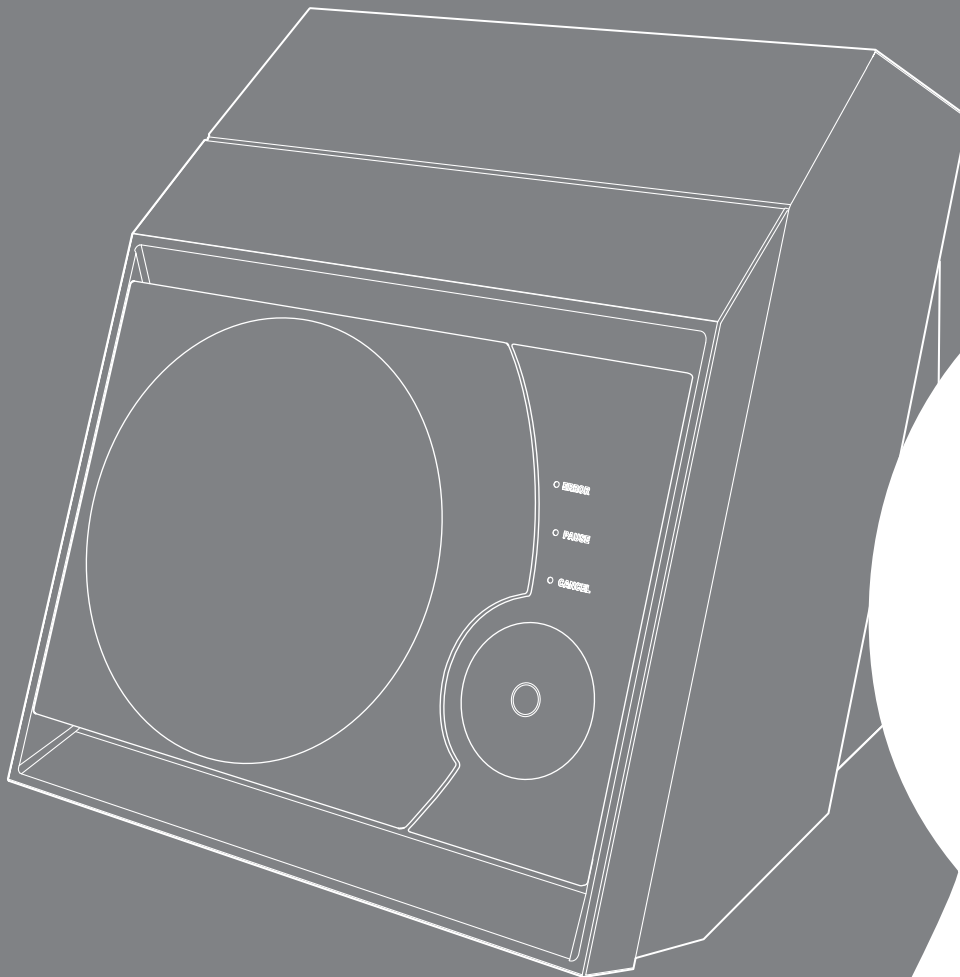


DWX-4

Setup Guide

Read this first.

This describes the setup tasks and important conditions about the installation location that must be met in order to enable use of this machine.



Thank you very much for purchasing this product.

- To ensure correct and safe usage with a full understanding of this product's performance, please be sure to read through this manual completely and store it in a safe location.
- Unauthorized copying or transferral, in whole or in part, of this manual is prohibited.
- The contents of this operation manual and the specifications of this product are subject to change without notice.
- The operation manual and the product have been prepared and tested as much as possible. If you find any misprint or error, please inform DGSHAPE Corporation.
- DGSHAPE Corporation 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.
- DGSHAPE Corporation assumes no responsibility for any direct or indirect loss or damage which may occur with respect to any article made using this product.

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.

Use only I/O cables that have been designed and manufactured specifically for this device.

NOTICE

Grounding Instructions

In the event of a malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This tool is equipped with an electric cord having an equipment-grounding conductor and a grounding plug. The plug must be plugged into a matching outlet that is properly installed and grounded in accordance with all local codes and ordinances.

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

Improper connection of the equipment-grounding conductor can result in a risk of electric shock. The conductor with insulation having an outer surface that is green with or without yellow stripes is the equipment-grounding conductor. If repair or replacement of the electric cord or plug is necessary, do not connect the equipment-grounding conductor to a live terminal.

Check with a 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 cord immediately.

For Canada

CAN ICES-3 (A)/NMB-3(A)

For California



WARNING :

This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

For EU Countries



Manufacturer:

Roland DG Corporation

1-6-4 Shinmiyakoda, Kita-ku, Hamamatsu-shi, Shizuoka-ken, 431-2103 JAPAN

The importer in the EU:

Roland DG Europe Holdings B.V.

