Roland

ColorCAMM PRO

Sign Maker by Roland DG Corporation

USER'S MANUAL

PC-600

Thank you very much for purchasing the PC-600.

- 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.

NOTICE

Grounding Instructions

Do not modify the plug provided - if it will not fit the outlet, have the proper outlet installed by a qualified electrician.

Check with qualified electrician or service personnel if the grounding instructions are not completely understood, or if in doubt as to whether the tool is properly grounded.

Use only 3-wire extension cords that have 3-prong grounding plugs and 3-pole receptacles that accept the tool's plug.

Repair or replace damaged or worn out cord immediately.

Operating Instructions

KEEP WORK AREA CLEAN. Cluttered areas and benches invites accidents.

DON'T USE IN DANGEROUS ENVIRONMENT. Don't use power tools in damp or wet locations, or expose them to rain. Keep work area well lighted.

DISCONNECT TOOLS before servicing; when changing accessories, such as blades, bits, cutters, and like.

REDUCE THE RISK OF UNINTENTIONAL STARTING. Make sure the switch is in off position before plugging in.

USE RECOMMENDED ACCESSORIES. Consult the owner's manual for recommended accessories. The use of improper accessories may cause risk of injury to persons.

NEVER LEAVE TOOL RUNNING UNATTENDED. TURN POWER OFF. Don't leave tool until it comes to a complete stop.

ROLAND DG CORPORATION
1-6-4 Shinmiyakoda, Hamamatsu-shi, Shizuoka-ken, JAPAN 431-2103
MODEL NAME : See the MODEL given on the rating plate.
RELEVANT DIRECTIVE : EC MACHINERY DIRECTIVE (98/37/EC)
EC LOW VOLTAGE DIRECTIVE (73/23/EEC)
EC ELECTROMAGNETIC COMPATIBILITY DIRECTIVE (89/336/EEC)

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.

Table of Contents

To Ensure Safe Use

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.

⚠WARNING

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

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

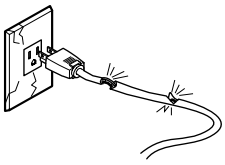
Ground the unit with the ground wire.
Failure to do so may result in risk of electrical shock in the even of a mechanical problem.

Do not use while in an abnormal state (i.e., emitting smoke, burning odor, unusual noise, or the like).
Doing so may result in fire or electrical shock.
Immediately switch off first the sub power, then the main power, unplug the power cord from the electrical outlet, and contact your authorized Roland DG Corp. dealer or service center.

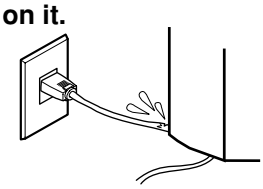
Use only with the power cord included with this product.
Use with other than the inculuded power cord may lead to fire or electrocution.

⚠CAUTION

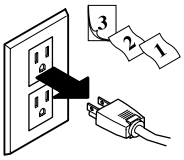
Do not use with a damaged power cord or plug, or with a loose electrical outlet.
Use with any other power supply may lead to fire or electrocution.



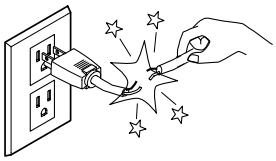
Do not injure or modify the electrical power cord, nor subject it to excessive bends, twists, pulls, binding, or pinching, nor place any object of weight on it.
Doing so may damage the electrical power cord, leading to electrocution or fire.



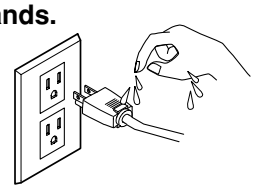
When not in use for extended periods, unplug the power cord from the electrical outlet.
Failure to do so may result in danger of shock, electrocution, or fire due to deterioration of the electrical insulation.



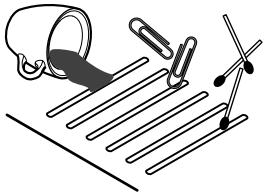
When unplugging the electrical power cord from the power outlet, grasp the plug, not the cord.
Unplugging by pulling the cord may damage it, leading to fire or electrocution.



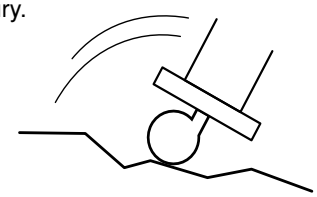
Do not attempt to unplug the power cord with wet hands.
Doing so may result in electrical shock.



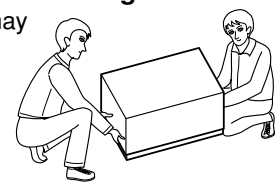
Do not allow liquids, metal objects or flammables inside the machine.
Such materials can cause fire.



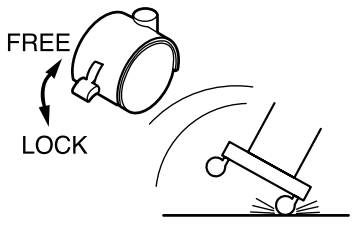
Install in a level and stable location.
Otherwise the unit may tip over and cause injury.



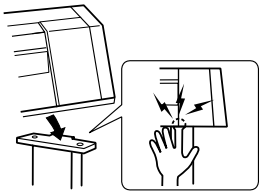
Unpacking, installing, or relocating the unit are operations which must be carried out by two or more persons holding the unit at its bottom surface on the left and right sides.
Failure to do so may result in dropping the unit, leading to injury.



Release the caster locks for the stand before attempting to move.
Otherwise the unit may tip over and cause injury.

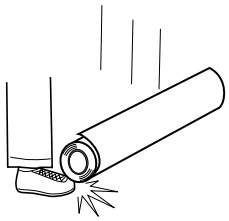


Use care to avoid pinching the fingers when placing the unit on the stand.
Doing so may result in injury.

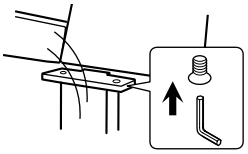


⚠CAUTION

Roll material must be placed at a predetermined shaft position.
Failure to do so may result in falling of the roll, leading to injury.



Use the joining screws to secure the unit to the stand.
Failure to do so may result in falling of the unit, leading to injury.



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

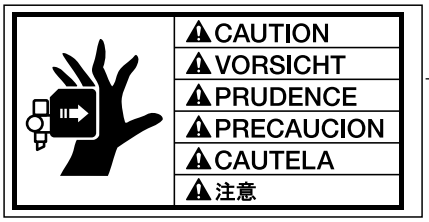
Make sure the power to the unit is off before attempting to replace the separating knife.
Doing so may result in injury.

Do not allow hands or hair to come near the platen while the carriage is in motion.
Failure to do so may result in injury due to sudden movement of the carriage when the power is switched on/off, when the sheet loading lever is raised or lowered, or when the [CUT TEST] key, [SHEET CUT] key, [DATA CLEAR] key, or [HEAD CLEANING] key is pressed.

Do not touch the area around the printing carriage with the hands.
Failure to do so may result in burns.

About the Labels Affixed to the Unit

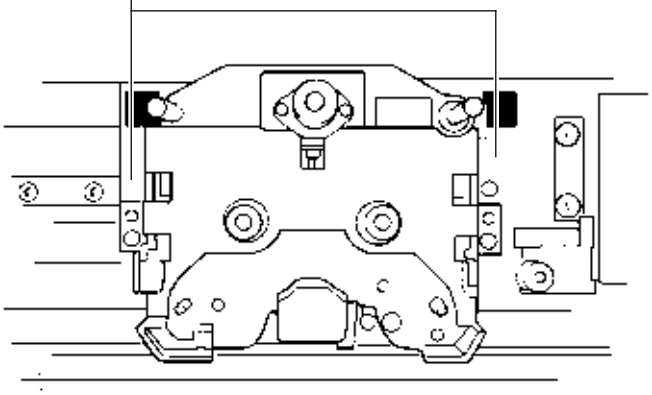
These labels are affixed to the body of this product.
The following figure describes the location.



Do not allow hands or hair to come near the platen while the carriage is in motion.

Model name
Rating label
Use a rated power supply.

Do not touch the area around the printing carriage with the hands.



In addition to the ⚠**WARNING** and ⚠**CAUTION** symbols, the symbols shown below are also used.

NOTICE : Indicates information to prevent machine breakdown or malfunction and ensure correct use.

: Indicates a handy tip or advice regarding use.

Pour utiliser en toute sécurité

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.

⚠ATTENTION

Ne pas démonter, réparer ou modifier.
Le non-respect de cette consigne pourrait causer un incendie ou provoquer des opérations anormales entraînant des blessures.

Mettre l'appareil à la masse avec une prise de terre.
Le non-respect de cette consigne pourrait entraîner des décharges électriques en cas de problème mécanique.

N'utilisez que le cordon d'alimentation fourni avec ce produit.
L'utilisation avec un autre cordon d'alimentation que celui fourni pourrait entrainer un risque d'incendie ou d'électrocution.

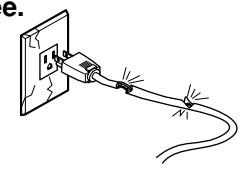
Ne pas utiliser avec une alimentation électrique ne respectant pas les caractéristiques indiquées sur l'appareil.
Une utilisation avec toute autre alimentation électrique pourrait provoquer un incendie ou une électrocution.

Ne pas utiliser si l'appareil est dans un état anormal (c'est-à-dire s'il y a émission de fumée, odeur de brûlé, bruit inhabituel etc.).
Le non-respect de cette consigne pourrait provoquer un incendie ou des décharges électriques.
Couper immédiatement l'alimentation secondaire et ensuite l'alimentation principale. Débranchez le fil électrique et contacter votre revendeur ou votre centre de service de la société Roland DG autorisé.

⚠PRUDENCE

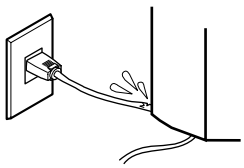
Ne pas utiliser avec une fiche ou un fil électrique endommagé ou avec une prise mal fixée.

Une négligence à ce niveau pourrait provoquer un incendie ou une électrocution.



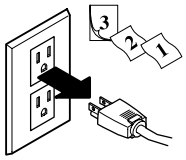
Ne pas endommager ou modifier le fil électrique. Ne pas le plier, le tordre, l'étirer, l'attacher ou le serrer de façon excessive. Ne pas mettre d'objet ou de poids dessus.

Une négligence à ce niveau pourrait endommager le fil électrique ce qui risquerait de provoquer une électrocution ou un incendie.



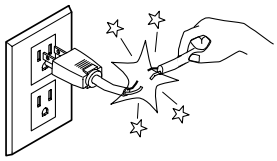
Débrancher le fil lorsque l'appareil reste inutilisé pendant une longue période.

Une négligence à ce niveau pourrait provoquer des décharges électriques, une électrocution ou un incendie dû à une détérioration de l'isolation électrique.



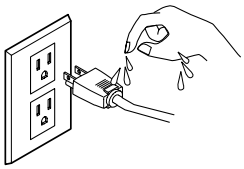
Saisir la fiche et non le fil électrique lorsque vous débranchez.

Débrancher en tirant sur le fil pourrait l'endommager et risquer de provoquer un incendie ou une électrocution.



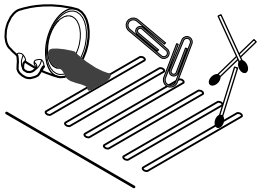
Ne pas essayer de débrancher le fil avec des mains mouillées.

Une négligence à ce niveau pourrait provoquer des décharges électriques.



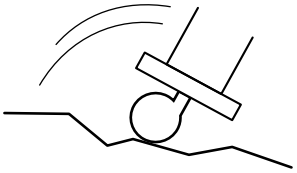
Ne pas introduire de liquide, d'objet métallique ou inflammable dans l'appareil.

Ce genre de matériel peut provoquer un incendie.



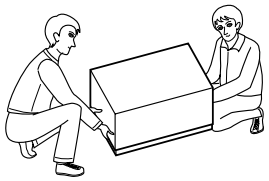
Installer dans un endroit stable et de niveau.

Sinon l'appareil pourrait se renverser et provoquer des blessures.



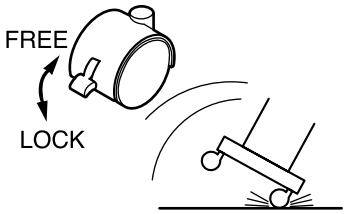
Le déballage, l'installation et le déplacement de l'appareil doivent être effectués par deux personnes ou plus.

Le non-respect de cette consigne pourrait causer des défauts dans l'appareil entraînant des blessures.



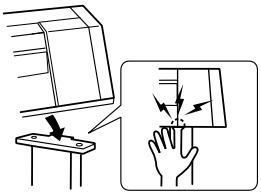
Débloquer le mécanisme d'arrêt des roulettes du support avant de le déplacer.

Sinon l'appareil pourrait se renverser et provoquer des blessures.



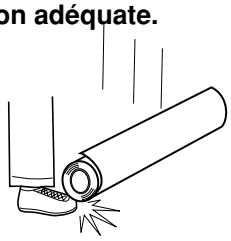
Manipuler avec précaution pour éviter de se coincer les doigts lors de l'installation de l'appareil sur le support.

Une négligence à ce niveau pourrait provoquer des blessures.

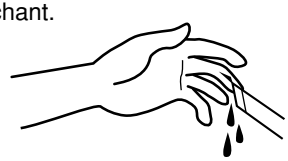


⚠PRUDENCE

Le rouleau doit être placé quand la barre est en position adéquate.
Une négligence à ce niveau pourrait provoquer la chute du rouleau et causer des blessures.

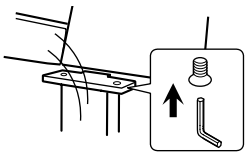


Ne pas toucher à l'extrémité de la lame avec vos doigts.
Vous risqueriez de vous blesser en y touchant.



Ne pas laisser vos cheveux ou vos mains à proximité du rouleau quand le chariot est en mouvement.
Le défaut de ce faire peut entraîner des blessures dues au déplacement rapide du chariot lors de la mise sous tension ou hors tension, lorsque le levier de chargement de la feuille est levé ou abaissé, ou lorsque les clés [CUT TEST], [SHEET CUT], [DATA CLEAR] ou [HEAD CLEANING] sont enfoncées.

Utiliser les vis fournies pour bien fixer l'appareil sur le support.
Le non-respect de cette consigne pourrait causer des défauts dans l'appareil entraînant des blessures.

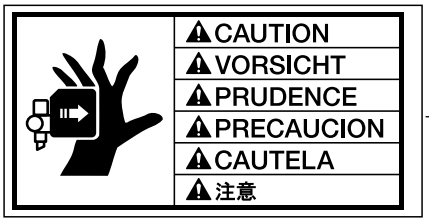


S'assurer que l'appareil est hors tension avant d'essayer de remplacer la lame séparatrice.
Une négligence à ce niveau pourrait provoquer des blessures.

Ne touchez pas avec les mains la zone située autour du chariot d' impression.
Tout manquement à cette consigne pourrait provoquer des brûlures.

À propos des étiquettes collées sur l'appareil

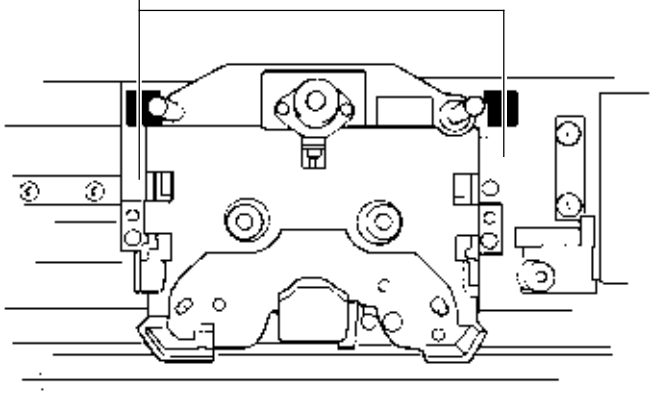
Ces étiquettes sont collées à l'extérieur de l'appareil.
Les dessins suivants indiquent l'endroit et le contenu des messages.



N' approchez pas vos mains ni vos cheveux du plateau de travail quand le chariot est en mouvement.

Nom du modèle
Étiquette des caractéristiques électriques
Utiliser l'alimentation appropriée

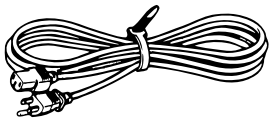
Ne touchez pas avec les mains la zone située autour du chariot d' impression.



Chapter 1 - Introduction

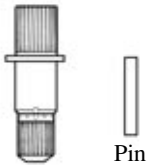
1-1 Checking Supplied Items

Check the following to make sure that you received all the items that were shipped along with the unit.

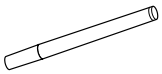


Power cord

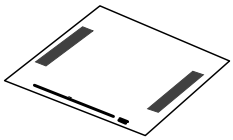
Blade (carbide)



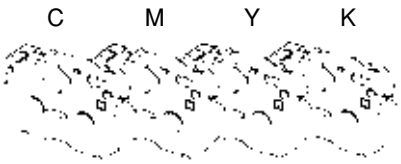
Blade holder



Head cleaner

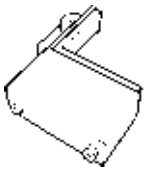


Cleaning sheet



Thermal transfer ribbon cartridge (resin)

Alignment tool

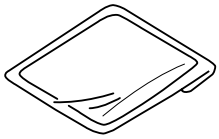


Brake

Replacement blade for separating knife

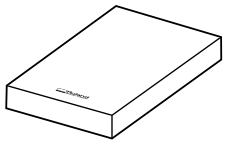
Material for test cuts

Cleaning pad



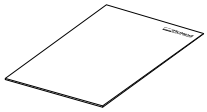
Dust cover

PC-600 DRIVER for Windows® 98/95



Roland COLORCHOICE®

Notes on usage



Quick reference guide

1-2 Set-up and Connections

⚠WARNING

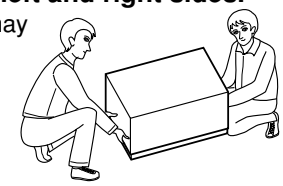
Ground the unit with the ground wire.
Failure to do so may result in risk of electrical shock in the even of a mechanical problem.

Use only with the power cord included with this product.
Use with other than the inculuded power cord may lead to fire or electrocution.

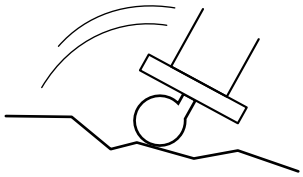
Do not use with any electrical power supply that does not meet the ratings displayed on the unit.
Use with any other power supply may lead to fire or electrocution.

⚠CAUTION

Unpacking, installing, or relocating the unit are operations which must be carried out by two or more persons holding the unit at its bottom surface on the left and right sides.
Failure to do so may result in dropping the unit, leading to injury.



Install in a level and stable location.
Otherwise the unit may tip over and cause injury.



NOTICE

Do not hold the upper portion of the PC-600 when installing or moving the unit.

Avoid installing the PC-600 in the following conditions, as this may result in damage to the machine.

- Avoid use in locations subject to high levels of electrical noise (near motors, generators, transformers, and the like).
- Avoid use in locations subject to high humidity or dust.
- The unit becomes hot during use. Do not install in locations where heat radiation is inadequate (i.e., areas with poor ventilation).
- Do not install in locations subject to strong vibration.
- Do not install in a location exposed to direct sunlight or other strong light.
- Install in an environment having a suitable operating temperature and humidity.

Always make sure that the main power switch is switched off on both the computer and the PC-600 whenever any cables are connected or disconnected.

