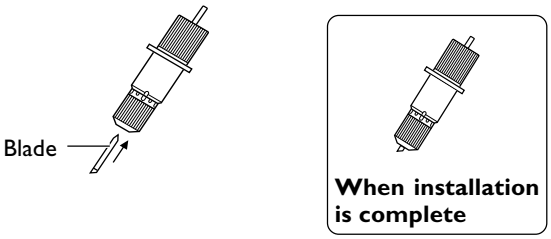
Remove the blade holder.

❷



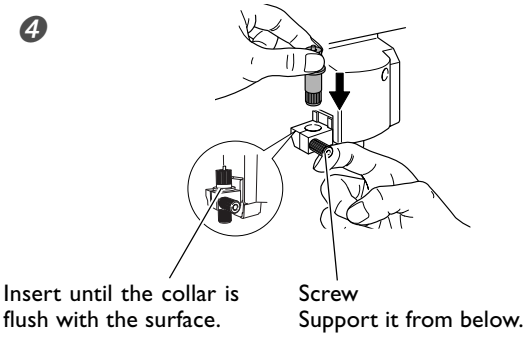
Remove the old blade.

❸



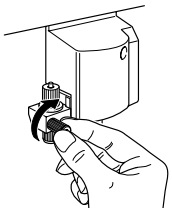
Install a new blade.

❹



Support the screw from below and insert the blade holder.
If installed without supporting the screw in this way, cutting quality may become poor.

❺



Tighten the screw.
Tug the blade holder upward to make sure it does not come loose.

Chapter 6: What to Do If

6-1 What to Do If

This section describes what to do if you encounter a problem while using the machine. Refer to this first, before assuming that a malfunction has occurred. Also, remedies for symptoms not described here are covered in the "GX-24 Reference Guide" (electronic-format manual). Refer to it as well.

The Machine Doesn't Run

Is the power switched on?

Make sure the power button is illuminated. If the power button is dark, press it to switch on the power.

Is the power cord connected correctly?

If it is not connected correctly, refer to the page indicated below and connect it properly.

☞ p 22 "Connecting the Power Cord"

Is material loaded?

Check and make sure of the following two points.

- The loading lever is raised.
- The display shows the cutting conditions or the width and length.

Is the cable used for the connection to the computer connected correctly?

If it is not connected correctly, refer to the page indicated below and connect it properly.

☞ p 23 "Connecting to the Computer"

Are the settings for the driver correct?

Make sure the communication port is set correctly.

The Material Comes Loose during Cutting

Is the loading lever lowered?

The material is not secured in place. Make sure the pinch rollers are inside the edges of the material and inside the areas of the pinch-roller position-verification marks, then raise the loading lever.

Is the material making contact somewhere while cutting is in progress?

Make sure the edges of the material do not touch the inner surfaces of the machine during cutting. Such contact may not only damage the material, but may make normal material feed impossible or cause the positioning of the material to slip.

Uncut Areas Remain or Cut Edges Cannot Be Cut Cleanly

Are the blade and blade holder securely mounted?

Make sure the screw is tightened securely.

Is the tip of the blade broken?

If the blade tip is broken, then replace the blade with a new one.

Is there any buildup of dust or material adhesive on the tip of the blade?

Check if there are any dirty deposits on the blade. If dirty, remove and clean the blade.

Is there any buildup of pieces of material or dust inside the blade holder?

Take off the tip of the blade holder and remove any pieces of material inside.

Is the blade force appropriate for the material being cut?

Carry out a cutting test and adjust the blade force until cutting can be performed without problem.

Is the blade protector damaged or deformed?

If the blade protector is damaged, correct cutting of material may be impossible even if the machine's settings and the installation of the blade and blade holder are all correct. If this happens, contact your authorized Roland DG Corp. dealer or service center.
(Replacement of the blade protector is a charged service operation.)

Chapter 7: Appendix

7-1 Usable Materials

Conditions for Usable Materials

Loadable material width

50 to 700 mm (2 to 27-1/2 in.)

Loadable material length

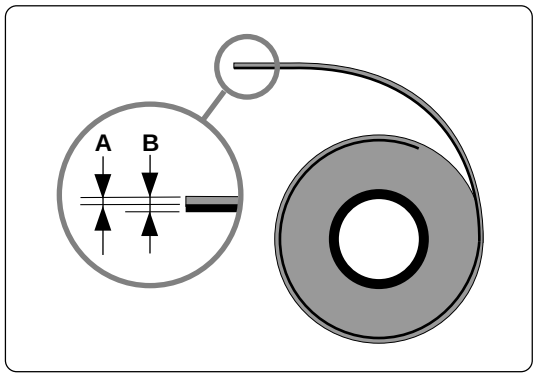
Flat Material: 100 mm (3-15/16 in.) or more
Roll Material: no restriction

A) Cuttable material thickness

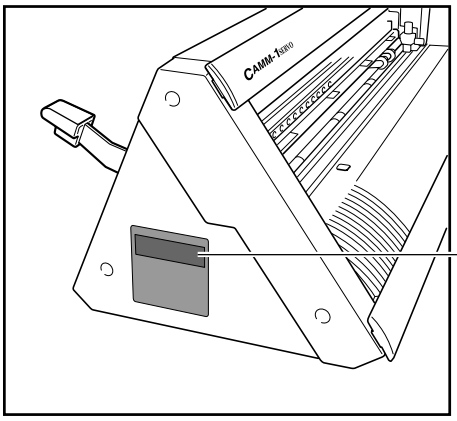
Material-portion thickness of 0.1 (0.004 in.) mm or less

B) Maximum media thickness (including backing paper)

0.3 mm (0.012 in.) or less
(Material measuring up to 1.0 mm (0.039 in.) can be loaded.)