Prof. J.H. Bavincklaan 2, 1183 AT, Amstelveen, The Netherlands

For EU Countries

WARNING

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

DGSHAPE Corporation has licensed the MMP technology from the TPL Group.

Operating Instructions

KEEP GUARDS IN PLACE and in working order.

REMOVE ADJUSTING KEYS AND WRENCHES. Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.

KEEP WORK AREA CLEAN. Cluttered areas and benches invite 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.

KEEP CHILDREN AWAY. All visitors should be kept safe distance from work area.

MAKE WORKSHOP KID PROOF with padlocks, master switches, or by removing starter keys.

DON'T FORCE TOOL. It will do the job better and safer at the rate for which it was designed.

USE RIGHT TOOL. Don't force tool or attachment to do a job for which it was not designed.

USE PROPER EXTENSION CORD. Make sure your extension cord is in good condition. When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating.

WEAR PROPER APPAREL. Do not wear loose clothing, gloves, neckties, rings, bracelets, or other jewelry which may get caught in moving parts. Nonslip footwear is recommended. Wear protective hair covering to contain long hair.

USE SAFETY GLASSES, face or dust mask if cutting or cleaning operation is dusty. Everyday eyeglasses only have impact resistant lenses, they are NOT safety glasses.

SECURE WORK. Use clamps or a vise to hold work when practical.

DON'T OVERREACH. Keep proper footing and balance at all times.

MAINTAIN TOOLS WITH CARE. Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.

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

REDUCE THE RISK OF UNINTENTIONAL STARTING. Make sure 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 STAND ON TOOL. Serious injury could occur if the tool is tipped or if the cutting tool is unintentionally contacted.

CHECK DAMAGED PARTS. Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function - check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced.

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

USE POWER SUPPLY CORD WHICH IS ATTACHED WITH PRODUCTS. do not use other power supply cord.

PERFORM CLEANING USING A DUST COLLECTOR OR A COMMERCIALY AVAILABLE BRUSH. Never use a solvent such as gasoline, alcohol, or thinner to perform cleaning.

CONNECT THE USB CABLE TO THE COMPUTER (Certified with IEC/EN60950-1) with the suitable flammability rating which was estimated by IEC/EN61010-1 3rd Edition (Cl. 9).

USE AN EXTERNAL CABLE AND A DUST COLLECTOR with the suitable flammability rating which was estimated by IEC/EN61010-1 3rd Edition (Cl. 9).

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To Ensure Safe Use

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

About WARNING and CAUTION Notices

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

About the Symbols

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

 Incorrect operation may cause injury.

 WARNING

 **Be sure to follow the operation procedures described in this documentation. Never allow anyone unfamiliar with the usage or handling of the machine to touch it.**
Incorrect usage or handling may lead to an accident.

 **Keep children away from the machine.**
The machine includes areas and components that pose a hazard to children and may result in injury, blindness, choking, or other serious accident.

 **Never operate the machine while tired or after ingesting alcohol or any medication.**
Operation requires unimpaired judgment. Impaired judgment may result in an accident.

 **Conduct operations in a clean, brightly lit location.**
Working in a location that is dark or cluttered may lead to an accident, such as becoming caught in the machine as the result of an inadvertent stumble.

 **Never use the machine for any purpose for which it is not intended, or use the machine in an undue manner that exceeds its capacity.**
Doing so may result in injury or fire.

 WARNING

 **Never use a cutting tool that has become dull. Perform frequent maintenance to keep and use the machine in good working order.**
Unreasonable usage may result in fire or injury.

 **For accessories (optional and consumable items, power cord, and the like), use only genuine articles compatible with this machine.**
Incompatible items may lead to an accident.

 **Before attempting cleaning, maintenance, or attachment or detachment of optional items, disconnect the power-cord.**
Attempting such operations while the machine is connected to a power source may result in injury or electrical shock.

 **Never attempt to disassemble, repair, or modify the machine.**
Doing so may result in fire, electrical shock, or injury. Entrust repairs to a trained service technician.

 **Never operate if a front cover is cracked or broken.**
Doing so may result in injury. If the front cover is cracked, contact your authorized Roland DG Corp. dealer.

This machine weighs 22 kg (48.5 lbs.)

 CAUTION

 **Unloading and emplacement are operations that must be performed by 2 persons or more.**
Tasks that require undue effort when performed by a small number of persons may result in physical injury. Also, if dropped, such items may cause injury.

 CAUTION

 **Install in a location that is level and stable.**
Installation in an unsuitable location may cause an accident, including a fall or tip over.

 The cutting waste or workpiece may catch fire or pose a health hazard.