For Better Color Reproduction

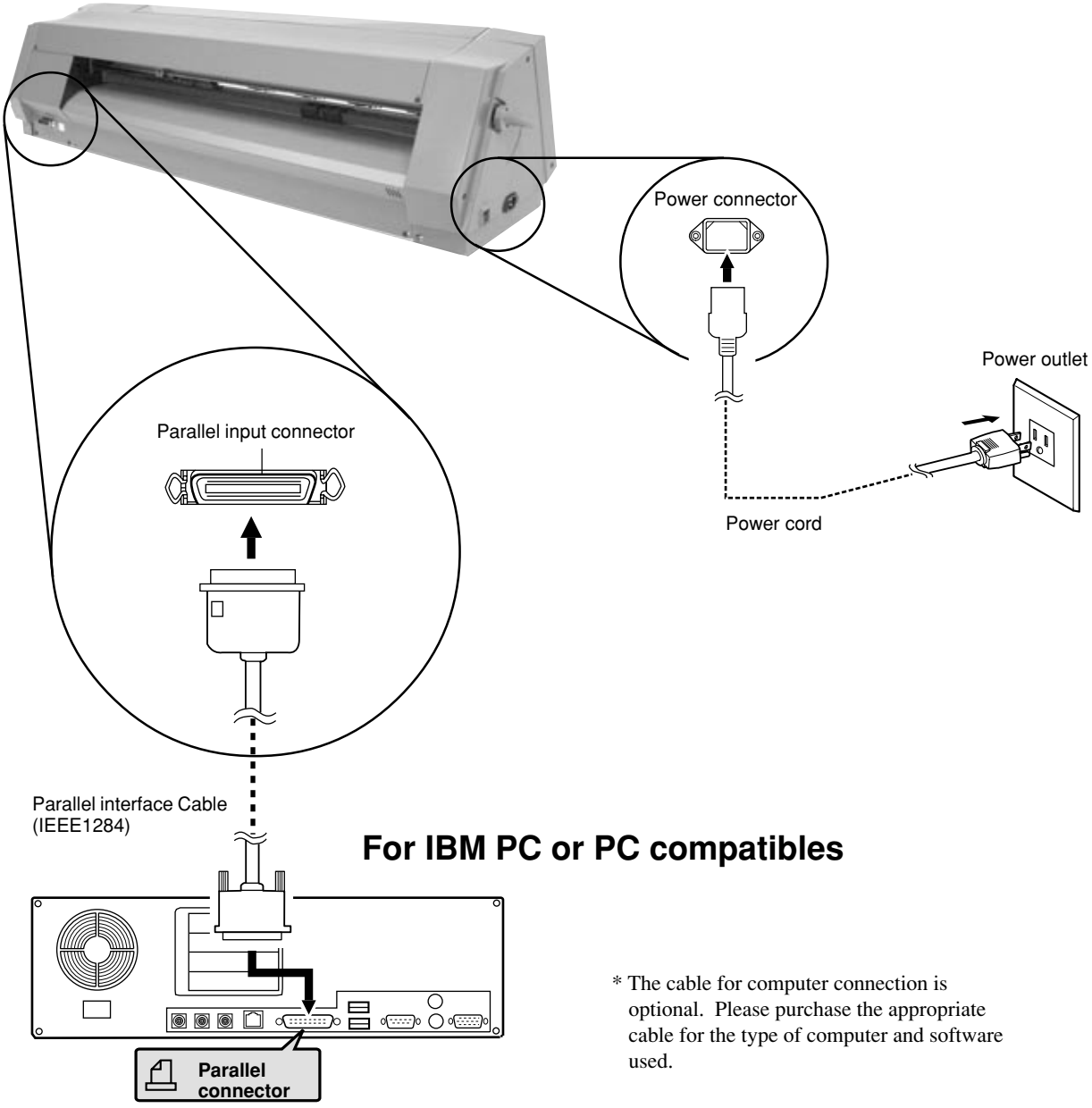
Due to the nature of the printing method of this machine, color, which you reproduce on cold-start condition under low environmental temperature, may appear low dense.
To achieve stable color reproduction capable of this machine, we do recommend you to prepare followings before printing :

- Warm up a working site to 20°C (68°F) or higher.
- Turn Main Power Switch ON then depress the [POWER] key prior to printing for approximate 10 minutes.

Do not put the hands inside the left and right covers. Doing so may result in breakdown of the unit.

Do not touch the reflective panel with the hands.
If the reflective panel is soiled, it may become impossible to replace the ink-ribbon cartridge correctly.

When arranging setup space for the PC-600, make sure you have a space that is at least 1500 mm (59-1/16 in.) wide, 750 mm (29-9/16 in.) in depth, and 1500 mm (59-1/16 in.) in height. Since the material moves during printing and cutting, make sure the unit is placed on a stable, sturdy surface. Also make sure there is nothing that can block the material at both front and rear.



* The cable for computer connection is optional. Please purchase the appropriate cable for the type of computer and software used.

1-3 Part Names and Functions

Front View

Printing carriage

This is where a ribbon cartridge is mounted in the cartridge holder and printing is carried out.

Pinch roller (left)

Press material against the grit roller. When loading material, place the left roller inside the left edge of the material to correctly track it through the machine.

Cleaning pad

* Do not remove this pad except to replace it. Removing it may result in breakdown.

Front cover

Opening the front cover during printing or cutting causes operation to be paused. Operation resumes when the front cover is closed.
No printing or cutting is performed while the front cover is opened.
When the front cover is closed, the unit detects the color and location of the installed ribbon cartridge.

Separating knife

This cuts off a piece of material from rolled material.

Cutting carriage

The blade holder is mounted here.

Cartridge holder

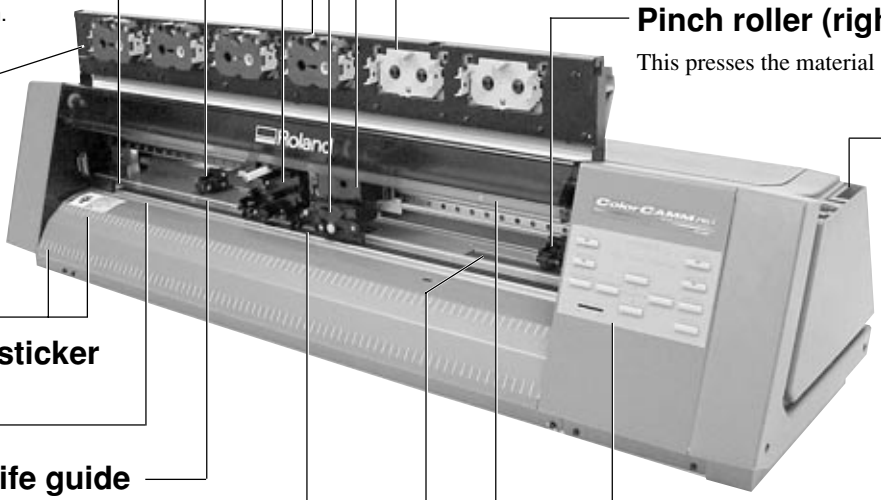
This is where the ribbon cartridge is installed.

Pinch roller (right)

This presses the material against the grit roller.

Tray

Use this to store blades or pens.



Reflective panel

Material alignment sticker

Platen

Knife guide

Plate slide

Grit roller

Operation panel

Grit roller position indicator

Rear View

Sheet Loading Lever

Used to raise or lower the pinch rollers when loading or unloading material. Automatic setup is performed by loading material and lowering the lever.

Power Connector (AC IN)

This connector accepts standard AC power cord.

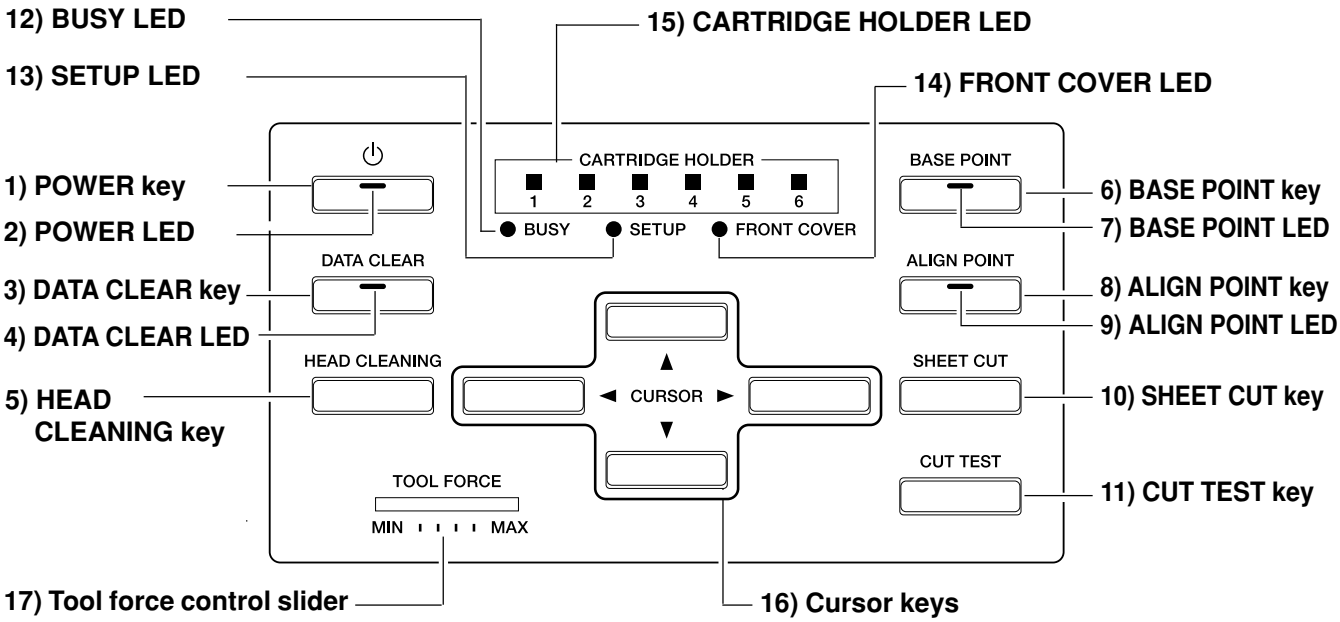
Main Power Switch

Parallel (centronics) input connector

In a parallel configuration, connect the parallel cable here. This cable carries data to your computer.

Operation Panel

* "Material setup" refers to the state when material has been loaded and the sheet-loading lever has been lowered.



1) POWER key
This switches the sub power source on and off.

2) POWER LED
This lights up when the sub power source has been switched on.

3) DATA CLEAR key
Holding down this key until a beep is heard deletes the data being received.

4) DATA CLEAR LED
The LED flashes while data is being deleted.

5) HEAD CLEANING key
This performs forced cleaning of the printing heads.
The PC-600 automatically performs cleaning of the printing heads. There is normally no need to perform forced cleaning. Press this key to perform cleaning only when printing is especially grimy.
To start cleaning, hold down the key until a beep is heard.

6) BASE POINT key
Sets the current position of the blade to the base point for printing or cutting.
This key can be used only after material has been loaded.
Hold down the key until a beep is heard.

7) BASE POINT LED
Setting a base point illuminates this LED.

8) ALIGN POINT key
This sets an align point for correcting the slant of loaded material.
Hold down the key until a beep is heard.

9) ALIGN POINT LED
Setting a align point illuminates this LED.

10) SHEET CUT key
This separates the printed or cut portion from the roll.
Hold down the key until a beep is heard.

11) CUT TEST key
This performs a cutting test (for verifying that blade force is correct).
This key can be used only after material setup has been performed.

12) BUSY LED
This flashes while receiving data and during processing.

13) SETUP LED
This lights up when material setup is finished.

14) FRONT COVER LED
During setup, this flashes when the front cover is opened.
Closing the front cover causes it to remain lit continuously.

15) CARTRIDGE HOLDER LED
This lights up when a ribbon cartridge is installed.
It flashes when the cartridge is installed incorrectly or the ink ribbon has been used up.

16) Cursor keys
Move the material and carriage.

17) Tool force control slider
This is used to set the blade force.

LED Display List

: Lights up
: Flashing
– : Dark

LED state								PC-600 status and operator action
POWER	SETUP	CARTRIDGE HOLDER	BUSY	FRONT COVER	DATA CLEAR	BASE POINT	ALIGN POINT	
	–	–	–	–	–	–	–	The sub power is on.
	–	–	–	–	–	–	–	For information about canceling sleep state -> sleep state, see "2-2 Powering On Auto-sleep."
		–	–	–	–	–	–	The unit is installed in a location outside the operating-temperature range. >> Install in a location where the operating temperature is appropriate. (See "3-9 Specifications Operating Temperature.")
–		–	–	–	–	–	–	Material setup has finished and operation is possible.
–		–	–	–	–	–	–	The pinch roller is above the grit roller. The loaded material is displaced from the sensor. >> See "2-3 Loading the Material".
–	–	Corre-sponding LED is	–	–	–	–	–	The cartridge set the corresponding location is installed incorrectly. >> Install the ink-ribbon cartridge correctly. (See "2-5 Installing a Ribbon Cartridge".) The ink ribbon at the corresponding location has been used up. >> Install a new ribbon cartridge of the same color. (See "2-5 Installing a Ribbon Cartridge Replacing an Ink Cartridge".)
–	–		–	–	–	–	–	The corresponding cartridge is installed correctly.
–		All (1 through 6)	–	–	–	–	–	- Ink-ribbon cartridges have been installed at the six cartridge-holder locations, and at the printing carriage. - During printing, the carriage could not retrieve an ink-ribbon cartridge, or could not return a cartridge to the cartridge holder. >> Install the ink-ribbon cartridge correctly. (See "2-5 Installing a Ribbon Cartridge.")
–	–	All (1 through 6)	–	–	–	–	–	A ribbon cartridge need for printing is absent. >> Install the ribbon cartridge that is needed for printing. (See "2-5 Installing a Ribbon Cartridge".)
–	–	–		–	–	–	–	While receiving data and during processing
–	–	–	–		–	–	–	The front cover is closed.
–	–	–	–		–	–	–	The front cover is open (operation is paused).
–	–	–	–	–		–	–	Data is being deleted.
–	–	–	–	–	–		–	The origin point for printing or cutting was set.
–	–	–	–	–	–			The setting for axis calibration has been made.

1-4 Installing the DRIVER

The screens shown in these steps are for windows 95. These screens may differ in places from the screens for windows 98, but the steps themselves are identical.

- To perform printing or cutting from a software application, the appropriate software driver must be installed.

- The file Readme.txt on the driver-installation disk contains late-breaking information that is not in the manual. Be sure to read through this file.
  You can read this file using Notepad or another word processor.

Operating environment

Personal computer with Windows® 98 or Windows® 95 installed.

Supported model

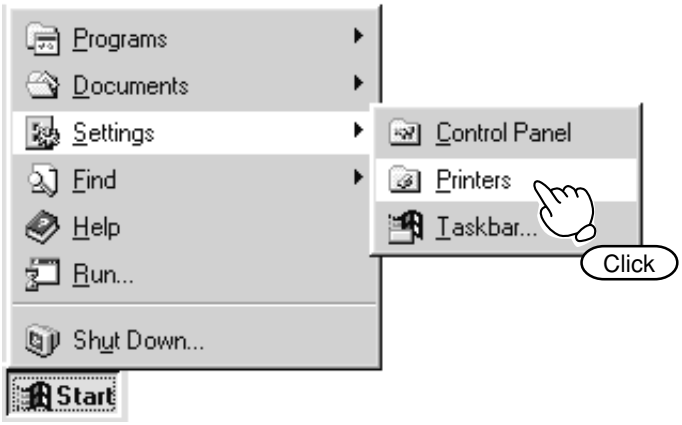
Color CAMM PRO PC-600

Installation

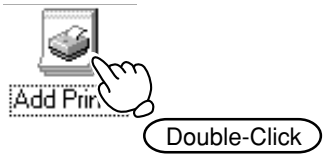
1 Switch on the computer and start windows®.

2 Insert the "PC-600 DRIVER for Windows® 98 / 95" disk included with the unit.

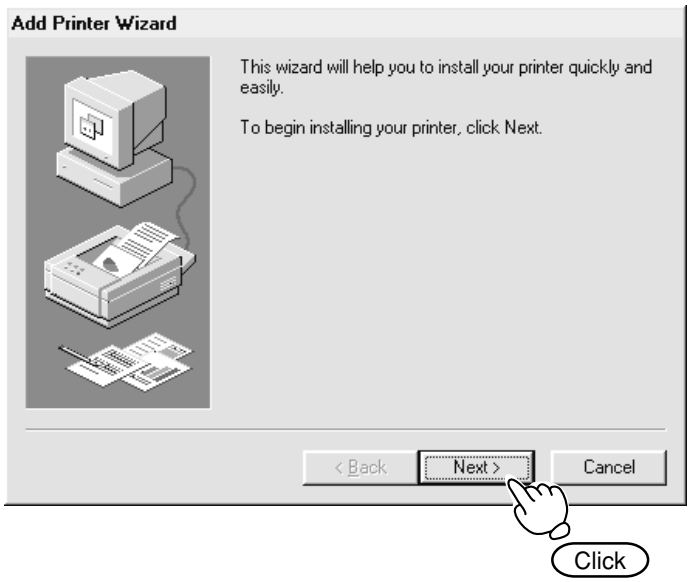
3 Click [Start].
Point to [Settings], then click [Printers].



4 Double-click the [Add Printer] icon.



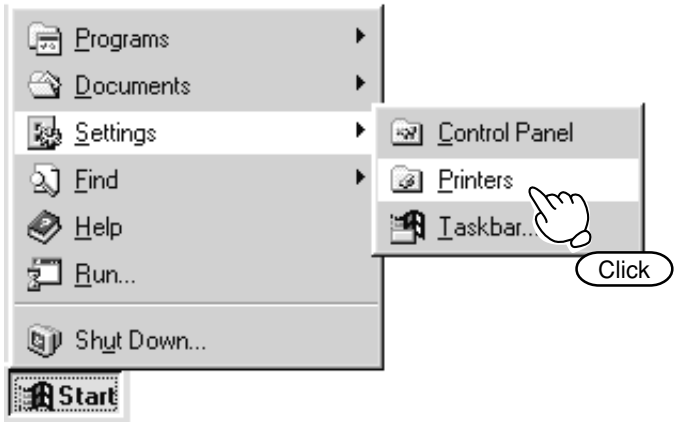
5 Click [Next >] and follow the messages to complete installation of the driver.



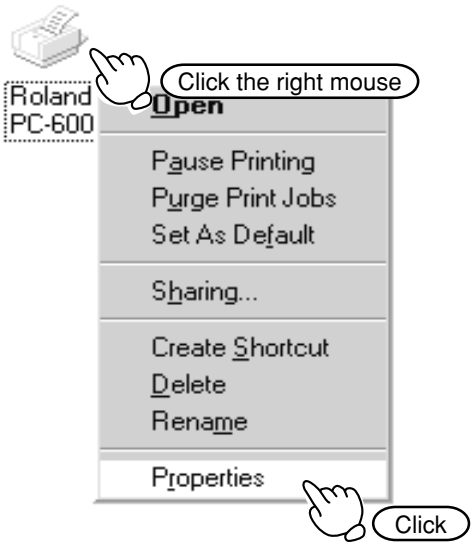
Driver Setup

Use the driver to choose the output port for data.