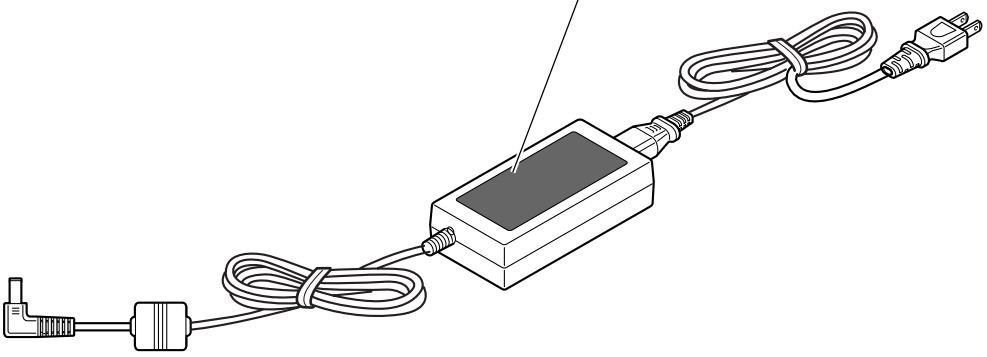


7-2 Locations of the Power Rating and Serial Number Labels



Serial Number
This is required when you seek maintenance, servicing, or support. Never peel off the label or let it get dirty.

Power Rating
Use an electrical outlet that meets the requirements for voltage, frequency, and amperage given here.



7-3 Specifications

		GX-24
Driving method		Digital controll servo motor
Cutting method		Media-moving method
Loadable material width		50 to 700 mm (2 to 27-1/2 in.)
Maximum cutting area		Width: 584 mm (22-15/16 in.) Length: 24998 mm (984-1/8 in.)
Acceptable tool		Special blade for CAMM-1 series
Maximum cutting speed		500 mm/s (All direction)
Cutting speed		10 to 500 mm/s (All direction)
Blade force		30 to 250 gf
Mechanical resolution		0.0125 mm/step (0.000492 in./step)
Software resolution		0.025 mm/step (0.000984 in./step)
Distance accuracy (*1)		Error of less than ±0.2% of distance traveled, or ±0.1 mm, whichever is greater
Repetition accuracy (*1) (*2)		±0.1 mm or less
Alignment accuracy for printing and cutting when loading printed material (*1) (*3)		±1 mm or less for movement distance of 210 mm or less in material-feed direction and movement distance of 170 mm or less in width direction (Excluding effects of printer and/or material)
Interface		USB interface (compliant with Universal Serial Bus Specification Revision 1.1) Serial (RS-232C)
Replot memory		800 KByte
Instruction system		CAMM-GL III
Power supply		Dedicated AC adapter Input: AC 100 to 240 V ±10 % 50/60 Hz 1.7 A Output: DC 24 V, 2.8 A
Power consumption		Approx. 30 W (including AC adapter)
Acoustic noise level	During operation	70 dB (A) or less (according to ISO 7779)
	During standby	40 dB (A) or less (according to ISO 7779)
Dimensions		855 (W) X 315 (D) X 240 (H) mm (33-11/16 (W) x 12-3/8 (D) x 9-7/16 (H) in.)
Weight		16 kg (35 lb.)
Packed dimensions		1050 (W) X 450 (D) X 390 (H) mm (41-3/8 (W) x 17-3/4 (D) x 15-3/8 (H) in.)
Packed weight		22 kg (49 lb.)
Environment		Temperature: 5 to 40˚C (41 to 104˚F), humidity: 35 to 80% (no condensation)
Included items		AC adapter, power cord, blade, blade holder, separating knife, roller base, tweezers, test-use material, application tape, USB cable, CD-ROM, user's manual

*1
According to material and cutting conditions as specified by Roland DG Corp. (using the PNS-24 stand, sold separately).

*2
➢ Excluding material expansion and contraction.
➢ Provided that media length is under 3000 mm

*3
According to Roland DG Corp. measurement criteria.
➢ Using the included software from Roland DG Corp.
➢ Using a laser or ink-jet printer having a resolution of 720 dpi or better.
➢ Excluding glossy or laminated material.
➢ Excluding effects of printing distortion due to printer precision and effects of material expansion, contraction, or warping.
➢ Depending on the ink (black) employed by the printer used, correct sensing may not be possible.

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