WARNING



Never attempt to cut magnesium or any other such flammable material.
Fire may occur during cutting.



Keep open flame away from the work area.
Cutting waste may ignite. Powdered material is extremely flammable, and even metal material may catch fire.



Never use a vacuum cleaner to take up cutting waste.
Taking up fine cuttings using an ordinary vacuum cleaner may cause danger of fire or explosion.

CAUTION



Wear dust goggles and a mask. Wash away any cutting waste remaining on the hands.

Accidentally swallowing or inhaling cutting waste may be hazardous to the health.

 Danger of pinching, entanglement, and burns

WARNING



Securely fasten the cutting tool and workpiece in place. After securing in place, make sure no wrenches or other articles have inadvertently been left behind.

Otherwise such articles may be thrown from the machine with force, posing a risk of injury.



Exercise caution to avoid being pinched or becoming caught.

Inadvertent contact with certain areas may cause the hand or fingers to be pinched or become caught. Use care when performing operations.



Caution: high temperatures.

The cutting tool and spindle motor become hot. Exercise caution to avoid fire or burns.

CAUTION



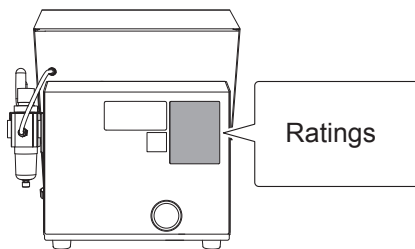
Caution: cutting tool.

The cutting tool is sharp. To avoid injury, exercise caution.

 Danger of electrical short, shock, electrocution, or fire

 WARNING

-  **Connect to an electrical outlet that complies with this machine's ratings (for voltage, frequency and current).**
Incorrect voltage or insufficient current may cause fire or electrical shock.



-  **Never use out of doors or in any location where exposure to water or high humidity may occur. Never touch with wet hands.**
Doing so may result in fire or electrical shock.

-  **Never allow any foreign object to get inside. Never expose to liquid spills.**
Inserting objects such as coins or matches or allowing beverages to be spilled into the ventilation ports may result in fire or electrical shock. If anything gets inside, immediately disconnect the power cord and contact your authorized Roland DG Corp. dealer.

-  **Never place any flammable object nearby. Never use a combustible aerosol spray nearby. Never use in any location where gases can accumulate.**
Combustion or explosion may be a danger.

-  **Handle the power cord, plug, and electrical outlet correctly and with care. Never use any article that is damaged.**
Using a damaged article may result in fire or electrical shock.

-  **Do not use the supplied power supply cord for other products.**

 WARNING

-  **When using an extension cord or power strip, use one that adequately satisfies the machine's ratings (for voltage, frequency, and current).**
Use of multiple electrical loads on a single electrical outlet or of a lengthy extension cord may cause fire.

-  **When the machine will be out of use for a prolonged period, disconnect the power cord.**
This can prevent accidents in the event of current leakage or unintended startup.

-  **Connect to ground.**
This can prevent fire or electrical shock due to current leakage in the event of malfunction.

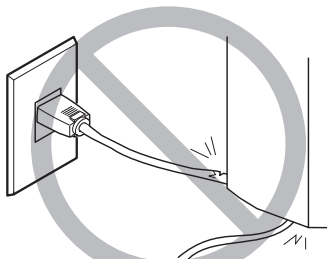
-  **Position so that the power plug is within immediate reach at all times.**
This is to enable quick disconnection of the power plug in the event of an emergency. Install the machine next to an electrical outlet. Also, provide enough empty space to allow immediate access to the electrical outlet.

-  **Never use cutting oil.**
This machine is not designed for the flow of cutting oil. Oil may get inside the machine and cause fire or electrical shock.

-  **Never use a pneumatic blower.**
This machine is not compatible with a pneumatic blower. Cutting waste may get inside the machine and cause fire or electrical shock.

-  **If sparking, smoke, burning odor, unusual sound, or abnormal operation occurs, immediately unplug the power cord. Never use if any component is damaged.**
Continuing to use the machine may result in fire, electrical shock, or injury. Contact your authorized Roland DG Corp. dealer.

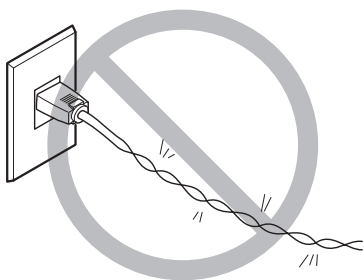
 Important notes about the power cord, plug, and electrical outlet



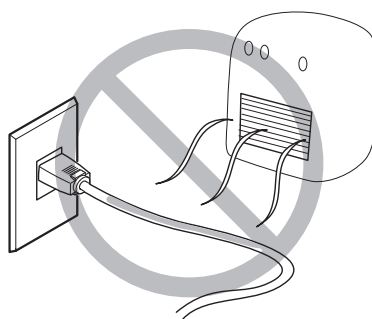
Never place any object on top or subject to damage.