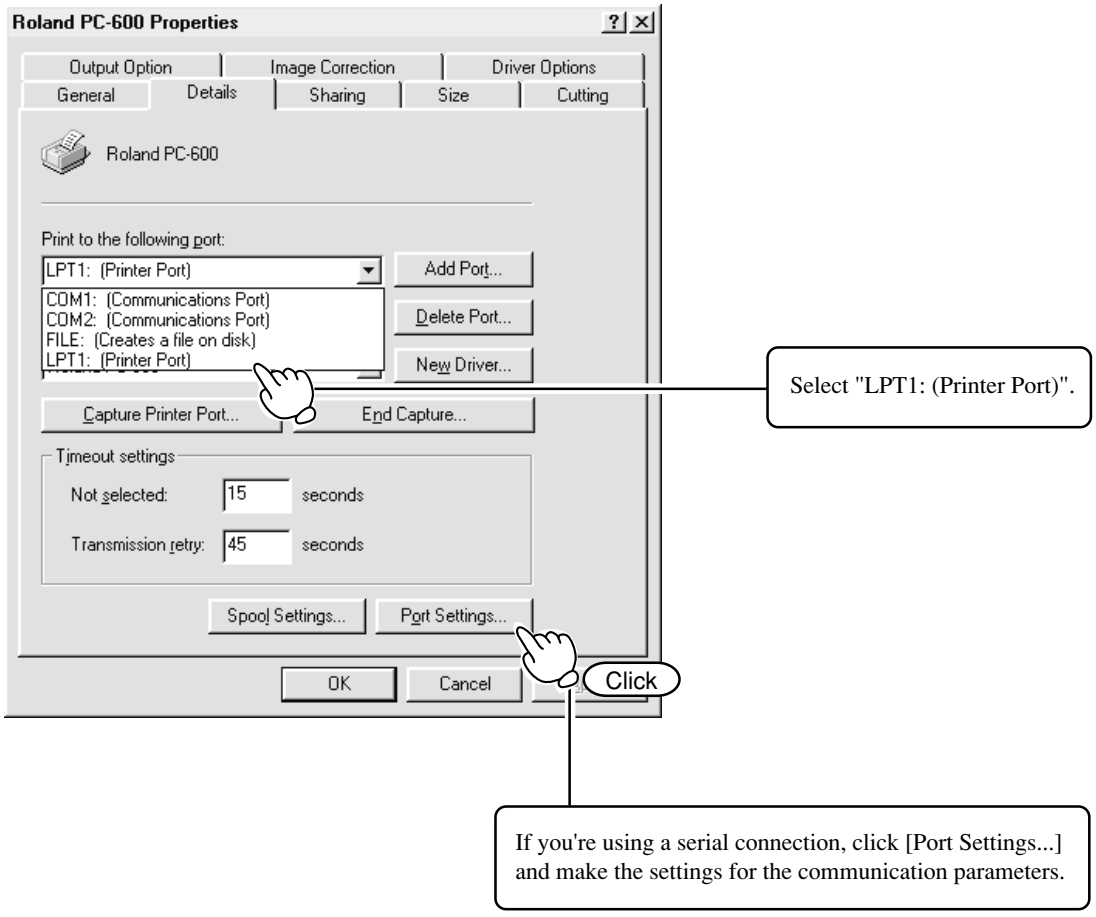
1 Click [Start].
Point to [Settings], then click [Printers].



2 Click the right mouse button on [Roland PC-600] and select [Properties].



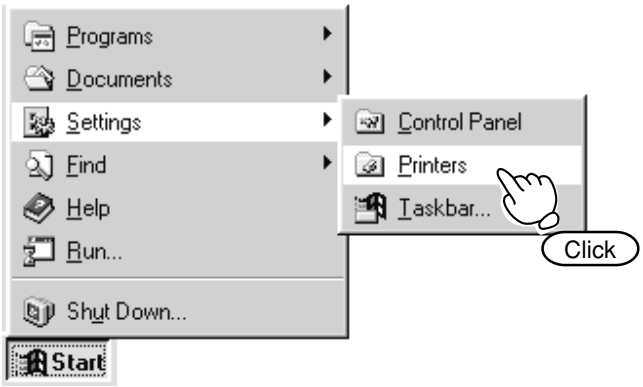
3 Click the [Details] tab and select a port.



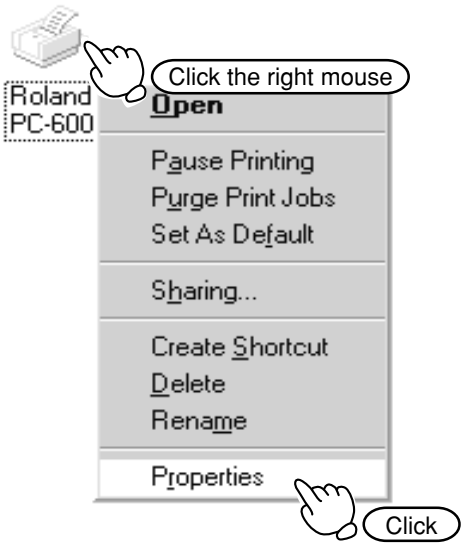
Using Help

If there is something you're not sure about or don't understand when setting up the driver, you can refer to the help screens for that topic. Available topics include details of the various settings as well as the "Printing and Cutting Guide" and "If you Think There's a Problem...."

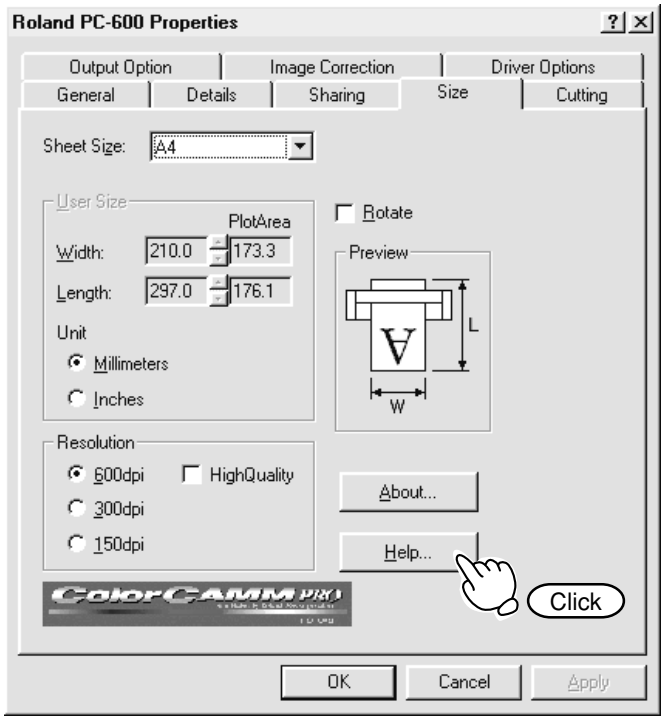
1 Click [Start].
Point to [Settings], then click [Printers].



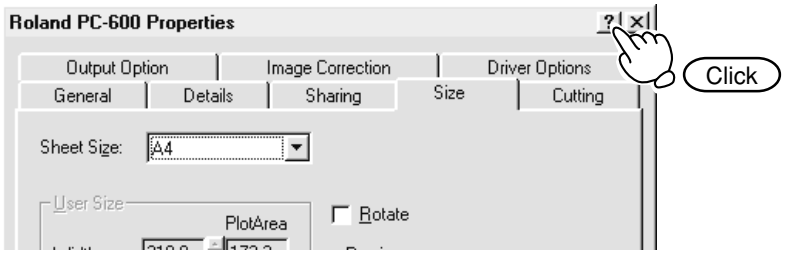
2 Click the right mouse button on [Roland PC-600] and select [Properties].



3 Click the [Size] tab, then click [Help...].



Clicking [?] in the upper-right corner of the window makes the mouse pointer change to a question mark ("?"). You can then move the "?" pointer over any item you wish to learn more about, then click on the item to display an explanation of it.



Chapter 2 - Basic Operation

2-1 Installing a Blade

NOTICE When installing or removing a blade, make sure the sub power for the PC-600 is switched off and no material is loaded.

When mounting the blade holder, do not depress the plate slide.

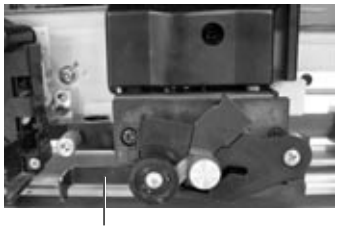
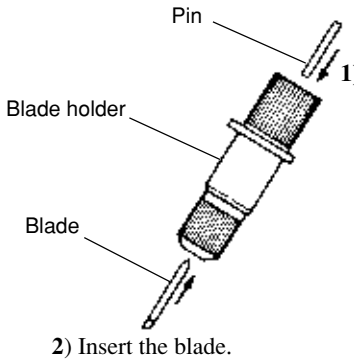


Plate slide

Do not touch the tip of the blade. This could impair the cutting performance of the blade.

To mount the tool holder, insert the tool holder until its collar lies flush against the upper portion of the mounting hole.

1 Insert blade into the blade holder until it snaps into place with an audible click.

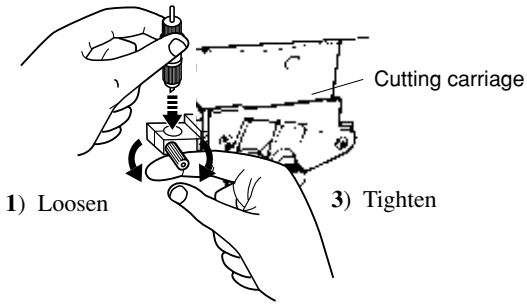


1) Insert the pin. (Leave the pin inserted.)

2) Insert the blade.

2 **2)** Support the tool-securing screw from below and install the blade holder.

* Insert the blade holder until the collar is flush with the carriage.

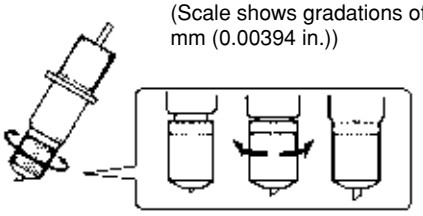


Adjusting the Cutter Blade

As shown in the figure, turn the tip of the blade holder to determine the optimal blade amount for the target material.

- Adjust the tip of the blade to a length shorter than the thickness of the sheet (material) to be cut.
- Gradually extend the blade tip while doing test cutting to determine the optimum blade tip length for the sheet to be cut.
- When cutting becomes impossible under identical conditions, increase tool force or extend the blade and carry out cutting again.

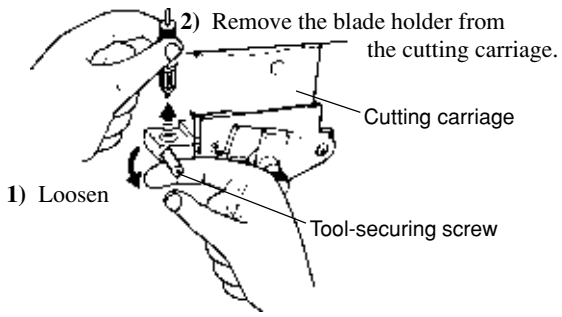
* One full rotation moves the blade 0.5 mm (0.0197 in.) up or down. (Scale shows gradations of 0.1 mm (0.00394 in.))



When cutting is performed after printing, the cap tip of the blade holder may scratch the printed surface.
If this is the case, lengthen the cutter blade extension.

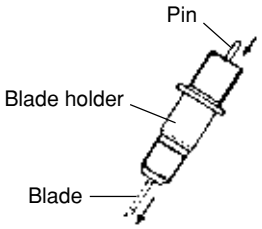
Removing a Blade

1



Leave the tool-securing screw loose. Tightening the screw makes it more difficult to install the blade holder.

2



Press the pin and remove the blade from the blade holder.

If a blade was used, wipe the blade with a soft cloth to remove any material that may cling to it.

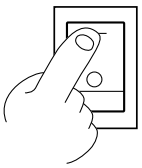
2-2 Powering On

⚠CAUTION

Do not allow hands or hair to come near the platen while the carriage is in motion.
Failure to do so may result in injury due to sudden movement of the carriage when the power is switched on/off, when the sheet loading lever is raised or lowered, or when the [CUT TEST] key, [SHEET CUT] key, [DATA CLEAR] key, or [HEAD CLEANING] key is pressed.

1 When using the unit for the first time, switch on the main power switch on the left-hand side of the unit.

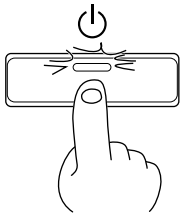
Press the side of the switch marked " –".



Leave the main power switch on, and use the sub power switch for switching the unit on and off on an every-day basis.

After you switch on the main power, the machine spends about five seconds warming up. When the machine beeps, it has finished warming up.

2 Make sure the sheet loading levers are raised, then press the [POWER] key (the sub power switch) on the control panel.



The POWER LED lights up

Auto-sleep

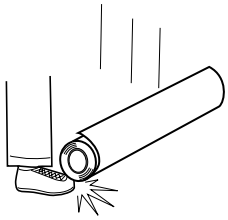
You can set the interval after printing or cutting operation, panel operation, and data transmission from the computer stop until the PC-600 goes to sleep (see "3-2 Setting (Making Settings on the PC-600)").
When the PC-600 goes to sleep, the sub power switches off and the unit enters power-saving mode. The POWER LED flashes at this time.
The available settings are [30 min.] (30 minutes), [60 min.] (60 minutes), and [DISABLE] (disabled). When set to [DISABLE], the PC-600 does not go to sleep after operation stops.
The factory-default setting is [30 min.] (30 minutes).
To cancel the sleep mode, send data from the computer or press any key on the operation panel.

2-3 Loading the Material

⚠CAUTION

Do not allow hands or hair to come near the platen while the carriage is in motion.
Failure to do so may result in injury due to sudden movement of the carriage when the power is switched on/off, when the sheet loading lever is raised or lowered, or when the [CUT TEST] key, [SHEET CUT] key, [DATA CLEAR] key, or [HEAD CLEANING] key is pressed.

Roll material must be placed at a predetermined shaft position.
Failure to do so may result in falling of the roll, leading to injury.



NOTICE

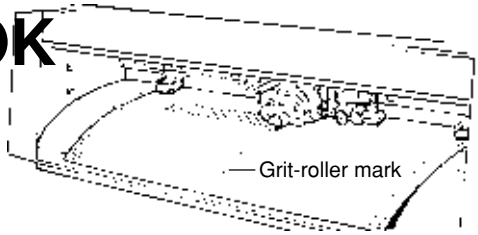
Please do not try to move the tool carriage by hand once the power has been turned on. Doing so may result in breakdown of the unit.

Not OK

Actions such as the following must never be attempted, because they may lead to damage of the printing head.

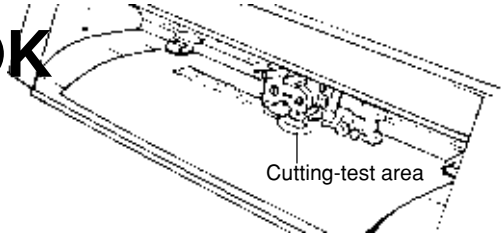
Do not attempt to print on a material that has grit-roller marks.

Not OK



Do not attempt to print at a location where cutting has been performed (such as an area used for a cutting test).

Not OK



Do not use material that is dusty or scratched.

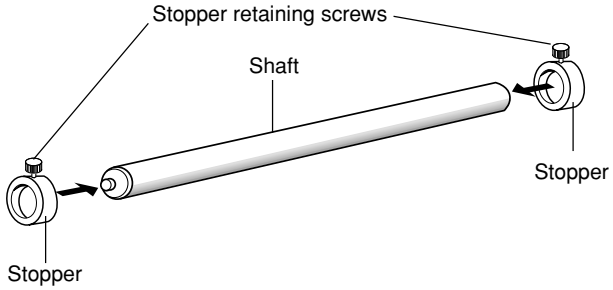
Ink adhesion may suffer if the material's printing surface is not clean. If dirt, oils from the hand, or dusts are transferred to the material when it is loaded, use a cloth moistened with alcohol to wipe the material clean before printing.

1

*** Only when using rolled material**

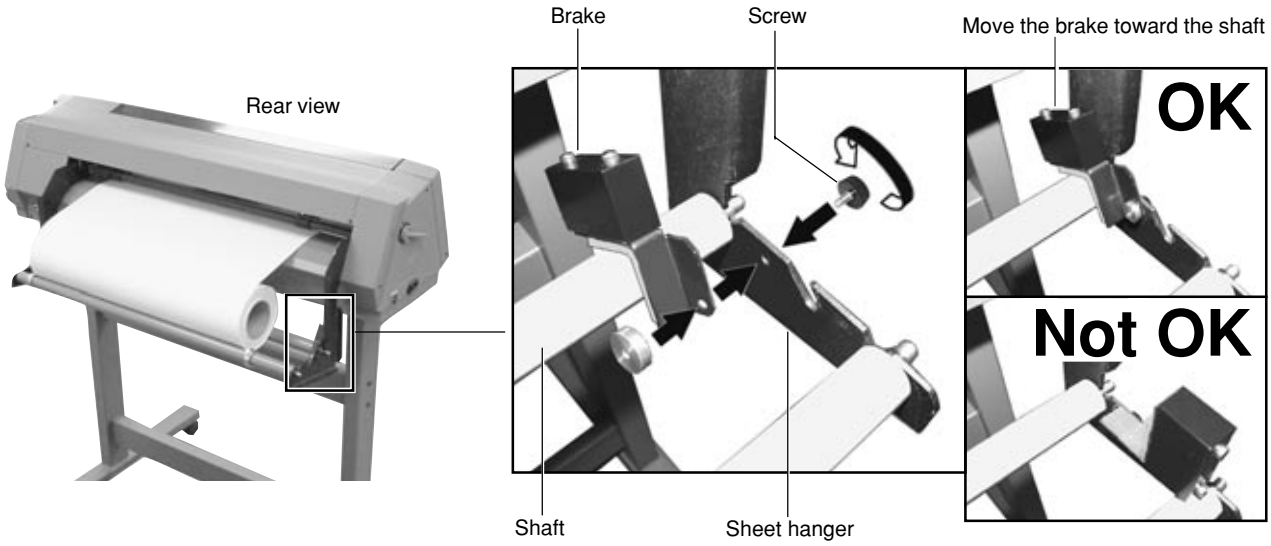
Pass the stopper onto the shaft to match the width of the roll material to be used. (The shafts (2 pieces), stoppers (2 pieces), and stopper retaining screws (2 pieces) are included with the stand.)

When fitting the stoppers onto the shaft, loosen the stopper retaining screws and pass the stoppers onto the end of the shaft where the hole is present.



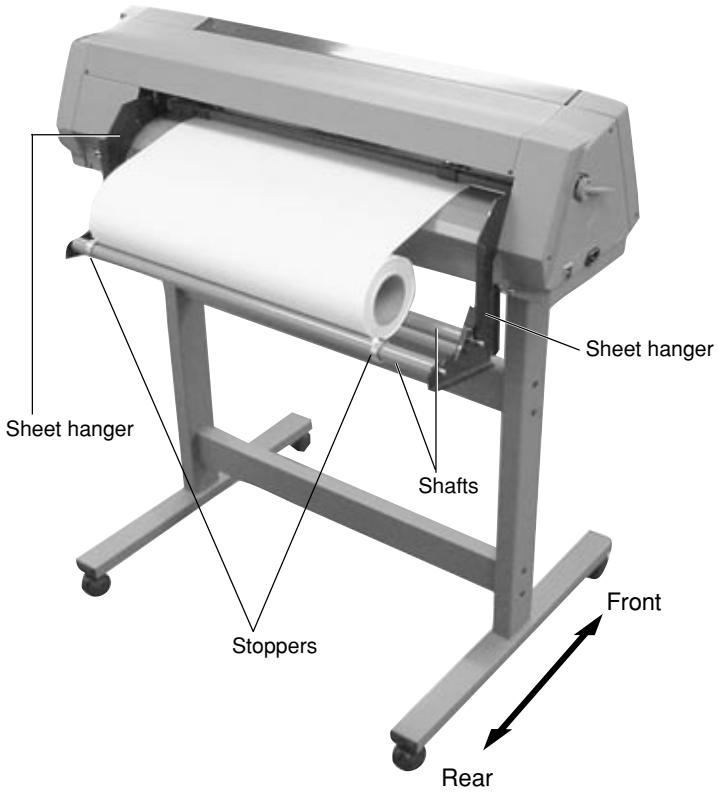
2

Set the two shafts in place and attach the brake.

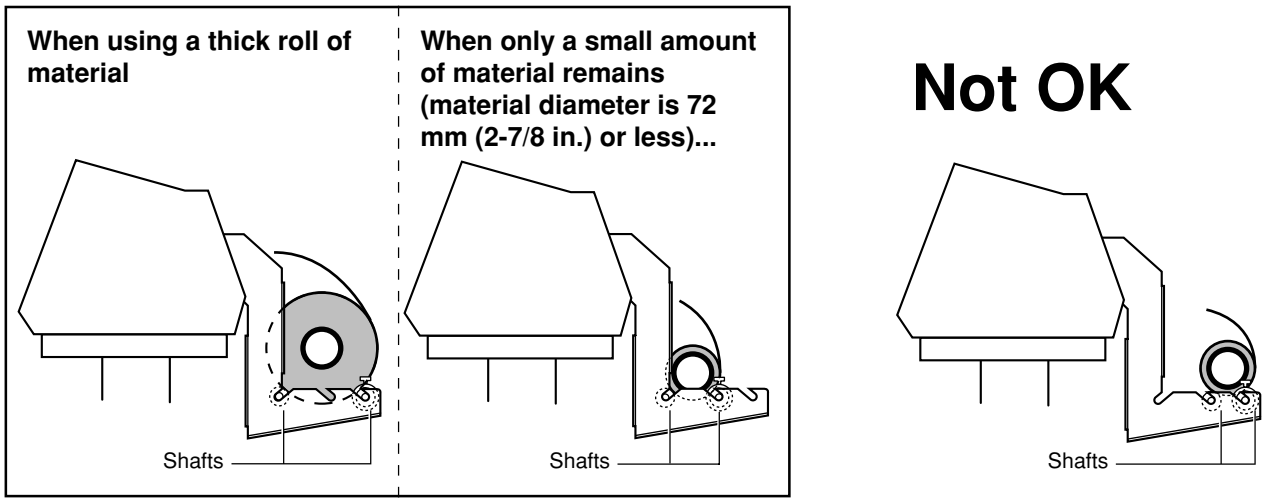


3

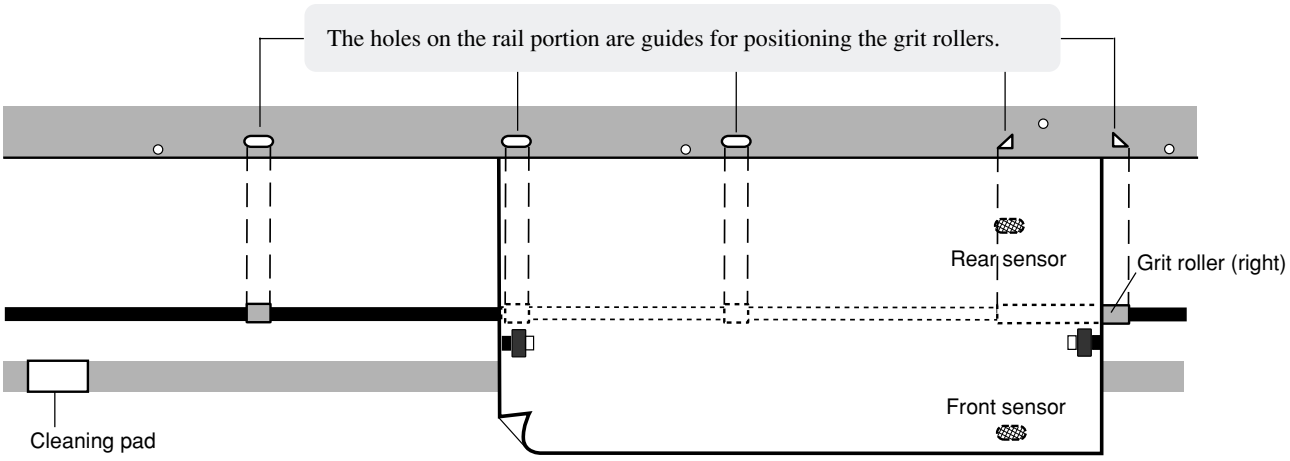
Install the two shafts on the sheet hanger and place the roll material on top of the shafts.
When you are using roll material, make the setting on the PC-600 to set the prefeed function to [ENABLE] (the factory default is [ENABLE]).
Before performing printing or cutting, the length of material required for output is automatically pulled out from the roll, then returned to the rear, where it is left slack. If output is performed without carrying out this operation first, printing or cutting may be misaligned, or the material may come loose or jam.
If the setting for disabling the prefeed function has been made on the machine, then pull out from the roll the length of material required.
(If the prefeed function is enabled, there is no need to pull out material.)



Side view of loaded roll material



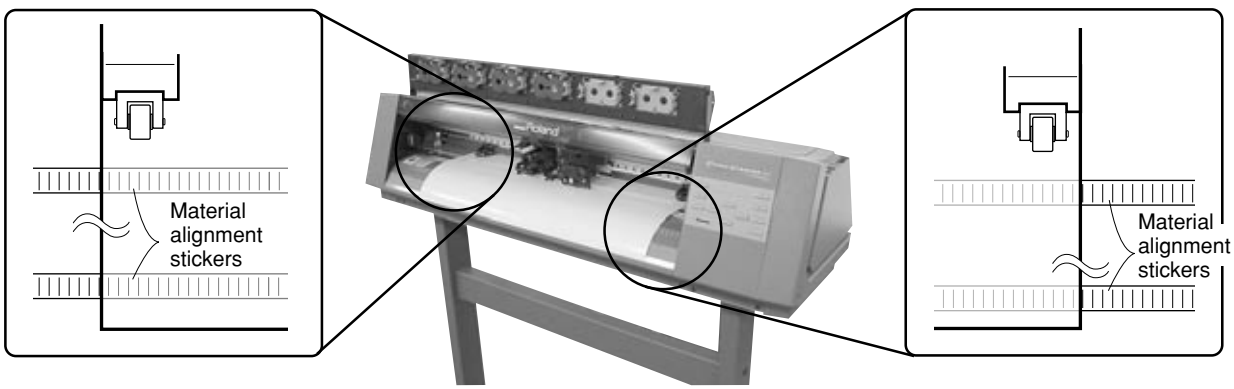
4 Position so that the left-hand edge of the material lies over any one of the grit rollers.
Move the material from side to side and position so that the right-hand edge of the material lies over the rightmost grit roller.



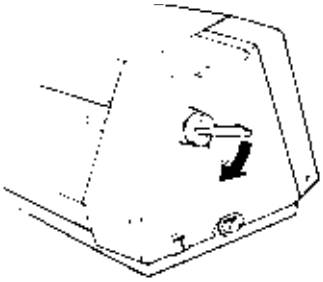
Make sure any objects are not over the cleaning pad. Damage to the head may result.

Make sure the material lies over the front and rear sensors.

5 Load the material so that it lies straight and is aligned with the guideline stickers, then move the left and right pinch rollers so that at they are above the grit rollers. (If the grit rollers are hidden by the material, align the pinch rollers with the grit roller position indicators.)



6 Lower the sheet loading levers to secure the material in place.

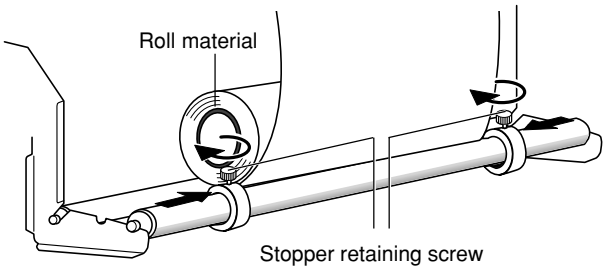


Setup is finished.

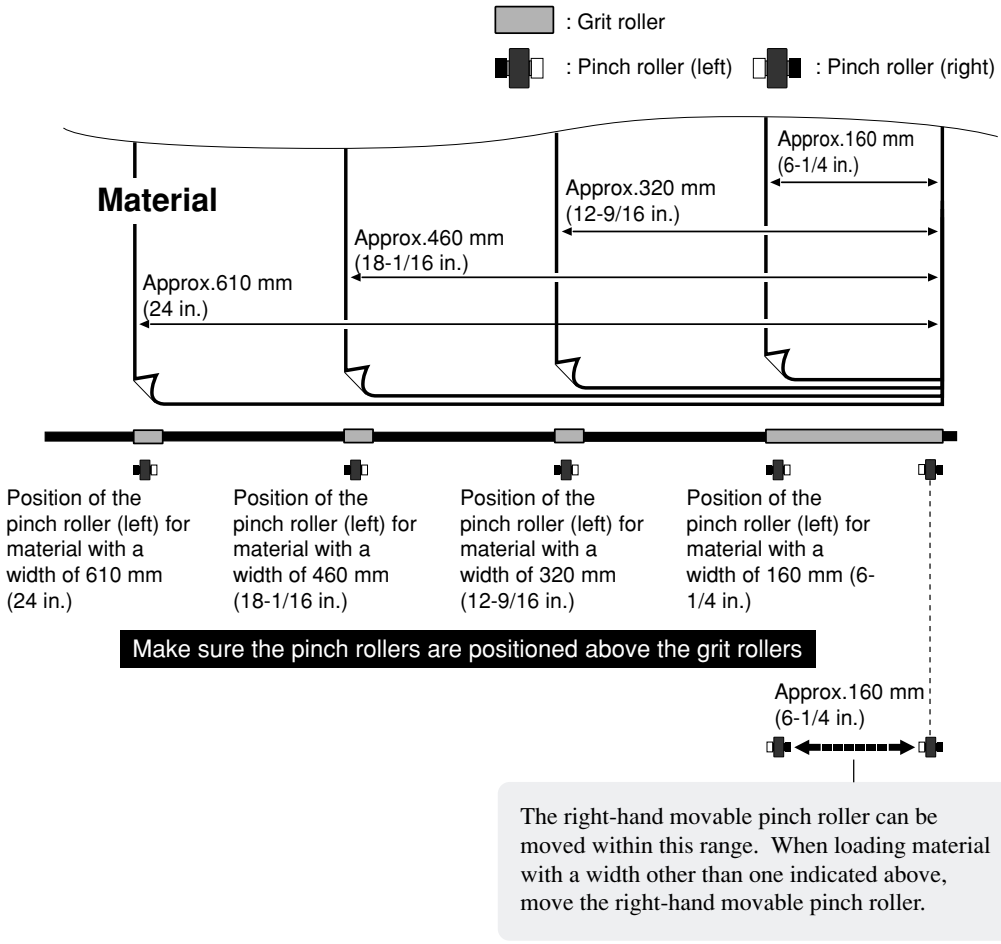
When the sheet loading lever is lowered, the carriage begins to move.
The width of the material is detected, and the carriage stops at the material's right-hand edge.
When no setting is made for BASE POINT, the point where the unit stops here becomes the base point.

7 *** Only when using rolled material**

Attach the stoppers to the edges of the roll material and tighten the screws to secure in place.



Loadable material widths and pinch-roller positions



If the SETUP LED flashes

Possible causes are given below.

The pinch rollers are not above the grit rollers.

Refer to "2-3 Loading the Material" and position the pinch rollers correctly above the grit rollers.

The loaded material does not cover the front and rear sensors.

Refer to "2-3 Loading the Material" and position the material correctly over the front and rear sensors.

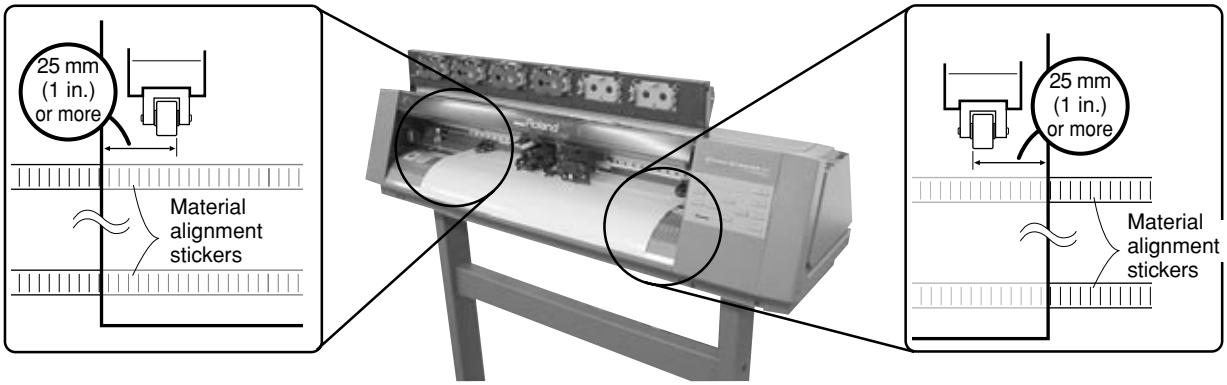
To Perform Long Printing/Cutting

When performing printing or cutting over a length of 1 m (39-3/8 in.) or more, first feed out the required length of material. Then follow the steps below to load the material.
If the setting for enabling the prefeed function has been made on the PC-600, then skip steps 6 and 7.

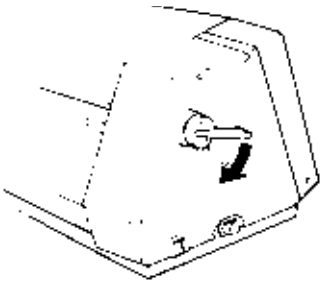
1 Use material that is wider by 50 mm (2 in.) or more than the width of the printing or cutting to be performed.

2 Perform steps 1 through 3 of "2-3 Loading the Material".

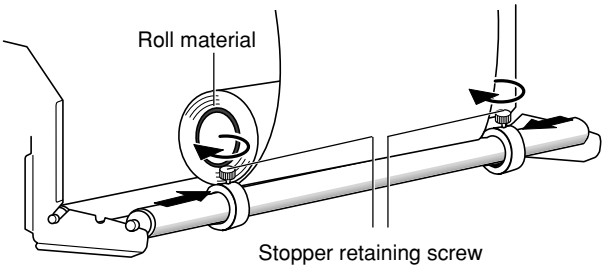
3 Position the pinch rollers as shown in the figure.



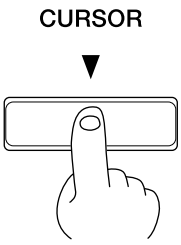
4 Lower the sheet loading levers to secure the material in place.



5 Attach the stoppers to the edges of the roll material and tighten the screws to secure in place.

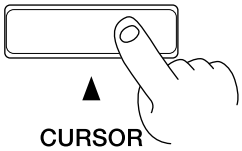


6 Feed out the length of material to be printed or cut.



Make sure that the material remains held by the pinch rollers.
If the material does come loose from the pinch rollers, set it in place again.

7 Return the fed-out material.



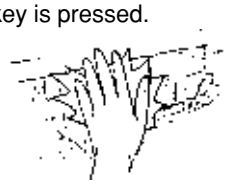
Make sure the material lies over the front and rear sensors.

When you are performing long printing, expansion or contraction of the material may cause colors to be misaligned. For roll material in particular, the time required for the material to uncurl and acclimatize to the ambient temperature and humidity is different for the outer portions and the central portion of the roll.
Before you perform long printing, pull out the length of material to be printed from the roll and let it allow to stand for about 30 minutes to an hour to allow it to become acclimatized to the environment, then load the material.

2-4 Cut Test

⚠CAUTION

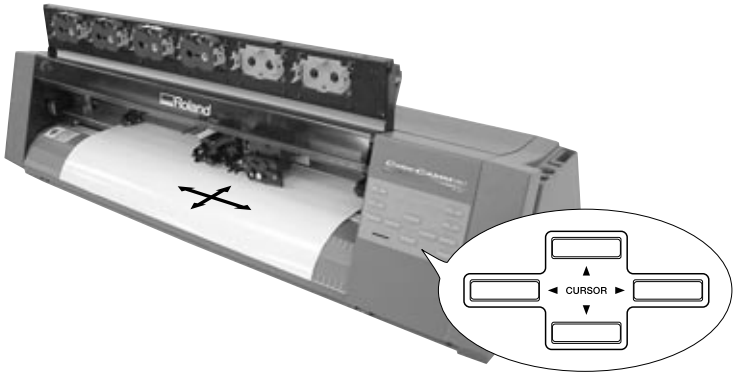
Do not allow hands or hair to come near the platen while the carriage is in motion.
Failure to do so may result in injury due to sudden movement of the carriage when the power is switched on/off, when the sheet loading lever is raised or lowered, or when the [CUT TEST] key, [SHEET CUT] key, [DATA CLEAR] key, or [HEAD CLEANING] key is pressed.



When carrying out cutting for the first time, or when the material or tool has been changed, a cutting test is performed to verify how the tool cuts.

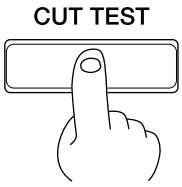
1 Move the tool force control slider on the right-hand side of the unit all the way to the front (for minimum blade force).

2 Open the front cover and move the tip of the blade to the point where the cutting test is to be started.



* Note that an area of approximately 2 square centimeters (a little less than a square inch) is required to make a test cut.

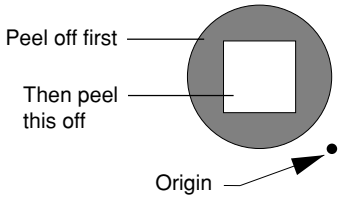
3 Hold down the [CUT TEST] key until you hear a beep.



Cut test starts.

4 **1)** First peel off the round section (shaded as shown).
>> When it can be peeled by itself, without disturbing the square, the cutter force is set appropriately.

2) Next, peel off the square, and look at the backing behind it.
>> The optimum blade pressure is correct if you can clearly make out the lines left by the blade.



Use the tool force control slider to adjust the blade force so that results like those shown above are not obtained.
Gradually increase the cutter force until you reach the optimum level.

2-5 Installing a Ribbon Cartridge

NOTICE

Ribbon cartridges must be installed in cartridge holders, and not mounted directly on the printing carriage.

Do not allow the marker seals on the ribbon cartridges to be soiled or scratched.
Such damage may result in faulty operation.

When performing full-color printing, install ribbon cartridges for four colors (CMYK).

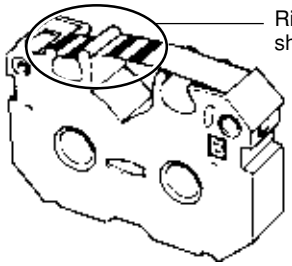
When closing the front cover, close gently by pressing with the hand, being careful not to let your fingers get pinched.

Do not allow the hands to touch the ink ribbons when opening or closing the front cover.

The PC-600 can perform printing using either resin or wax ribbons. Please give attention to the matters described below. Failure to do so may make it impossible to achieve attractive printing results.

- Do not attempt printing with a mixture of resin and wax ribbons. Use only one type of ribbon at any given time.
- Make sure that the type of ink ribbon installed (resin or wax) matches the setting for the driver (resin or wax).
- Resin ribbons and wax ribbons are suited to different types of media.
  Please select a medium that is appropriate for the type of ribbon in use.

Please do not use a cartridge when it shows the ribbon end stripe as illustrated.



The PC-600 can automatically determine the color of an ribbon cartridge, so it doesn't matter which color cartridges are mounted in which of the six cartridge holders.
Also, when more than one ribbon cartridge of the same color have been installed, the unit gives priority to the leftmost cartridge as seen from the front. In such cases, if the first cartridge runs out of ink ribbon during printing, the unit simply selects the next cartridge and continues printing.