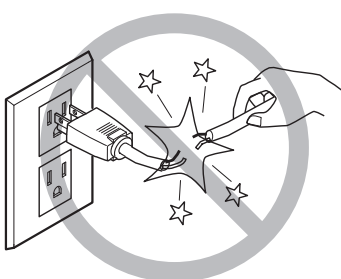
Never allow to get wet.



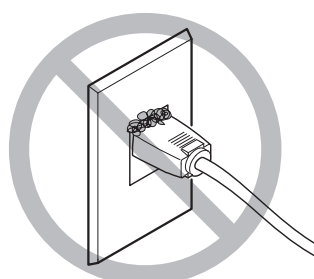
Never bend or twist with undue force.



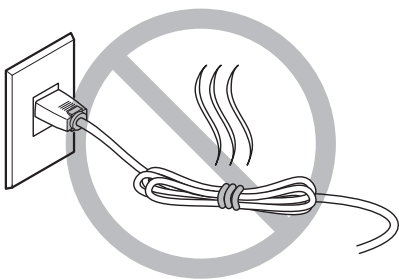
Never make hot.



Never pull with undue force.



Dust may cause fire.



Never bundle, bind, or roll up.

 Danger exists of components being thrown off or damaged.

 WARNING



Connect the air hose securely, so that it will not come loose.

A pressurized hose that comes loose may whip about uncontrolled, posing a hazard. Connect securely.



Before attempting cleaning, maintenance, or attachment or detachment of the air hose or any optional items, stop the supply of compressed air and allow the pressure to escape.

Allowing the equipment to remain under pressure poses a hazard of flying components.



When the machine will be out of use for a prolonged period, stop supply of compressed air and bleed off the air pressure.

This can prevent an accident.



Use an air hose of the specified diameter and having adequate pressure resistance.

Otherwise the article may come loose or rupture.



Keep the supply of compressed air within the specified pressure range.

Exceeding the specified pressure may result in rupture or other major accident.

 WARNING



Ensure no contamination of the supplied compressed air by any water, oils, chemicals, or foreign objects.

Components may deteriorate or rupture, or the contaminants may be scattered, posing a hazard.



Never use in a location exposed to cutting oil, solvents, chemicals, or other such substances.

Components may deteriorate or rupture under the pressure of compressed air.



Never use in a location exposed to direct sunlight.

Components may deteriorate or rupture under the pressure of compressed air.



Never strike or subject the object to impact.

Components may suffer damage or rupture under the pressure of compressed air.



Keep the temperature of the installation area within the specified range. Never place a stove or heater nearby.

Components may deteriorate or rupture under the pressure of compressed air.

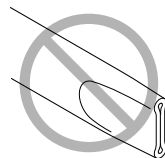
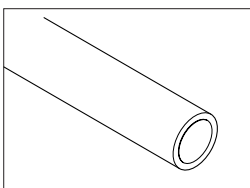


Never damage the air hose, or bend or twist it with undue force. Never use an item that has deteriorated.

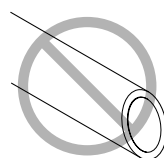
A damaged air hose may rupture.

 Important notes about the end (cut edge) of the air hose

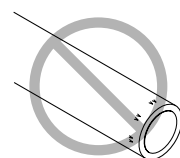
Failure to observe these cautions may result in air leakage or easy dislodgement of the air hose. Also, when a hose has been detached, cut off the end before reattaching the hose.



Ensure that it is not crushed.



Make the cut edge straight.



Keep free from damage or soiling.

Warning Labels

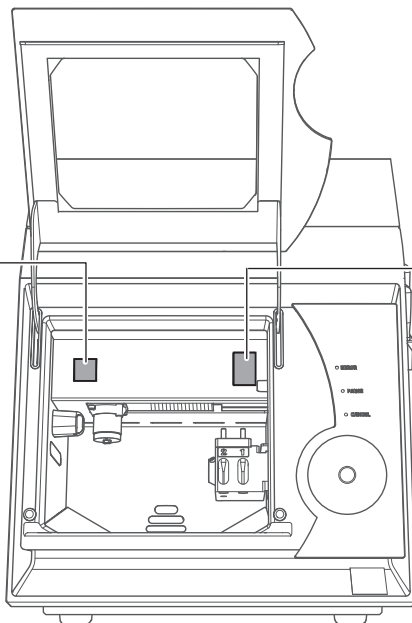
Warning labels are affixed to make areas of danger immediately clear. The meanings of these labels are as follows. Be sure to heed their warnings.