Selecting Ribbon Cartridges

Process Color Printing

Full-color printing is performed using the process colors C (cyan), M (magenta), Y (yellow), and K (black). Install the four CMYK ribbon cartridges in the cartridge holders.
For the software driver, select Process Colors. (Please refer to the help file for the PC-600 DRIVER.)

Special Color Printing

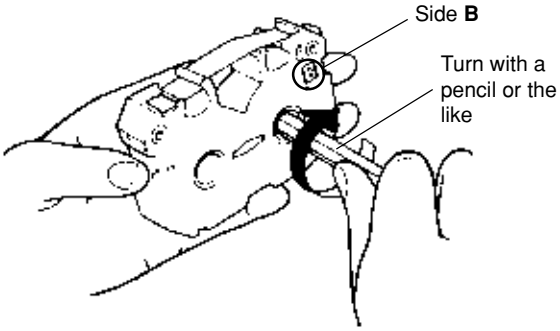
This is used when you wish to add emphasis to one area or perform printing with limited colors.
For the software driver, select Special Colors. (Please refer to the help file for the PC-600 DRIVER.)
Ribbon cartridges for special colors are sold separately.

Installing Ribbon Cartridge

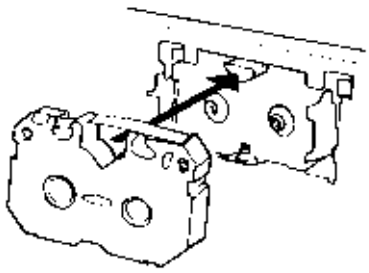
1 When installing a new ribbon cartridge, remove the stopper.

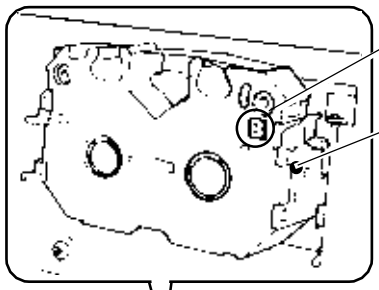
- Do not attempt to rewind the ink ribbon. Rewinding the ink ribbon may cause it to break.
- A used ribbon cartridge cannot be reused. Do not attempt to turn over and reinstall a used ribbon cartridge, or to rewind the ink ribbon and reuse the cartridge.

2 Take up slack in the in ribbon as shown in the figure.



3 Open the front cover and fit the cartridge in the cartridge holder. Gently press into place with the fingers.

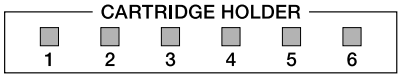


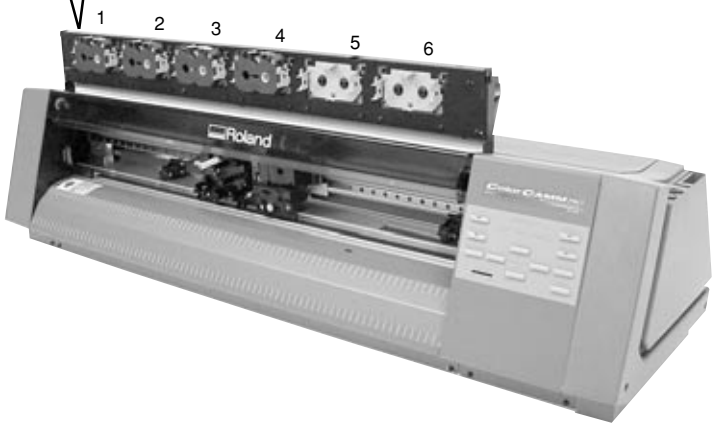


Make sure side **B** is facing up.

The cartridge is held in place by the tabs on the left and right.

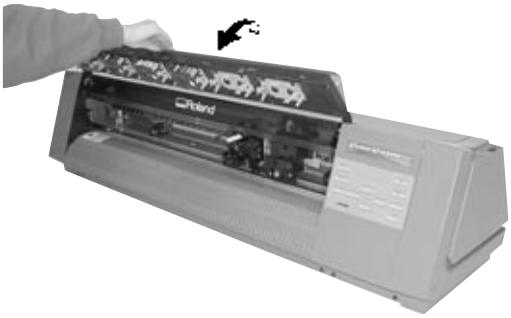
Make sure that the cartridge is securely held in place by the tabs on the left and right sides, and that the ink ribbon is free of slack.





From left to right, as shown in the figure, the CARTRIDGE HOLDER LED numbers correspond to cartridge holders 1 through 6, and the LEDs for holders where ink-ribbon cartridges are installed light up. If a cartridge is not installed correctly, the LED lights up and a warning beep sounds. (To disable the warning beep, on the machine, set Beep (warning beep for the ink-ribbon cartridges) to [Disable] (see "3-2 Settings (Making Settings on the PC-600).")

4 Gently close the front cover.

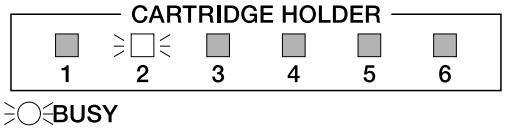


The FRONT COVER LED flashes if the front cover is not shut securely.
Make sure the LED is lighted.

Replacing an Ink Cartridge

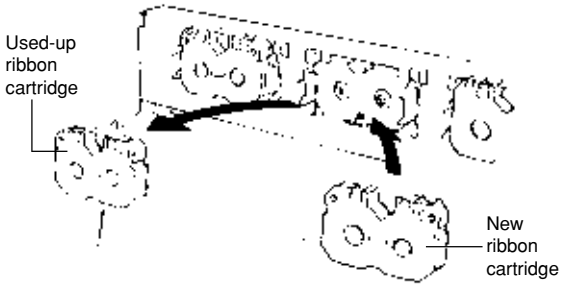
If an ink ribbon runs out while printing is in progress, the CARTRIDGE HOLDER LED flashes.
Follow the steps below to replace with a new ribbon cartridge.

1 If the ink ribbon runs out, operation stops and the warning beep sounds. (To disable the warning beep, on the machine, set Beep (warning beep for the ink-ribbon cartridges) to [Disable] (see "3-2 Settings (Making Settings on the PC-600)."))
If data is being received at this time, the CARTRIDGE HOLDER LED for the holder installed with the cartridge where the ink ribbon has run out flashes simultaneously with the BUSY LED.



Example:
In this case, the cartridge installed at "2" has run out of ink ribbon.

2 Open the front cover and replace with a new ribbon cartridge of the same color.



3 Printing resumes when the front cover is closed.
When a cartridge of a different color is installed, the CARTRIDGE HOLDER LED flashes and printing is not resumed.

If an ink cartridge of the same color is installed in a different cartridge holder

The cartridge of the same color is retrieved and printing continues.
However, the CARTRIDGE HOLDER LED continues to flash until the ink cartridge is replaced.

2-6 Self-test

⚠CAUTION

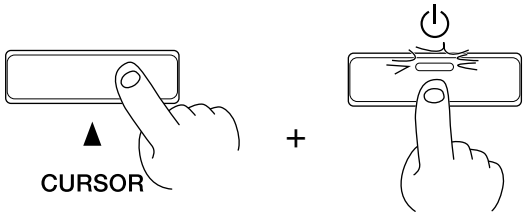
Do not allow hands or hair to come near the platen while the carriage is in motion.
Failure to do so may result in injury due to sudden movement of the carriage when the power is switched on/off, when the sheet loading lever is raised or lowered, or when the [CUT TEST] key, [SHEET CUT] key, [DATA CLEAR] key, or [HEAD CLEANING] key is pressed.

The PC-600 is equipped with a “self-test” function to allow you to check whether or not it is capable of operating normally. If the PC-600 is not performing correctly, follow the steps below to perform a self-test.
A computer is not required in order to carry out the self-test.

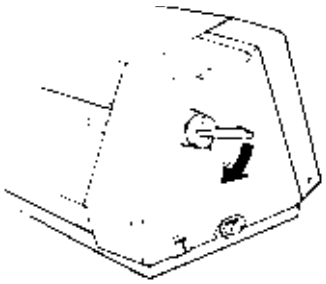
1 Leave on the main power for the PC-600, and switch off the sub power.

2 Install blade holders and four-color (CMYK) ribbon cartridges on the PC-600.

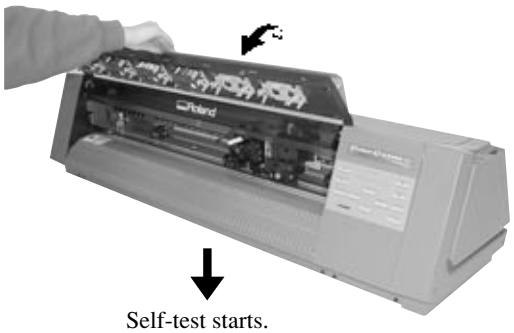
3 Hold down the ▲ key on the panel while you turn the [POWER] key (sub power) on.



4 Load material and lower the sheet loading lever.

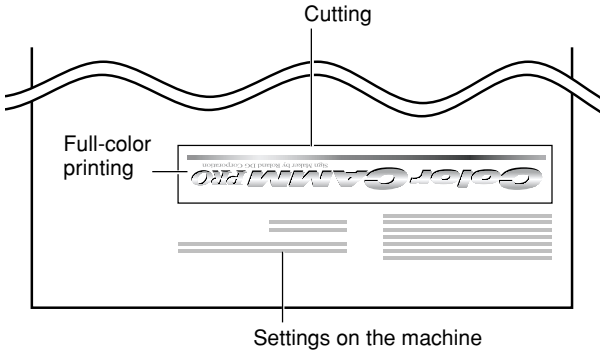


5 Gently close the front cover.



Self-test starts.

6 Operations is normal if the figure shown at below.



After the operation check has finished, raising the sheet loading lever cancels the operation check mode. After that, the unit just as it does when the power has been switched on in the normal manner.

2-7 Downloading Printing/Cutting Date

NOTICE When printing a line that is horizontal with respect to the direction of material feed, set the line width to 0.15 mm (0.0059 in.) or more. Printing with a line width less than 0.15 mm (0.0059 in.) may cause the ink ribbon to snap.

The unit will begin printing/cutting when it receives printing/cutting data sent from the computer.
For more details, please refer to the help file for the PC-600 DRIVER or the documentation for the application software you're using.

2-8 Pausing and Stopping Operation

Printing or cutting is **Paused**

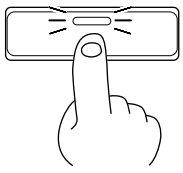
Open the front cover. → The FRONT COVER LED flashes and operation pauses.

Printing or cutting is **Resumes**

Close the front cover. → The FRONT COVER LED lights up and printing or cutting resumes.

To Terminate printing or cutting

1) Halt transmission of printing or cutting instructions from the computer.
2) Hold down the [DATA CLEAR] key until you hear a beep.



LED status
Remains continuously lit during data clear. Goes dark when data clear has ended.

Printing or cutting instructions already sent from the computer to the PC-600 are deleted, and operation stops.

* After stopping an operation, if the unit does not function normally when the next batch of data is sent, switch the power off and back on.

2-9 Cutting Off or Detaching the Material

⚠CAUTION

Do not allow hands or hair to come near the platen while the carriage is in motion.
Failure to do so may result in injury due to sudden movement of the carriage when the power is switched on/off, when the sheet loading lever is raised or lowered, or when the [CUT TEST] key, [SHEET CUT] key, [DATA CLEAR] key, or [HEAD CLEANING] key is pressed.

Cutting Off a Piece of Material from a Roll

To cut off a piece of material while leaving the rest of the roll loaded on the machine, you can either press the [SHEET CUT] key, or use the driver or the machine to set [AUTO SHEET CUT] to [ENABLE], so that the material is cut off automatically.

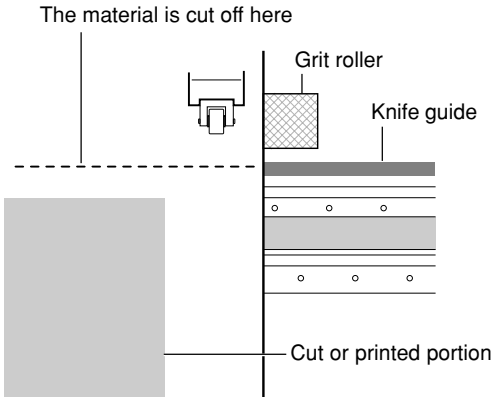
When separating the material by pressing the [SHEET CUT] key

To cut off the material at the present location of the knife guide, hold down the [SHEET CUT] key until you hear a beep.

When sending a material-cutting command from the computer (driver) to separate the material automatically

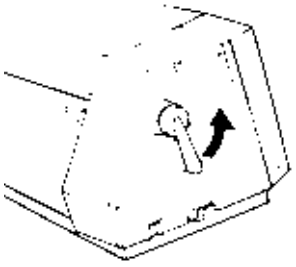
Use the user settings on the PC-600 itself to set [AUTO SHEET CUT] to [ENABLE]. For more information, see "3-2 Settings (Making Settings on the PC-600)."

* When the material-cutting command has not been set to "enabled" at the computer, automatic separation of the material is not performed.



Removing the Material

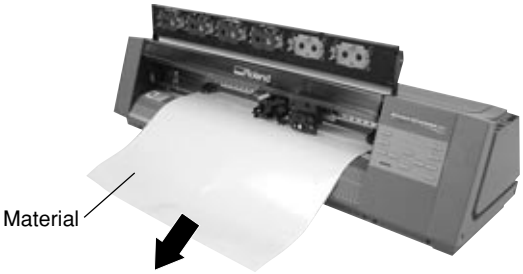
1 Open the front cover and raise the sheet loading lever.



Canceling the setup

The carriage moves to the left.

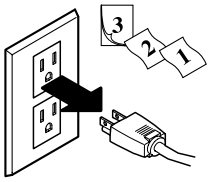
2 Remove the material.



2-10 Powering Off

⚠CAUTION

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



NOTICE **Do not switch off the main power while printing is in progress. Doing so causes the printing head to remain in contact with the sheet, which may damage the head.**
When switching off the main power, use the [POWER] key to turn off the sub power, make sure the POWER LED has gone out, and then switch off the main power.

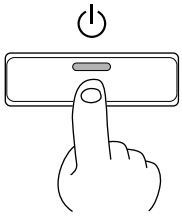
When the unit is not in use, keep the pinch rollers raised. The pinch rollers may be deformed if left engaged.

Before unplugging the power cord, make sure the main power switch have been turned off.

Power Off in Daily Operation

1 Make sure the sheet loading lever has been raised.

2 Switch off the sub power by holding down the [POWER] key on the operation panel until you hear a beep.

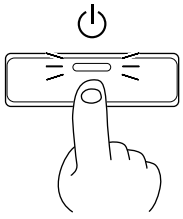


The machine goes to sleep when the time set for auto-sleep elapses with no operation being performed.

* In everyday use, the main power is normally always left on and not switched off.

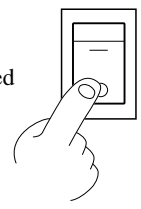
When Not Use for a Prolonged Period

1 Switch off the sub power by holding down the [POWER] key until you hear a beep.

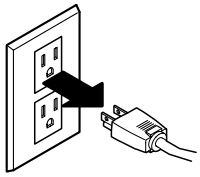


2 Make sure the flashing POWER LED has gone out, then switch off the main power.

Press the side of the switch marked with " ◯ ".



3 Unplug the power cord from the electrical outlet.

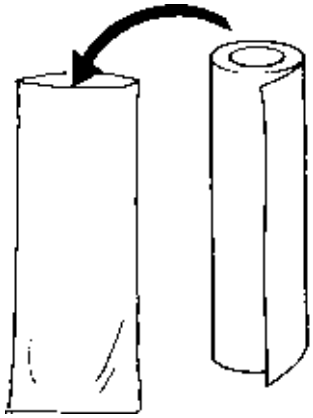


When Not in Use

Place the included dust cover over the machine.
This prevents dust from accumulating on the machine and the material.

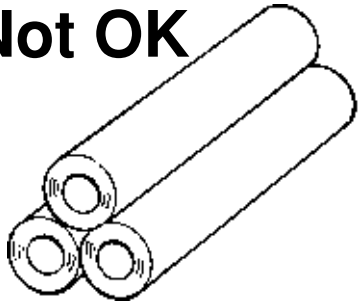
Storing Material

When storing material, place it in plastic bags to protect it from dust and grime.

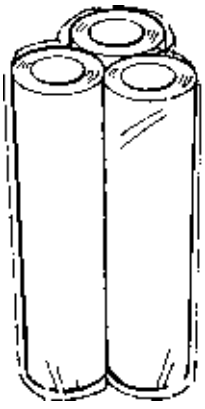


Also, do not store material on its side; store is vertically (standing up).
If material is placed on its side without wrapping it in plastic, dust and grime may build up on the surface of the material and damage the printing heads when printing.

Not OK



OK



Chapter 3 - User's Reference

3-1 Settings for the PC-600 Driver for Windows

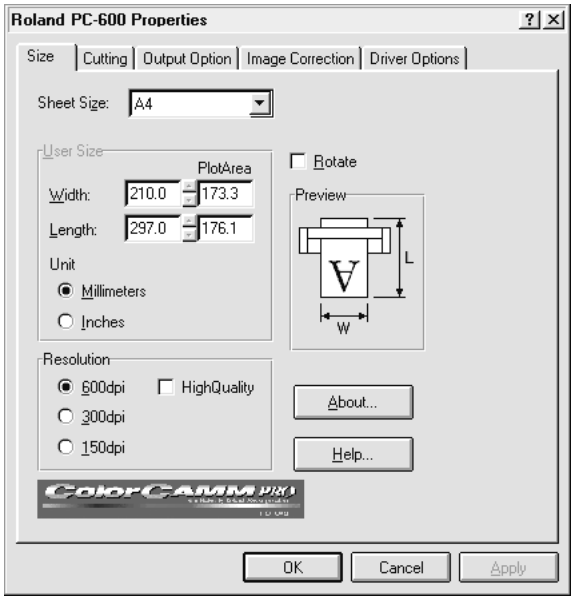
This sends data to the PC-600 from a Windows-based program.
When you are sending data from a commercial draw-type program, make the settings for the cutting parameters with the driver.
For a detailed explanation, see the help screens for the PC-600 driver.

Displaying the Driver Setting Screen

To make the settings for the driver, open Properties.
To open Properties, use the printing menu for the program you're using to set the printer to [Roland PC-600], then click [Properties].

Setting the Material Size

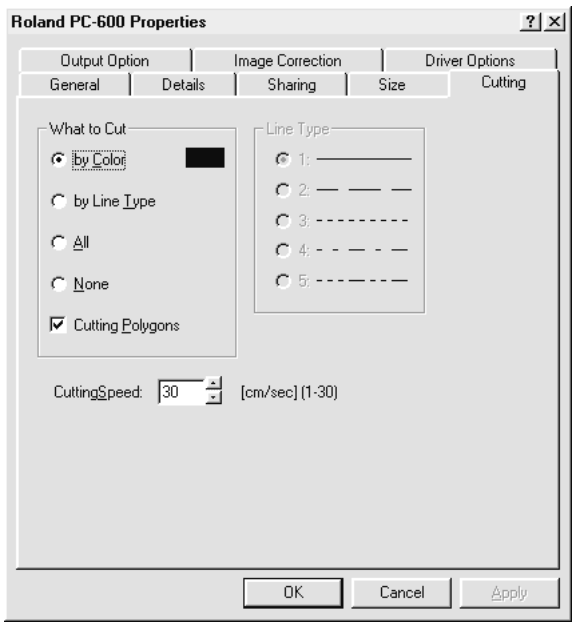
At the [Size] tab, make the setting for the size of the loaded material.