Also, never remove the labels or allow them to become obscured.



Never use a pneumatic blower.

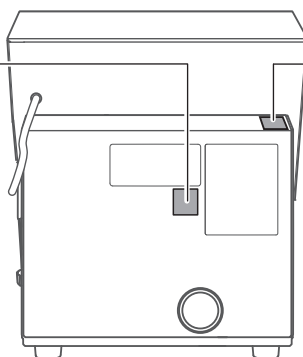
This machine is not compatible with a pneumatic blower. Cutting waste may get inside the machine and cause fire or electrical shock.



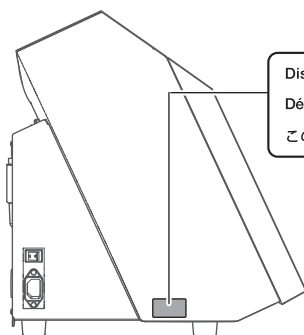
Caution: Sharp Tool
Inadvertent contact may cause injury.



To reduce the risk of injury, user must read and understand user's manual.



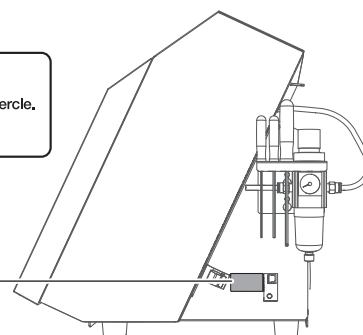
Caution: High Voltage
Cover removal may pose hazard of shock or electrocution due to high voltage.



Disconnect the power cord before opening this cover.
Débranchez le cordon d'alimentation avant d'ouvrir ce couvercle.
このカバーを開ける際は電源ケーブルを抜いてください。

Install software (driver) in PC before connecting USB.

USBを接続するまえに、
PCにソフトウェア(ドライバー)を
インストールしてください。





Pour utiliser en toute sécurité

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

Avis sur les avertissements

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

À propos des symboles

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

 L'utilisation incorrecte peut causer des blessures

 ATTENTION

 **S'assurer de suivre les procédures d'utilisation décrites dans la documentation. Ne jamais permettre à quiconque ne connaît pas le fonctionnement ou la manutention de l'appareil de le toucher.** L'utilisation ou la manutention incorrectes peuvent causer un accident.

 **Garder les enfants loin de l'appareil.** L'appareil comporte des zones et des composants qui présentent un danger pour les enfants et qui pourraient causer des blessures, la cécité, la suffocation ou d'autres accidents graves.

 **Ne jamais faire fonctionner l'appareil après avoir consommé de l'alcool ou des médicaments, ou dans un état de fatigue.** L'utilisation de l'appareil exige un jugement sans faille. L'utilisation avec les facultés affaiblies pourrait entraîner un accident.

 **Utiliser l'appareil dans un endroit propre et bien éclairé.** Travailler dans un endroit sombre ou encombré peut causer un accident; l'utilisateur risque, par exemple, de trébucher malencontreusement et d'être coincé par une partie de l'appareil.

 **Ne jamais utiliser l'appareil à des fins autres que celles pour lesquelles il est conçu. Ne jamais l'utiliser de manière abusive ou d'une manière qui dépasse sa capacité.** Le non-respect de cette consigne peut causer des blessures ou un incendie.

 ATTENTION

 **Ne jamais utiliser un outil de coupe émoussé. Procéder fréquemment aux travaux d'entretien pour garder l'appareil en bon état de fonctionnement.** L'usage abusif peut causer un incendie ou des blessures.

 **Utiliser uniquement des accessoires d'origine (accessoires en option, articles consommables, câble d'alimentation et autres articles semblables), compatibles avec l'appareil.** Les articles incompatibles risquent de causer des accidents.

 **Débrancher le câble d'alimentation avant de procéder au nettoyage ou à l'entretien de l'appareil, et avant d'y fixer ou d'en retirer des accessoires en option.** Tenter ces opérations pendant que l'appareil est branché à une source d'alimentation peut causer des blessures ou un choc électrique.

 **Ne jamais tenter de démonter, de réparer ou de modifier l'appareil.** Le non-respect de cette consigne risque de provoquer un incendie, un choc électrique ou des blessures. Confier les réparations à un technicien ayant la formation requise.

 **Ne pas utiliser si un couvercle avant est fissuré ou brisé.** Si le couvercle transparent à l'avant ou sur le côté de l'appareil est fissuré, communiquer avec le représentant Roland DG autorisé.

 Le poids de cet appareil est de 22 kg (48.5 lbs.)