Choose the size of the loaded media.
When you choose the media size with [Sheet Size], the [User Size] values for [Width] and [Length] show the size values. Also, the [PlotArea] value for the size (the media size area minus margins) appears to the right.
If there is no selection for the size of the loaded media, choose "User Size," then at [User Size], type in the width and length of the material.

Setting the Cutting Parameters

At the [Cutting] tab, select the cutting line and make the setting for the cutting speed.
Bitmap data is printed, without performing cutting. Make cutting lines using vector data.

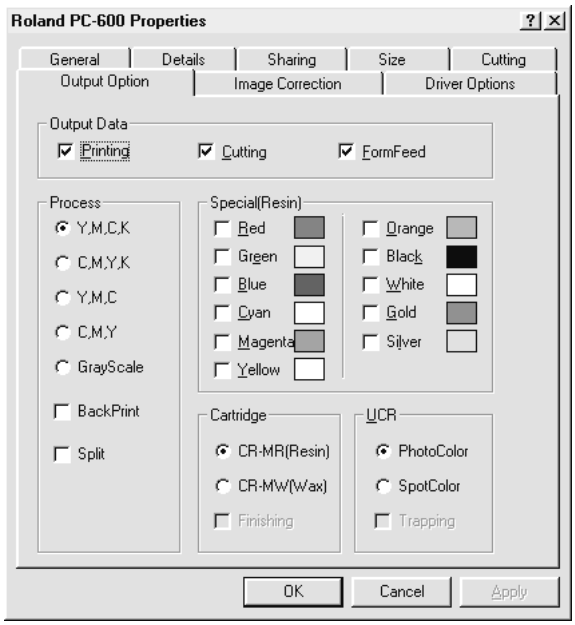


1 Choose the cutting method.
Specify the cutting line by color or line type.
Also, choosing [All] performs cutting for all vector data, and choosing [None] prints all data.

2 Set the movement speed for the blade.

Setting the Output Parameters

At the [Output Option] tab, make the settings for the ink ribbons you're using and the printing method.



1 Make the settings for the output data.

When only [Printing] is selected

Only printing data is output. Data set for the cutting lines with the [Cutting] tab is not output.

When only [Cutting] is selected

Only data set for the cutting lines with the [Cutting] tab is output. Other data is not output.

When both [Printing] and [Cutting] are selected

All data is output, regardless of whether it is printing data or cutting data.

When [FormFeed] is on

When [Form Feed] is on, a feed operation takes place and a new origin point is set after the medium has been printed or cut.
The amount of feed is equal to the length of the printing area for the material size.

* You can make the setting for [Cut Media After Printing]on the [Driver Options] tab only when [FormFeed] is selected.

2 From [Process], choose the printing method.

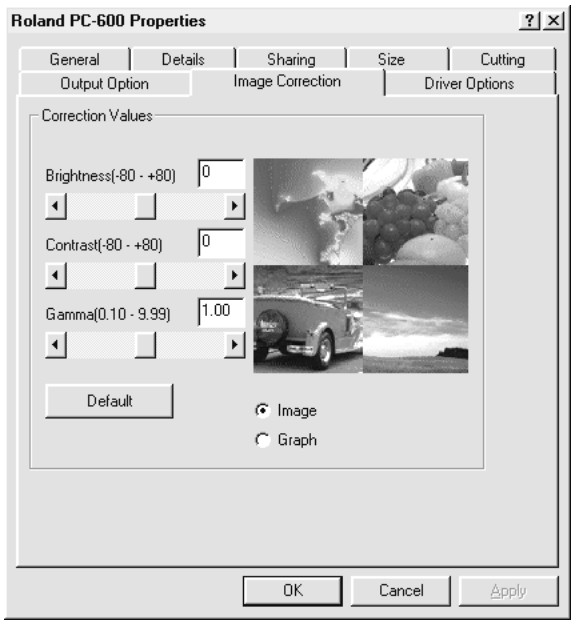
3 To use a special color, choose the color to use from [Special], then associate the image color (the color you specified using the program) with an ink ribbon. Install an ink-ribbon cartridge of the color you chose in the PC-600.
To print using only special colors, clear the selection for the [Process] item.

4 Choose the type of cartridge.

5 To print a photographic image, select [PhotoColor].
To print a poster image or drawing, select [SpotColor].
If the substrate is visible due to variations in printing alignment for each ribbon, select [Trapping].

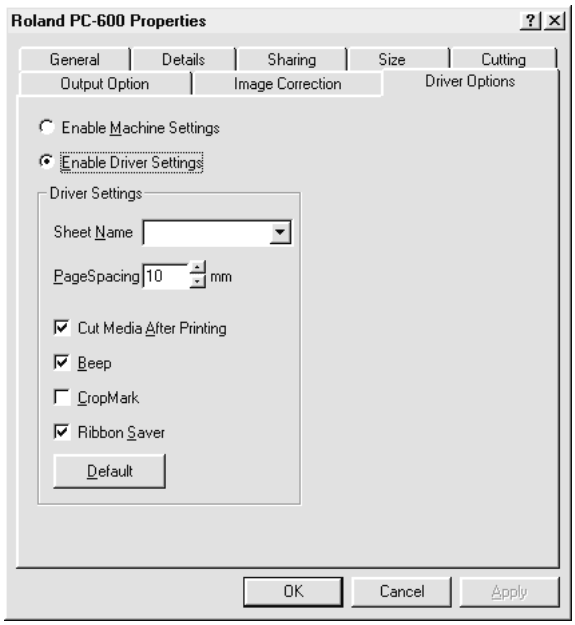
Correcting an Image

When performing output, this corrects and outputs the original image.
If necessary, make the setting at the [Image Correction] tab.



Setting the Operating Parameters

At the [Driver Options] tab, make the settings for the machine's operating parameters for other than printing and cutting.



1 To use the settings on the PC-600 and not use the driver settings, choose [Enable Machine Settings].

2 To use the driver settings, choose [Enable Driver Settings] and make the settings for each item.
For items with check boxes, select the check box (putting a "✓" in the check box) to make the setting for [Enable].

3-2 Settings (Making Settings on the PC-600)

You can make the settings for the following item on the PC-600 itself. Make these settings as required.

Auto sheet cut : When this is enabled, the material is separated from the roll when a material-cutting command is sent.

Auto-sleep : This sets the interval after which the PC-600 goes to sleep when there is no operation of data processing. When the machine goes to sleep, it enters the power-saving mode. The POWER LED flashes at this time.
To cancel the sleep state, send some data or press any key on the operation panel.

Front edge sense : This detects the front edge of the material. Setting this to [ENABLE] adds detection to the setup operations. Because printing or cutting starts only after detecting the edge of the material, is detected, the amount of wasted material can be reduced.

Blade offset : This sets the amount of offset for the tip of the blade. The amount of blade offset is the length from the centerline of the blade to the blade tip.
The amount of offset varies according to the blade.

Crop marks : This prints crop marks on the material.
This is handy when you want to remove a piece of material after printing, laminate it, then load it again to perform cutting.
When printing crop marks, use the black ink cartridge. When printing with resin, load black resin. When printing with wax, load black wax.
* You can also make the setting for printing crop marks using the PC-600 driver. If the setting for enabling or disabling crop marks has been made using the driver, the driver setting determines whether crop marks are printed. If you're using Roland COLORCHOICE®, make the settings on the PC-600. The settings for this item cannot be made on Roland COLORCHOICE®.

Prefeed mode : This feeds the material forward and backward before printing or cutting.
This lets you make sure ahead of time that the material can be fed correctly during printing or cutting. It also makes material feed more stable by placing grit-roller tracks on the material in advance.

Beep (warning sound for the ink-ribbon cartridges)
: This switches the warning bell for the ink-ribbon cartridges on or off.
* You can also make the setting for turning the warning beep on or off using the PC-600 driver. When the setting has been made using the driver, the driver setting determines whether the warning beep is on or off. If you're using Roland COLORCHOICE®, make the settings on the PC-600. The settings for this item cannot be made on Roland COLORCHOICE®.

Ribbon Saver : When empty data for 70 mm (2-13/16 in.) or more in the direction of carriage movement is sent, the portion is output without winding the ink ribbons, making the most economical use of the ink ribbons.
When this is on, images with junctions between bands that are slightly visible may be printed. If image quality is a priority, switch this off.
* You can also screwdriver for turning Ribbon Saver on or off using the PC-600 driver. When the setting has been made using the driver, the driver setting determines whether Ribbon Saver is on or off. If you're using Roland COLORCHOICE®, make the settings on the PC-600. The settings for this item cannot be made on Roland COLORCHOICE®.

Making the Settings

1) Hold down the [ALIGN POINT] key on the panel while you turn the [POWER] key (sub power) on. The ALIGN POINT LED and the POWER LED lights up.
2) Pressing the ◄ and ► keys changes the displayed CARTRIDGE HOLDER LEDs.
3) Referring to the table below, use the ▲ and ▼ keys to illuminate or extinguish the CARTRIDGE HOLDER LEDs for the value you want to set.
4) The setting is completed when the [POWER] key is used to switch off the sub power.

The setting that has been made is stored in memory even after the power is switched off. To change the setting, simply repeat the procedure just described.
You can perform an operation check to check the present settings with the printing results. For more information about the operation check, see "2-6 Self-test."

□: Lights up ■: Dark

Functions	CARTRIDGE HOLDER LED Setting item 1	2	3	4	Value	CARTRIDGE HOLDER LED Setting state 5	6	Factory Default
Auto sheet cut	□	■	■	■	Enable	■	■	√
					Disable	□	■	
Auto-sleep	■	□	■	■	30 min.	■	■	√
					60 min.	□	■	
					Disable	■	□	
Front edge sense	□	□	■	■	Disable	■	■	√
					Enable	□	■	
Blade offset	■	■	□	■	0.25 mm	■	■	√
					0.50 mm	□	■	
Crop marks	□	■	□	■	Disable	■	■	√
					Enable	□	■	
Prefeed mode	■	□	□	■	Enable	■	■	√
					Disable	□	■	
Beep (warning sound for the ink-ribbon cartridges)	□	□	□	■	Enable	■	■	√
					Disable	□	■	
Ribbon Saver	■	■	■	□	Enable	■	■	√
					Disable	□	■	

3-3 Other Functions

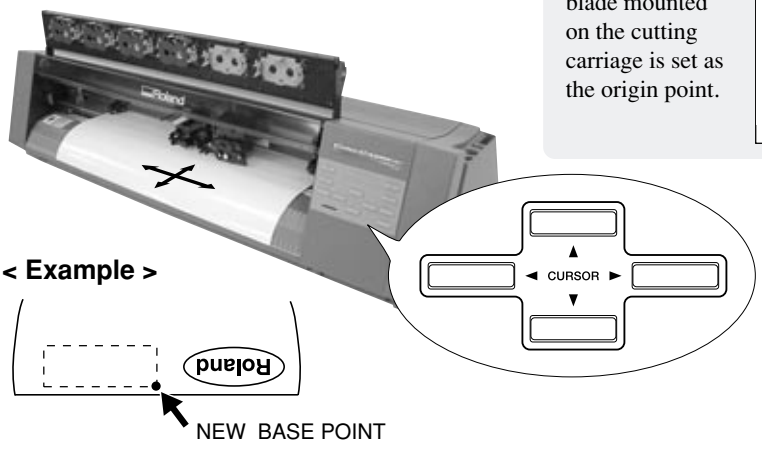
Setting the Base Point

– Printing/Cutting at the Desired Location –

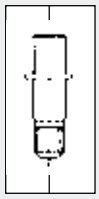
The BASE POINT key is used to set the base point for printing or cutting.
The base point can be set anywhere you like on the material, making it possible to print or cut unused portions of the material.
The base point can be set after finishing material setup (and lowering the sheet loading lever).
The base point remains enabled until you perform one of the operations described below.

- Raising the sheet loading lever
- Feeding the page
- Resetting the base point
- Pressing the [DATA CLEAR] key
- Pressing the [SHEET CUT] key

1 Open the front cover and use the cursor keys to move the carriage to a new base point for printing or cutting. The BASE POINT setting can be only when in the printing or cutting area. Take care to ensure that the front edge of the sheet does not come loose from the front sensor.

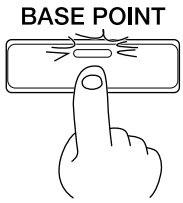


The center of the blade mounted on the cutting carriage is set as the origin point.

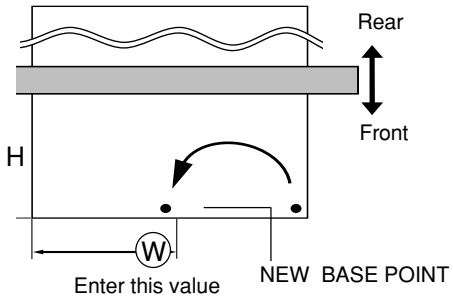


2 With the front cover left open, hold down the [BASE POINT] key until you hear a beep.

The BASE POINT LED lights up



If the base point has been moved, enter the value for **W** in the figure at right as the sheet size width for the driver. If this value is not corrected, output results may be cut off before reaching their normal end.



Setting the Crop Marks, Base Point, and Align Point

– Remove the Printed Material, then Reload the Material and Perform Cutting –

This feature is for performing position alignment in cases where printing is performed, after which the material removed from the machine for further processing (such as laminating), then again loaded on the machine for cutting.

* Setting crop marks to [ENABLE] changes the printing/cutting area. For more information, see "3-5 About the Printing/Cutting Area."
* When reloading a portion that has already been printed and cut off of the roll, them make sure there is at least 90 mm (3-9/16 in.) from where printing ended to the rear edge of the material (where it was cut from the roll).
  When the material is to be cut off automatically, then at the PC-600 driver [Driver Options] tab, set [Page Spacing] to 90 mm (3-9/16 in.) or more.

1 Hold down the [ALIGN POINT] key on the panel while you turn the [POWER] key (sub power) on. The ALIGN POINT LED and the POWER LED light up.

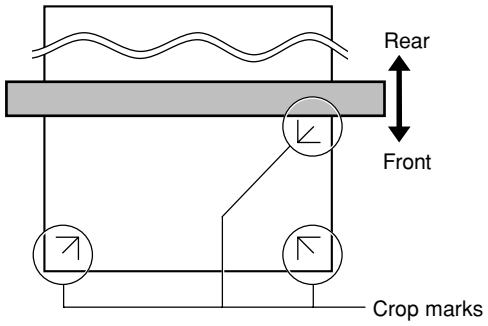
2 Use the ◄ and ► keys to make the LEDs for CARTRIDGE HOLDER 1 and 3 light up.

3 Use the ▲ and ▼ keys to make the LED for CARTRIDGE HOLDER 5 light up.

4 The setting is completed when the [POWER] key is used to switch off the sub power. Crop marks are now set to [ENABLE].

5 Press the [POWER] key (sub power) to switch on the power.
You can also enable or disable crop marks by making the setting using the driver. When you are making the setting with the driver, steps 1 through 5 are not necessary.

6 Send the printing data from the computer.
Three crop marks are automatically printed on the left and right areas at the front edge of the material.



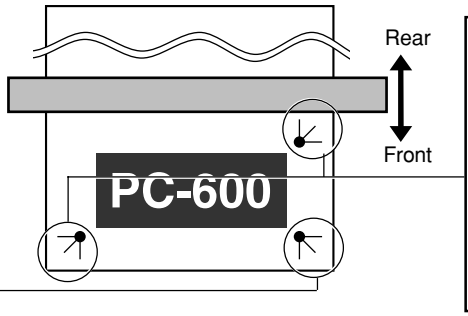
7 When printing finishes, raise the sheet loading levers, remove the material, and perform lamination (or whatever further processing needs to be done). When done, reload the material in about the same position used for printing and lower the sheet loading levers. (The SETUP LED lights up.)

8 Use the ◄ and ► keys to move the carriage to the center of the platen.

9 Install the alignment tool on the cutting carriage.

10

1) **Set the base point**
Use the arrow keys to move the tip of the alignment tool to the square crop mark at the lower right area of the material, then press the [BASE POINT] key.



2) **Set the align point**
Use the arrow keys to move the tip of the alignment tool to the crop-mark corner in the length direction of the material (at either the lower left or upper right).
Then press the [ALIGN POINT] key.

- The align point cannot be set to both the lower left and upper right points.
- The align point cannot be set if the angle between the base point and the align point is 5 degrees or more.
- Marks set with the application software (such as crop marks) cannot be used.

11 Remove the alignment tool from the cutting carriage and install the blade holder.

12 Send the cutting data from the computer.

Turning Off Crop Marks

1 Hold down the [ALIGN POINT] key on the panel while you turn the [POWER] key (sub power) on. The ALIGN POINT LED and the POWER LED light up.

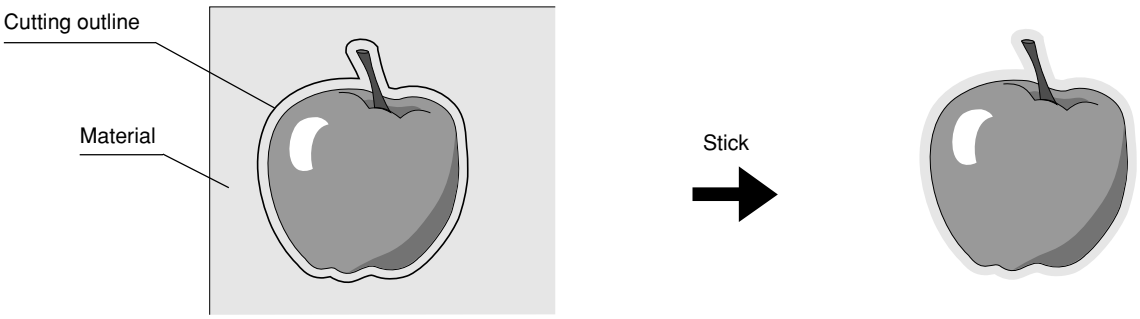
2 Use the ◄ and ► keys to make the LEDs for CARTRIDGE HOLDER 1 and 3 light up.

3 Use the ▲ and ▼ keys to make the LED for CARTRIDGE HOLDER 5 light up.

4 The setting is completed when the [POWER] key is used to switch off the sub power. Crop marks are now set to [ENABLE].

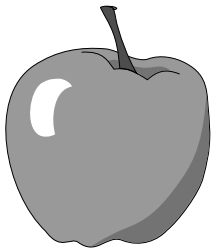
3-4 Tips and Tricks for Printing/Cutting

Removing the Blank Space Surrounding a Picture

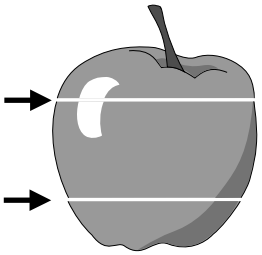


Adding Color to a Border

Correcting Line Pitch



Line pitch: Correct



Line pitch is too wide, and spaces appear between lines.

How to Correct Line Pitch

1) Hold down the [BASE POINT] key on the panel while you turn the [POWER] key (sub power) on. The BASE POINT LED and the POWER LED lights up.

2) Pressing the ◄ and ► keys changes the displayed CARTRIDGE HOLDER LEDs.

3) Referring to the table below, use the ◄ and ► keys to determine the amount of offset between lines.
Using a "-" (negative) correction value makes the line pitch narrower, and using a "+" (positive) value makes it wider.

4) The setting is completed when the [POWER] key is used to switch off the sub power.

The setting that has been made is stored in memory even after the power is switched off. To change the setting, simply repeat the procedure just described.

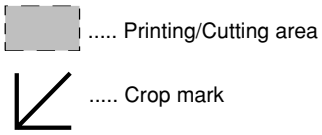
* Distance accuracy cannot be guaranteed when line-pitch correction has been performed.

1 step = approx. 0.1 dot ☐: Flashing ■ : Dark

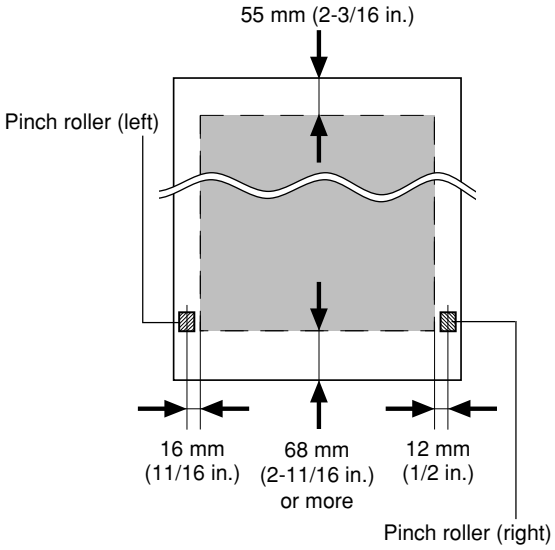
Pitch (Step)	CARTRIDGE HOLDER LED					
	1	2	3	4	5	6
-1	☐	■	■	■	■	☐
-2	■	☐	■	■	■	☐
-3	☐	☐	■	■	■	☐
-4	■	■	☐	■	■	☐
-5	☐	■	☐	■	■	☐
-6	■	☐	☐	■	■	☐
-7	☐	☐	☐	■	■	☐
-8	■	■	■	☐	■	☐
-9	☐	■	■	☐	■	☐
-10	■	☐	■	☐	■	☐
-11	☐	☐	■	☐	■	☐
-12	■	■	☐	☐	■	☐
-13	☐	■	☐	☐	■	☐
-14	■	☐	☐	☐	■	☐
-15	☐	☐	☐	☐	■	☐
-16	■	■	■	■	☐	☐
-17	☐	■	■	■	☐	☐
-18	■	☐	■	■	☐	☐
-19	☐	☐	■	■	☐	☐
-20	■	■	☐	■	☐	☐
-21	☐	■	☐	■	☐	☐
-22	■	☐	☐	■	☐	☐
-23	☐	☐	☐	■	☐	☐
-24	■	■	■	☐	☐	☐
-25	☐	■	■	☐	☐	☐
-26	■	☐	■	☐	☐	☐
-27	☐	☐	■	☐	☐	☐
-28	■	■	☐	☐	☐	☐
-29	☐	■	☐	☐	☐	☐
-30	■	☐	☐	☐	☐	☐

Pitch (Step)	CARTRIDGE HOLDER LED					
	1	2	3	4	5	6
Default (no offset)	■	■	■	■	■	■
+1	☐	■	■	■	■	■
+2	■	☐	■	■	■	■
+3	☐	☐	■	■	■	■
+4	■	■	☐	■	■	■
+5	☐	■	☐	■	■	■
+6	■	☐	☐	■	■	■
+7	☐	☐	☐	■	■	■
+8	■	■	■	☐	■	■
+9	☐	■	■	☐	■	■
+10	■	☐	■	☐	■	■
+11	☐	☐	■	☐	■	■
+12	■	■	☐	☐	■	■
+13	☐	■	☐	☐	■	■
+14	■	☐	☐	☐	■	■
+15	☐	☐	☐	☐	■	■
+16	■	■	■	■	☐	■
+17	☐	■	■	■	☐	■
+18	■	☐	■	■	☐	■
+19	☐	☐	■	■	☐	■
+20	■	■	☐	■	☐	■
+21	☐	■	☐	■	☐	■
+22	■	☐	☐	■	☐	■
+23	☐	☐	☐	■	☐	■
+24	■	■	■	☐	☐	■
+25	☐	■	■	☐	☐	■
+26	■	☐	■	☐	☐	■
+27	☐	☐	■	☐	☐	■
+28	■	■	☐	☐	☐	■
+29	☐	■	☐	☐	☐	■
+30	■	☐	☐	☐	☐	■

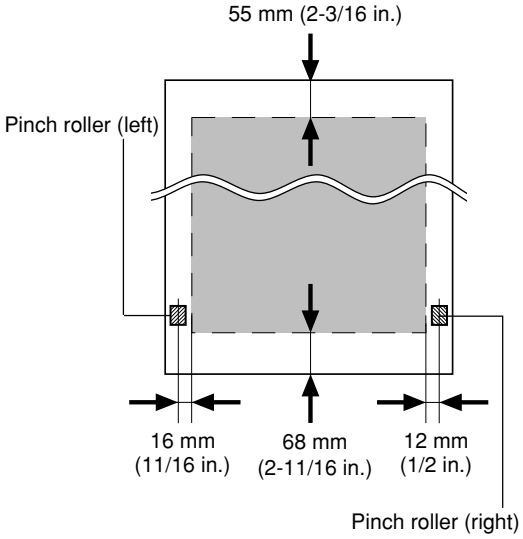
3-5 About the Printing/Cutting Area



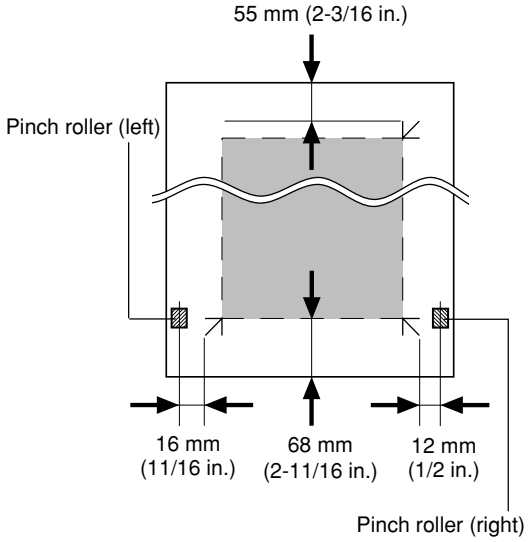
Factory default



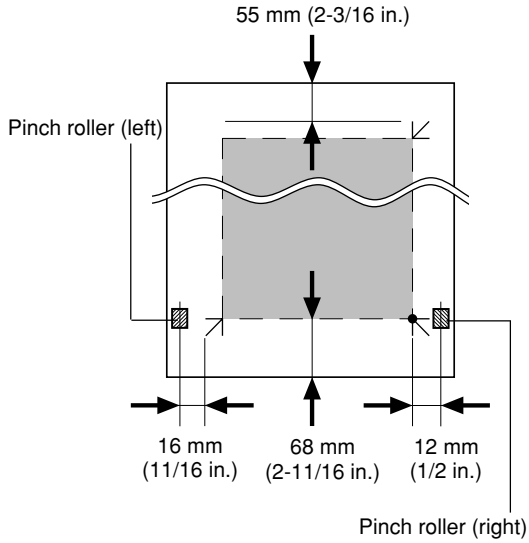
When front edge sense is enabled



When crop marks is enabled



When crop marks are enabled and a base point has been set



3-6 About the Blade

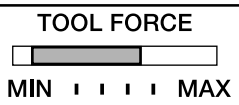
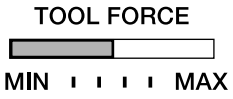
If the Blade Becomes Dull

When the blade starts to lose its sharpness, try gradually increasing the cutter force.
Increasing the cutter force temporarily allows the blade to perform better. However, once the blade is dull, it is time to replace it.

Average Blade Life

The life of a blade varies, depending on the amount of cutting it performs.
The total cutting length can vary considerably, depending on the thickness, toughness, and type of adhesive of the cut material. Set an appropriate cutter force, one that is well matched to the material and the hardness of the blade. This will extend the life of the blade. Excessive cutter forces can cause the blade to wear out quickly. Care should be taken.

The table below provides a rough guide to appropriate cutting conditions and expected blade life.
Please note that making the settings for conditions shown below will not necessarily achieve attractive cutting results in all circumstances. Before performing actual cutting, please carry out a cutting test and adjust as required (see "6 Cut Test & Self-test").

Blade	Material	Pen-force scale	Speed	Blade compensation	Life of a blade
ZEC-U1005	General Signal Vinyl		30 cm/sec. (11.811 in./sec.)	0.25 mm (0.00984 in.)	8000 m (314960 in.)
ZEC-U5025	General Signal Vinyl		30 cm/sec. (11.811 in./sec.)	0.25 mm (0.00984 in.)	4000 m (157480 in.)

How to Replace the Separating Knife

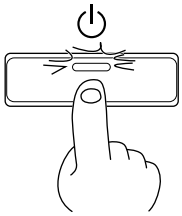
⚠CAUTION

Make sure the power to the unit is off before attempting to replace the separating knife.
Doing so may result in injury.

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

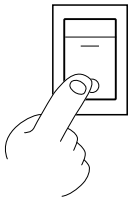
If the separating knife, replace it with the replacement blade included with the PC-600.
Follow the steps below to replace the blade.

1 Hold down the [POWER] key on the control panel until the LED starts to flash, and switch off the sub power.



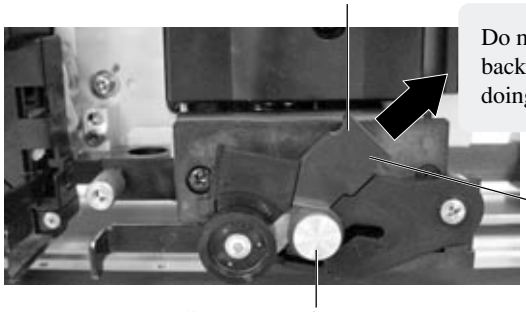
2 Make sure the flashing POWER LED has gone out, then switch off the main power.

Press the side of the switch marked with " ◯ ".



3 Remove the separating knife.

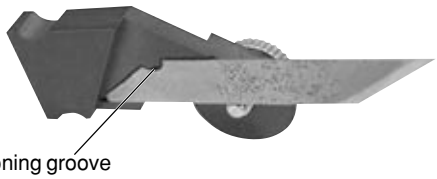
2) Grasp the top portion of the holder, and slowly pull it out in the direction of the arrow.



1) Remove the screw.

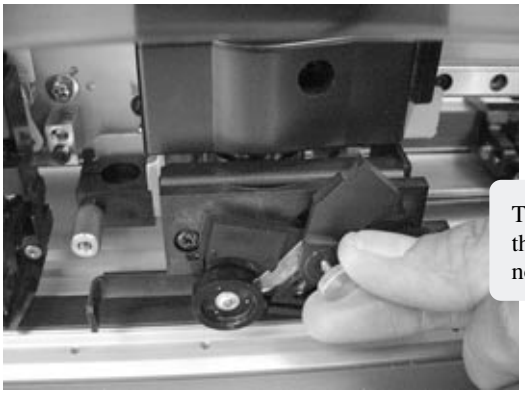
* If the blade remains in the carriage, use the included tweezers to remove it.

4 Replace with a new knife.



The knife is secured in place by the magnet.

5 Install the separating knife.



1) Grasp the top portion of the holder and slowly insert it into the groove.

2) Tighten the screw.

Take care to ensure that the knife does not slip.

3-7 Care and Maintenance

⚠CAUTION

Do not touch the area around the printing carriage with the hands.
Failure to do so may result in burns.

NOTICE Be sure to switch off the main power for the PC-600 before attempting to clean the unit and platen or using head cleaner to clean the printing head.

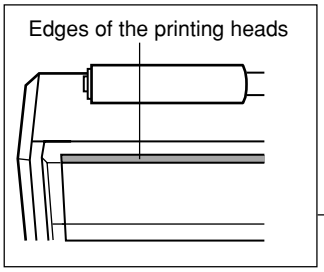
Never attempt to oil or lubricate the mechanism.

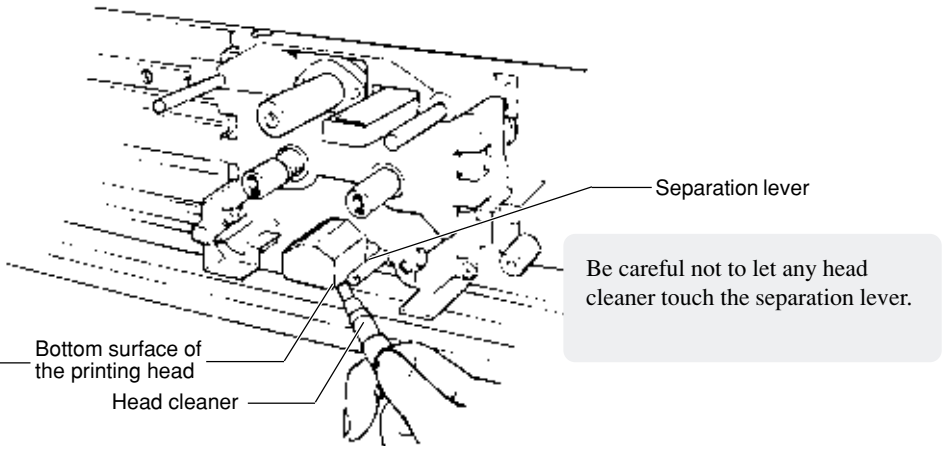
Cleaning the Printing Head

The PC-600 automatically performs cleaning of the printing head.
You can also perform forced cleaning by pressing the [HEAD CLEANING] key, but normally automatic cleaning is sufficient. If printing is especially grimy, press the [HEAD CLEANING] key to perform cleaning. To start cleaning, hold down the key until a beep is heard.
The head is cleaned with the cleaning pad on the front-left surface of the unit when an ink-ribbon cartridge is replaced. Ordinary grime is removed by this automatic cleaning, but when soiling is severe, the head cleaner included with the unit should be used to remove it.
The method described below is used to perform cleaning with the head cleaner.

NOTICE Drops of cleaning fluid may spray out when the cap is opened. Hold away from the platen when opening the cap. The platen may be discolored by any cleaning fluid that comes in contact with it. (The cleaning fluid is non-toxic.)

Use the included head cleaner to remove grime from the edges of the printing heads.





Be careful not to let any head cleaner touch the separation lever.

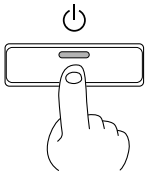
If this cleaning fails to remove all grime, then use the included head-cleaning sheet to perform cleaning.

How to Use the Cleaning Sheet

The following details the correct usage of this cleaning sheet.
Failure to observe the following points may result in damage to the machine.

- Do not use any cleaning sheet that has a damaged surface such as cuts, tears or creases.
- The printing head can be damaged by dust.
- The Pinch rollers should be set over the black bands at either end of the sheet, to ensure that the head is restricted to the center cleaning area of the sheet and cannot pass over marks left by the pinch rollers.
- Store the cleaning sheet in a clean place and wipe the cleaning surface with a "lint free" cloth before use.

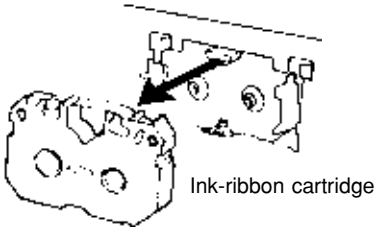
1 Switch off the sub power.



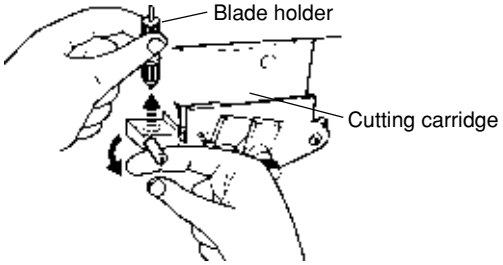
2 Open the front cover.

3 Raise the sheet loading lever.

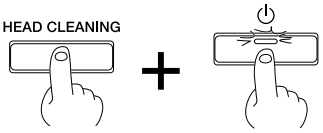
4 Take out the ink-ribbon cartridge.



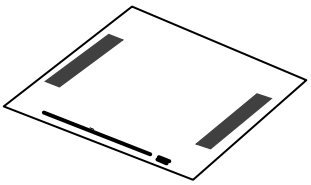
5 Remove the blade holder.

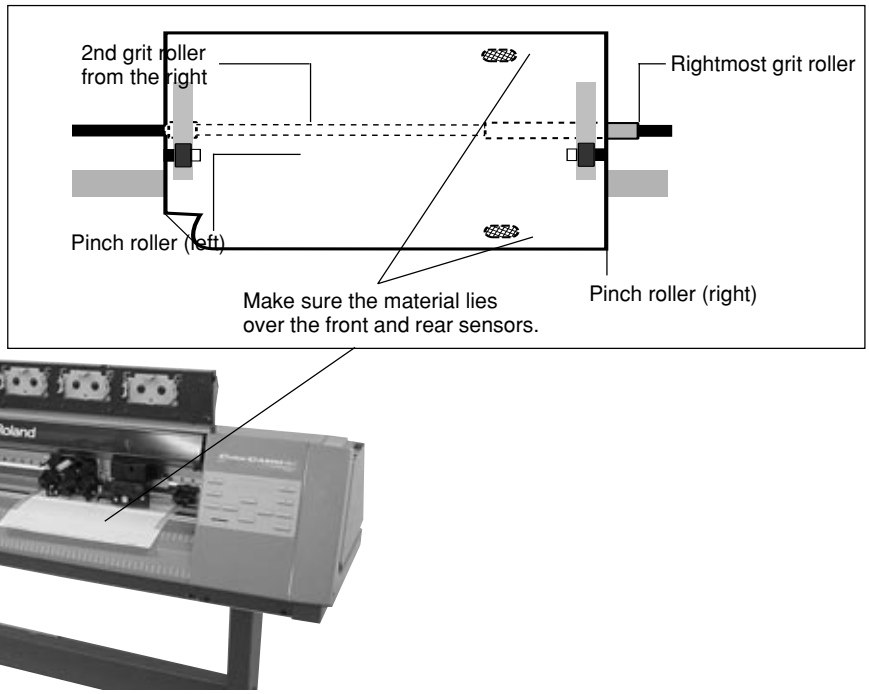


6 Keep pushing the [HEAD CLEANING] Key, and the sub power on.



7 Load the cleaning sheet.
Position the material, the pinch rollers, and the grit rollers at the locations shown below.
Load so that the pinch rollers descend on the black blacks on the left and right edges of the cleaning sheet.





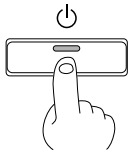
8 Lower the sheet loading lever.
If the material is not loaded at the correct location, the SETUP LED flashs at the same time.
If this happens, reload the material at the proper location.

9 When the front cover is closed, the BUSY LED flashes and head cleaning starts.
Head cleaning is finished when the BUSY LED goes dark.

10 When cleaning is finished, open the front cover and raise the sheet loading lever.

11 Remove the material.

12 Switch off the sub power.



Cleaning the Main Unit

For routine cleaning, use a soft piece of cloth.

Cleaning the Platen

If the platen becomes soiled, wipe it clean with a dry, soft cloth.
Do not wipe with a head cleaner or alcohol.
Use care when cleaning to avoid damaging the surface of the platen. Printing quality may suffer.

If printing on the platen was performed by mistake

If the grime is allowed to remain, printing may be smudged or uneven. Follow the steps below to clean.
1) Apply cellophane tape over the soiling, then rub the tape with your finger.
2) Slowly peel off the tape.
Repeat until the grime is removed.

Cleaning the Cleaning Pad

If the cleaning pad becomes dirty, clean it gently using a commercially available brush (item with soft fibers) or the like.