 PRUDENCE

 **Le déchargement et la mise en place doivent être faits par au moins 2 personnes.** Les tâches qui exigent un effort trop grand si elles sont exécutées par un petit nombre de personnes peuvent être cause de blessures. La chute d'articles très lourds peut aussi causer des blessures.

 PRUDENCE

 **Installer l'appareil à un endroit stable et plat.** Installer l'appareil à un endroit inapproprié peut provoquer un accident grave comme le renversement ou la chute.

 **Les débris de coupe peuvent s'enflammer ou présenter un risque pour la santé.**

ATTENTION



Ne jamais tenter de couper du magnésium ni aucun autre matériau inflammable.
Un incendie pourrait se produire pendant la coupe.



Ne pas approcher une flamme nue de l'espace de travail.
Les rognures de coupe peuvent s'enflammer. Les matériaux pulvérisés sont extrêmement inflammables et même le métal peut s'enflammer.



Ne jamais utiliser un aspirateur pour aspirer des déchets coupés.
L'utilisation d'un aspirateur normal pour aspirer des déchets finement coupés peut entraîner un risque d'incendie ou d'explosion.

PRUDENCE



Porter des lunettes de protection et un masque. Rincer toutes les rognures de coupe qui pourraient rester collées aux mains.

Avaler ou respirer accidentellement des rognures de coupe peut être dangereux pour la santé.

 **Certains éléments peuvent présenter un risque de pincement, d'emmêlement, de brûlure ou d'autres dangers.**

ATTENTION



Fixer solidement l'outil de coupe et la pièce à travailler. Une fois qu'ils sont fixés solidement, s'assurer qu'aucun outil ni aucun autre objet n'a été laissé en place.
Si tel était le cas, ces objets pourraient être projetés avec force hors de l'appareil et causer des blessures.



Faire preuve de prudence pour éviter l'écrasement ou le coincement.
La main ou les doigts peuvent être écrasés ou coincés s'ils entrent en contact avec certaines surfaces par inadvertance. Faire preuve de prudence pendant l'utilisation de l'appareil.



Attention : températures élevées.
L'outil de coupe et le moteur chauffent. Faire preuve de prudence pour éviter un incendie ou des brûlures.

PRUDENCE

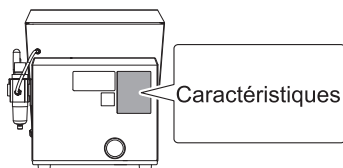


Attention : outil de coupe.
L'outil de coupe est acéré. Faire preuve de prudence pour éviter les blessures.

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

 ATTENTION

-  **Brancher à une prise électrique conforme aux caractéristiques de cet appareil (tension, fréquence et courant).**
Une tension incorrecte ou un courant insuffisant peuvent causer un incendie ou un choc électrique.



-  **Ne jamais utiliser à l'extérieur ni à un endroit où l'appareil risque d'être exposé à de l'eau ou à une humidité élevée. Ne jamais toucher l'appareil avec des mains mouillées.**

Le non-respect de cette consigne risque de provoquer un incendie ou un choc électrique.

-  **Ne jamais insérer d'objet étranger dans l'appareil. Ne jamais exposer l'appareil aux déversements de liquides.**

L'insertion d'objets comme des pièces de monnaie ou des allumettes, ou le déversement de liquides dans les orifices de ventilation peuvent causer un incendie ou un choc électrique. Si un objet ou du liquide s'infiltre dans l'appareil, débrancher immédiatement le câble d'alimentation et communiquer avec le représentant Roland DG autorisé.

-  **Ne jamais placer d'objet inflammable à proximité de l'appareil. Ne jamais utiliser de produit inflammable en aérosol à proximité de l'appareil. Ne jamais utiliser l'appareil dans un endroit où des gaz peuvent s'accumuler.**

Une combustion ou une explosion pourraient se produire.

-  **Manipuler le câble d'alimentation, la fiche et la prise électrique correctement et avec soin.**

Ne jamais utiliser un article endommagé, car cela pourrait causer un incendie ou un choc électrique.

-  **Ne pas utiliser le cordon électrique fourni avec d'autres produits.**

 ATTENTION

-  **Si une rallonge ou une bande d'alimentation électrique sont utilisées, s'assurer qu'elles correspondent aux caractéristiques de l'appareil (tension, fréquence et courant).**

L'utilisation de plusieurs charges électriques sur une prise unique ou une longue rallonge peut causer un incendie.

-  **Si l'appareil doit rester inutilisé pendant une longue période, débrancher le câble d'alimentation.**

Cela peut prévenir les accidents en cas de fuite de courant ou de démarrage accidentel.

-  **Mise à la terre.**

La mise à la terre peut prévenir un incendie ou un choc électrique dus à une fuite de courant en cas de défaillance.

-  **Placer l'appareil de façon à ce que la fiche soit facile d'accès en tout temps.**

Ainsi, l'appareil pourra être débranché rapidement en cas d'urgence. Installer l'appareil près d'une prise électrique. En outre, prévoir suffisamment d'espace pour que la prise électrique soit facile d'accès.

-  **Ne jamais utiliser d'huile de coupe.**

Cet appareil n'est pas conçu pour traiter l'huile de coupe. L'huile peut s'infiltrer à l'intérieur et causer un incendie ou un choc électrique.

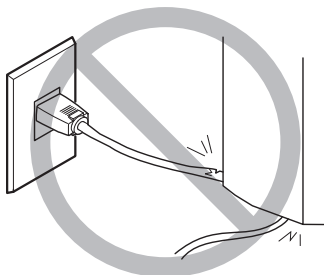
-  **Ne jamais utiliser d'air sous pression.**

Cet appareil n'est pas conçu pour être nettoyé à l'aide d'un appareil soufflant. Des rognures de coupe peuvent s'infiltrer à l'intérieur et causer un incendie ou un choc électrique.

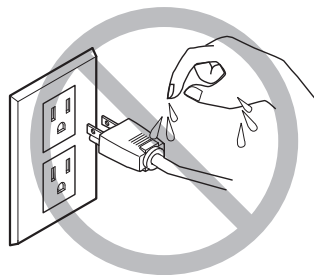
-  **S'il se produit des étincelles, de la fumée, une odeur de brûlé, un bruit inhabituel ou un fonctionnement anormal, débrancher immédiatement le câble d'alimentation. Ne jamais utiliser si un composant est endommagé.**

Continuer à utiliser l'appareil peut causer un incendie, un choc électrique ou des blessures. communiquer avec le représentant Roland DG autorisé.

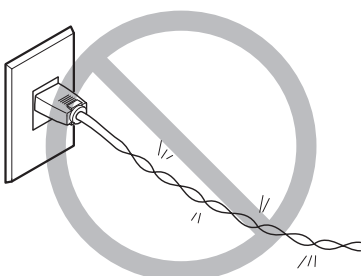
** Remarques importantes à propos du câble d'alimentation, de la fiche et de la prise électrique**



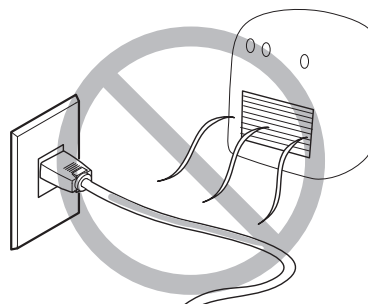
Ne jamais déposer aucun objet sur le câble, sur la fiche ou sur la prise car cela risque de les endommager.



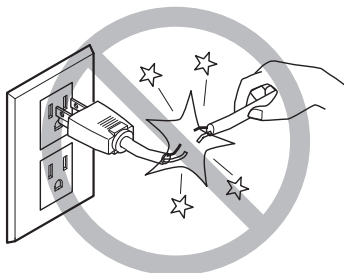
Ne jamais laisser l'eau toucher le câble, la fiche ou la prise.



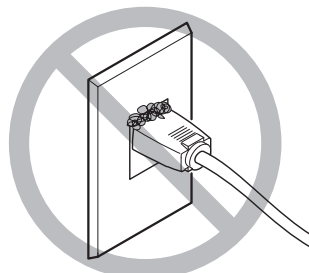
Ne jamais plier ni tordre le câble avec une force excessive.



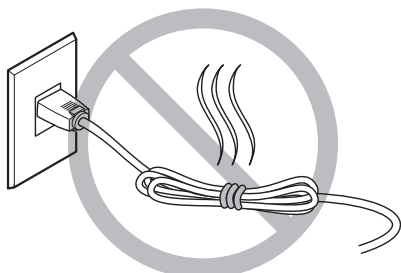
Ne jamais chauffer le câble, la fiche ou la prise.



Ne jamais tirer sur le câble ou la fiche avec une force excessive.



La poussière peut causer un incendie.



Ne jamais plier ni enrouler le câble.

 Il y a risque que des composants soient projetés ou endommagés.

 ATTENTION

 **Connecter solidement le tuyau à air pour éviter qu'il se détache.**

Un tuyau sous pression qui se détache peut fouetter l'air de manière désordonnée et créer une situation dangereuse. Le fixer solidement.

 **Avant de procéder au nettoyage ou à la maintenance de l'appareil, d'y fixer ou d'en détacher le tuyau à air ou un accessoire en option, arrêter l'alimentation en air comprimé et laisser la pression s'échapper.**

Si l'équipement est laissé sous pression, il y a risque que des éléments soient projetés.