The Cleaning Pad

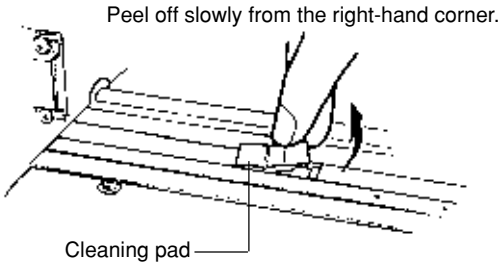
If the cleaning pad on the left edge of the unit's front surface is damaged, the printing head may be destroyed.
If the cleaning pad is damaged by a blade or the like, replace it with a new cleaning pad.
Continuing to use a cleaning pad that has deteriorated may impair printing quality.
As a general guideline, the cleaning pad should be replaced with a new one after printing 50 m (1960 in.) of material (24 in. in width).

Replacing the Cleaning Pad

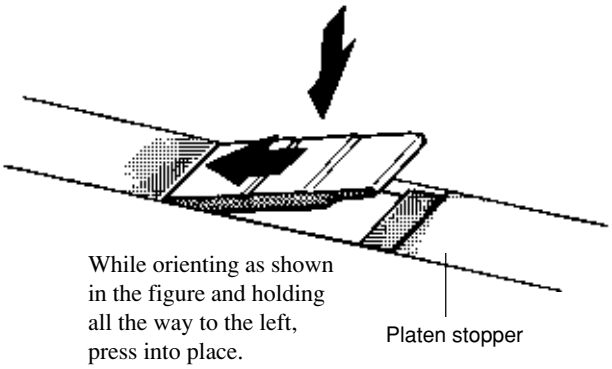
NOTICE When printing, be sure a cleaning pad is installed. Performing printing with no cleaning pad installed may destroy the printing head.

Continuing to use a cleaning pad that has deteriorated may impair printing quality.
As a general guideline, the cleaning pad should be replaced with a new one after printing about 50 m of material (24" in width).
Also, if the cleaning pad becomes damaged, replace it immediately.
Failure to replace it may cause destruction of the printing head.
Follow the steps below to replace the cleaning pad.

1 Remove the old cleaning pad.



2 Install the new cleaning pad.



3 Check the following:
- Make sure the cleaning pad has not come loose.
- Make sure there is no gap between the cleaning pad and the platen stopper.

Cleaning the Reflective Panel

If the reflective panel becomes dirty, clean it by moistening a cloth with water, wringing well, and wiping gently.

3-8 What to Do If...

NOTICE If you want to completely stop the operation of the PC-600, press the [POWER] key.
If the sub power cannot be switched off, then switch off the main power. In such cases, however, the printing head remains in contact with the sheet, and attempting to pull out the sheet or move the carriage while in this state which may damage the head.

If the PC-600 doesn't run...

PC-600

Is the machine being used at the proper operating temperature?
Check the operating temperature in "3-9 Specifications" and use the machine in an appropriate environment.

Is the PC-600 sub power on?
Turn on the sub power (See “2-2 Powering On”) .

Is the sheet loading lever not in the lowered position?
If the sheet loading lever has not been lowered, load the material correctly and lower the sheet loading lever.

Has the front cover not been closed?
Close the front cover. Operation is paused while the front cover is open. The FRONT COVER LED flashes while the front cover is open.

Has the ribbon been used up?
Replace with a new ribbon cartridge (see “2-5 Installing a Ribbon Cartridge Replacing an Ink Cartridge”) .

Has the machine gone to sleep?
When the user settings on the PC-600 have been used to set auto-sleep to [30 min.] or [60 min.], then when the set time elapses after printing or cutting operation, panel operation, and data transmission from the computer stop, the PC-600 goes to sleep.
To cancel the sleep mode, send data from the computer or press any key on the operation panel.

Connection cable

Are the computer and the PC-600 linked with the right cable?
The type of cable you need is determined by your computer and the software you are using. Even if the computer is the same, running different software may require a different cable. Use the cable specified in your software.

Is the cable making a secure connection?
Connect securely (See “Set-up and Connections”) .

Software

Has the correct driver selection been made for the application software?
Select the appropriate PC-600 driver.

Are the settings for the driver software correct?
Make the correct settings for the output port and communication parameters (see "Installing the DRIVER").

The SETUP LED and CARTRIDGE HOLDER LEDs are flashing

The machine may be malfunctioning.
The SETUP LED and CARTRIDGE HOLDER LEDs flash when a fatal error occurs. When this happens, all operation except for switching off the main power becomes impossible.
Switch off the main power, then switch it on again.
If this does not correct the problem, then check the flashing LEDs and contact your authorized Roland DG Corp. dealer or service center.

Clean, attractive printing is impossible

Is the printing head dirty?

Clean the printing head (see “ 3-7 Care and Maintenance”).
If cleaning will not improve the printing quality, the printing head might reach to the end of its life.
Contact your authorized Roland DG Corp. dealer or service center for replacement of the printing head.

Is the surface of the platen dirty or scratched?

Clean the platen (see “ 3-7 Care and Maintenance”).

Is the cleaning pad free of dust or damage?

A dusty or damaged cleaning pad may destroy the printing head. Gently wipe away any adhering dust or grime.
Also, if the cleaning pad becomes damaged, replace it immediately.

Has the cleaning pad deteriorated?

Continuing to use a cleaning pad that has deteriorated may impair printing quality.
As a general guideline, the cleaning pad should be replaced with a new one after printing about 50 m of material (24 in. in width).

Is the material free of soi-ling? (Is the material free of printing grime, dust, or damage?)

If the surface of the material is dusty or damaged, or if it has been touched by the hands, leaving perspiration or oils, printing may suffer drop-out or smudging, and fail to yield attractive results.
If the material is dirty, then before you load it on the machine, clean it using rubbing alcohol.
When loading material after cleaning, be careful not to let the printing area get dirty.
Also, if the material is dusty or damaged, not only may attractive printing be impossible, but the printing heads may be damaged as well. If the material is damaged, replace it with a new piece of material.
When storing material, be careful to protect it from dust or damage.

Has the material been sufficiently acclimated before use?

The material may shrink or expand due to absorption of moisture in the air. If such shrinking or expansion occurs during printing, the printed pattern may be misaligned.
Pull out the amount of roll material to be used, and allow to stand for 30 minutes to an hour.
The amount of time required for acclimation varies according to the type of material.

Has a used-up ink ribbon been flipped over or rewound and reused?

A used ribbon cartridge cannot be reused.
Do not attempt to turn over and reinstall a used ribbon cartridge, or to rewind the ink ribbon and reuse the cartridge.

Have the ribbon cartridges been installed correctly?

Correctly load the cartridge in the cartridge holder. Ribbon looseness or slack in the ribbon can also have a negative effect on attractive printing. (See “2-5 Installing a Ribbon Cartridge”.)

A cartridge change error occurs

Have the ribbon cartridges been installed correctly?

Correctly install the ribbon cartridges. (See “2-5 Installing a Ribbon Cartridge”.)

Is the reflective panel free of soiling?

If the reflective panel is soiled, it may become impossible to change the ink-ribbon cartridge correctly.
If dirty, then use a cloth moistened with water then wrung well, and wipe gently to clean.

Cartridge detection is incorrect

Has a marker seal on a ribbon cartridge become dirty?

Wipe off any grime on marker seals.

Are ribbon cartridges designed exclusively for the PC-600 being used?

Use only exclusive PC-600 ribbon cartridges.

Printing or cutting stops before the normal end is reached

Has the material been displaced from the sensors at the front or rear?

If the material becomes separated from the front or rear sensor during printing or cutting, operation stops. Be sure to use material of adequate size for the current printing or cutting job (See “About the Printing/Cutting Area”) .

Has a ribbon cartridge run out of ribbon?

If there is no more ink ribbon left for printing, replace the ribbon cartridge with a new one (See “2-5 Installing a Ribbon Cartridge Replacing an Ink Cartridge”) .

Full-color printing is impossible

Is the full set of four-color ribbon cartridges (CMYK) installed?

Full-color printing cannot be performed unless all four colors (CMYK) are available. Load the ribbon cartridges for cyan, magenta, yellow, and black in the cartridge holders. (See “2-5 Installing a Ribbon Cartridge”.)

Have the correct settings been made for the software driver?

Specify Process Color at the driver setup screen. (Please refer to the help file for the PC-600 DRIVER.)

Does the computer have enough memory?

If the computer runs out of memory during operations, try closing other open applications or restarting Windows®.
If you still get a message about insufficient memory, check how much free space is left on your hard drive. Windows® normally uses a portion of the hard drive as virtual memory, and so an error message may appear if the hard drive runs out of free space. If this happens, delete unneeded files or move them to a different drive to free up more space.
If you've followed the steps above and still get an error message about insufficient memory, installing more RAM in your computer is recommended.

The material slips away from the pinch rollers during operation

Is the loaded material straight, and not at an angle?

If the loaded material is crooked, it may come loose from the pinch rollers during feed operations. Make sure the material is straight by aligning it with the guideline stickers when loading (See “2-3 Loading the Material”.)

Is lengthy printing or cutting (1 m (39-3/8 in.) or more) being performed?

The material can be made less likely to come loose by moving the pinch rollers inward by a small amount. Also, make the user setting on the PC-600 to enable the prefeed function, or, alternatively, use key operations after loading the material to feed the material by the amount to be used to make sure the material will not come loose from the pinch rollers, and then perform the actual printing or cutting. (See “2-3 Loading the Material To Perform Long Printing/Cutting”.)

During operation, do the left and right edges of the material touch the inner surfaces of the PC-600?

Make sure that the left and right edges of the material do not touch the inner surfaces of the PC-600 during operation. Such contact may damage the material, and could also make it impossible to advance the material–thus causing it to slip.

Is roll material being used?

When you are using roll material, make the user setting on the PC-600 to enable the prefeed function. If the prefeed function has been disabled, pull out from the roll the amount to be used, and then carry out printing or cutting. Slippage of the material may occur if the PC-600 has to pull out the material wound on the roll as is performs printing or cutting.

Is the brake installed?

If the included brake is not attached, then install it (see "2-3 Loading the Material").
If the settings on the machine have been made to set the prefeed function to [ENABLE], then before performing printing or cutting, the length of material required for output is automatically pulled out from the roll, then returned to the rear, where it is left slack. The brake keeps the material from returning to the roll at this time.
If the material is not pulled out from the roll first, printing or cutting may be misaligned, or the material may come loose or jam.

Printing on the platen was performed by mistake

Clean the platen. (See "3-7 Care and Maintenance.")

When performing long printing, the colors are misaligned

This is caused by expansion and contraction of the material. For roll material in particular, the time required for the material to uncurl and acclimatize to the ambient temperature and humidity is different for the outer portions and the central portion of the roll.
Before you perform long printing, pull out the length of material to be printed from the roll and let it allow to stand for about 30 minutes to an hour to allow it to become acclimatized to the environment.

When performing long printing or cutting, operation stopped before printing or cutting finished

Depending on the program you're using, it may be possible to print or cut only up to the program's maximum output size.

One portion cannot be printed or cut

Do the settings for material size (printing area) for the driver and the program match each other?

If the settings for material size (printing area) for the driver and the program are different from each other, the output location may be shifted.
Be sure to make sure the settings for material size (printing area) for the driver and the program match each other before performing output.

When performing continuous printing, the image quality changes or margins are grimy

When you perform continuous printing, image quality may deteriorate, or ink may build up in the margins. This is because the printing heads grow hot and apply more heat than necessary to the ink ribbon.
This is especially likely to occur when performing full-color printing of an image with a large printing surface area, or when printing an iron-on decal.
If image quality changes when performing continuous printing, open the front cover to pause printing. Let stand for about 15 minutes, then close the front cover to resume printing. This allows the printing heads to return to close to normal temperature and print with normal image quality.

When printing solid-color areas, there are gaps between lines

Differences in material thickness may cause slippage in the amount of feed by the grit rollers.
If you want to eliminate gaps between lines, then correct the line pitch. (See "3-4 Tips and Tricks for Printing/Cutting Correcting Line Pitch.")

Printing and cutting are misaligned

When printing is followed by cutting, expansion or contraction of the material during printing may cause the cutting line may be displaced from the printing location.
Take steps to make the displacement less conspicuous, such as by creating a margin around the printed portion or adding a thick border. (See "3-4 Tips and Tricks for Printing/Cutting.")

The Material is not cut properly

Are the blade and blade holder installed correctly and securely?

Install these so that there is no looseness (see “2-1 Installing a Blade”).

Is the blade chipped?

If it is, replace it with a new one (see “2-1 Installing a Blade”).

Check if there are any dirty deposits on the blade.

If dirty, remove and clean the blade.

Make sure you are using an appropriate cutter force setting.

Perform a “cutting test,” then adjust the tool force slider as necessary to obtain the optimum cutter force (see “2-4 Cut Test”).

Reducing the margin at the front edge of the material

* Only If You're Using Roll Material *

Use the user settings on the PC-600 to enable front-edge sensing. When this setting is made, the machine rolls back the margin at the front edge of the material before performing printing or cutting.

Operation stops while continuous printing is in progress

If the printing heads grow hot during continuous printing, operation stops automatically to allow the heads to cool. When cooling ends, operation resumes.

3-9 Specifications

		PC-600
Mechanism		Media-movement method, Thermal-transfer serial, Automatic cartridge-changing type
Acceptable Media Width		50 to 610 mm (2 to 24 in.)
Maximum Work Area		571.6 mm x 24,998 mm (22-1/2 in. x 984-1/8 in.) * This may be restricted by the program
Acceptable Media Type		Adhesive vinyl, thickness 0.23 to 0.06 mm (0.00906 to 0.00237 in.)
Tools		Cutter: blade & blade holder. Printing ribbon: thermal transfer ribbon cartridge.
Number of installed cartridges		6 pieces
Cutter Force		30 to 200 gf
Cutting Speed		10 to 300 mm/sec. (0.393 to 11.811 in./sec)
Printing Speed		Max.252 mm/sec. (9.921 in./sec)
Cutting Resolution (Software Resolution)		0.025 mm/step (0.000984 in./step)
Printing Resolution		600 dpi x 600 dpi, 1,200 dpi (carriage-movement direction) x 600 dpi
Cutting Accuracy (Distance Accuracy)		Less than ±0.3 % of distance traveled or ±0.3 mm (±0.0118 in.), whichever is greater
Registration Between Printing & Cutting		Less than ±0.3 mm (±0.0118 in.) (Excluding expansion or contraction of the media, and excluding times when material is been reloaded)
Interface		Bidirectional parallel interface (compliant with IEEE 1284 : nibble mode)
Memory		2 Mbyte
Control Switches		POWER, DATA CLEAR, BASE POINT, ALIGN POINT, CUT TEST, SHEET CUT, HEAD CLEANING, TOOL FORCE, ▲, ▼, ◄, ►
LED		POWER, BASE POINT, ALIGN POINT, DATA CLEAR, CARTRIDGE HOLDER 1—6, SETUP, BUSY, FRONT COVER
Power-saving function		Auto-sleep
Power consumption		Printing / Cutting mode Maximum : 1.2 A / 100V–240V ±10% 50/60 Hz Standby mode Maximum : 0.3 A /100V–240V ±10% 50/60 Hz
Acoustic noise level		Printing/Cutting mode: less than 65 dB (A) Standby mode: less than 40 dB (A) (According to ISO7779)
Dimensions	Main unit	1125 mm (W) x 326 mm (D) x 285 mm (H) (44-5/16 in. (W) x 12-7/8 in. (D) x 11-1/4 in. (H)) When cover is opening: 1125 mm (W) x 326 mm (D) x 377 mm (H) (44-5/16 in. (W) x 12-7/8 in. (D) x 14-7/8 in. (H))
	With stand	1125 mm (W) x 756 mm (D) x 1134 mm (H) (44-5/16 in. (W) x 29-13/16 in. (D) x 44-11/16 in. (H)) When cover is opening: 1125 mm (W) x 756 mm (D) x 1226 mm (H) (44-5/16 in. (W) x 29-13/16 in. (D) x 48-5/16 in. (H))
Weight	Main unit	28 kg (61.7 lb.)
	With stand	47 kg (103.6 lb.)
Operating Temperature		15 to 30°C (59 to 86°F)
Operating Humidity		35 to 70% (non-condensing)
Accessories		Power Cord, thermal transfer ribbon cartridge (resin), blade (carbide), blade holder (blade holder and pin), material for test cuts, head cleaner, alignment tool, brake, replacement blade for separating knife, cleaning sheet, cleaning pad, dust cover, PC-600 DRIVER for Windows® 98/95, Roland COLORCHOICE®, user's manual (this manual), notes on usage, quick reference guide

Interface specifications

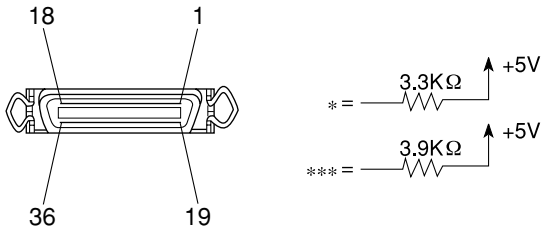
Parallel	
Standard	Bidirectional parallel interface (compliant with IEEE 1284: nibble mode)
Input signals	$\overline{\text{STROBE}}$ (1BIT), DATA (8BITS), $\overline{\text{SLCT IN}}$, $\overline{\text{AUTO FEED}}$, $\overline{\text{INIT}}$
Output signals	BUSY (1BIT), $\overline{\text{ACK}}$ (1BIT), $\overline{\text{FAULT}}$, SLCT, PERROR
Level of input output signals	TTL level
Transmission method	Asynchronous

Interface connector

Parallel interface connector (in compliance with specifications of Centronics)

Signal number	Terminal number		Signal number
$\overline{\text{SLCT IN}}$	36	18	HIGH***
HIGH*	35	17	GND
NC	34	16	GND
GND	33	15	NC
$\overline{\text{FAULT}}$	32	14	$\overline{\text{AUTO FEED}}$
$\overline{\text{INIT}}$	31	13	SLCT
	30	12	PERROR
	29	11	BUSY
	28	10	$\overline{\text{ACK}}$
	27	9	D7
	26	8	D6
GND	25	7	D5
	24	6	D4
	23	5	D3
	22	4	D2
	21	3	D1
	20	2	D0
	19	1	$\overline{\text{STROBE}}$

Pin Connection



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

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

Roland License Agreement

Roland DG Corporation ("Roland") grants you a non-assignable and non-exclusive right to use the COMPUTER PROGRAMS in this package ("Software") under this agreement with the following terms and conditions.

1. Coming into Force

This agreement comes into force when you purchase and open the sealed package or sealed disk package.
The effective date of this agreement is the date when you open the sealed package or sealed disk package.

2. Property

Copyright and property of this Software, logo, name, manual and all literature for this Software belong to Roland and its licenser.

The followings are prohibited :
(1) Unauthorized copying the Software or any of its support file, program module or literature.
(2) Reverse engineering, disassembling, decompiling or any other attempt to discover the source code of the Software.

3. Bounds of License

Roland does not grant you to sub-license, rent, assign or transfer the right granted under this agreement nor the Software itself (including the accompanying items) to any third party.
You may not provide use of the Software through time-sharing service and/or network system to any third party who is not individually licensed to use this Software.

You may use the Software by one person with using a single computer in which the Software is installed.

4. Reproduction

You may make one copy of the Software only for back-up purpose. The property of the copied Software belongs to Roland.
You may install the Software into the hard disk of a single computer.

5. Cancellation

Roland retains the right to terminate this agreement without notice immediately when any of followings occurs :
(1) When you violate any article of this agreement.
(2) When you make any serious breach of faith regarding this agreement.

6. Limitations on Liability

Roland may change the specifications of this Software or its material without notice.

Roland shall not be liable for any damage that may caused by the use of the Software or by exercise of the right licensed by this agreement.

7. Governing Law

This agreement is governed by the laws of Japan, and the parties shall submit to the exclusive jurisdiction of the Japanese Court.