 **Si l'appareil doit rester inutilisé pendant une longue période, couper l'alimentation en air comprimé et purger la pression.**

Cette précaution peut prévenir un accident.

 **Utiliser un tuyau à air du diamètre spécifié et ayant une résistance appropriée à la pression.**

Sinon, le tuyau risque de se détacher ou de se rompre.

 **Garder l'alimentation en air comprimé à la pression spécifiée.**

Appliquer une pression supérieure à la pression spécifiée risque de faire rompre le tuyau ou de causer un accident grave.

 **S'assurer que l'air comprimé n'est pas contaminé par de l'eau, de l'huile, des produits chimiques ou des objets étrangers.**

Les composants pourraient se détériorer ou se rompre et les contaminants seraient projetés, ce qui créerait un danger.

 ATTENTION

 **Ne jamais utiliser dans un endroit exposé à de l'huile de coupe, à des solvants, à des produits chimiques ou à d'autres substances similaires.**

Les composants pourraient se détériorer ou se rompre sous la pression de l'air comprimé.

 **Ne jamais utiliser dans un endroit exposé directement aux rayons du soleil.**
Les composants pourraient se détériorer ou se rompre sous la pression de l'air comprimé.

 **Ne jamais frapper ni soumettre l'objet à un impact.**

Les composants pourraient être endommagés ou se rompre sous la pression de l'air comprimé.

 **Garder la température de l'endroit où l'appareil est installé dans les limites spécifiées. Ne jamais placer un four ou un appareil de chauffage à proximité.**

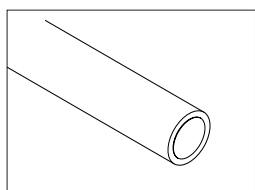
Les composants pourraient se détériorer ou se rompre sous la pression de l'air comprimé.

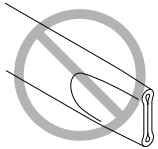
 **Ne jamais endommager le tuyau à air, le plier ou le tordre avec une force excessive. Ne jamais utiliser un article détérioré.**

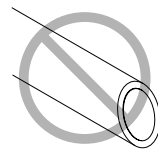
Un tuyau à air endommagé risque de se rompre.

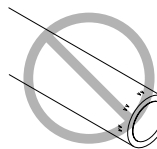
 Remarques importantes relativement à l'extrémité (bord coupé) du tuyau à air.

Le non-respect de ces consignes de sécurité peut causer une fuite d'air ou le débranchement du tuyau à air. En outre, si le tuyau à air a été débranché, en couper l'extrémité avant de le rebrancher.



 **S'assurer qu'il n'est pas écrasé**

 **Le bord coupé doit être droit**

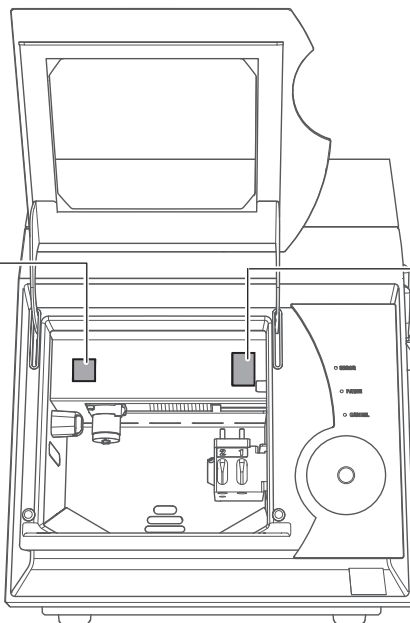
 **Le garder en bon état et propre**

Vignettes d'avertissement

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



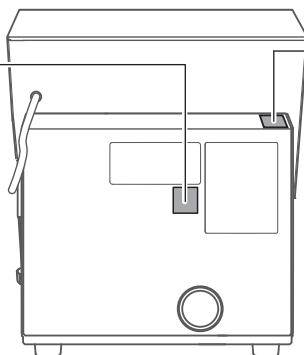
Ne jamais utiliser d'air sous pression.
Cet appareil n'est pas conçu pour être nettoyé à l'aide d'un appareil soufflant. Des rognures de coupe peuvent s'infiltrer à l'intérieur et causer un incendie ou un choc électrique.



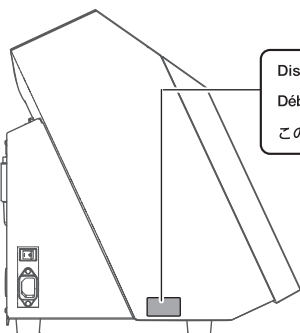
Attention : outil coupant
Un contact imprudent risque d'entraîner une blessure.



Afin de réduire le risque de blessures, l'utilisateur doit lire et bien comprendre le mode d'emploi.



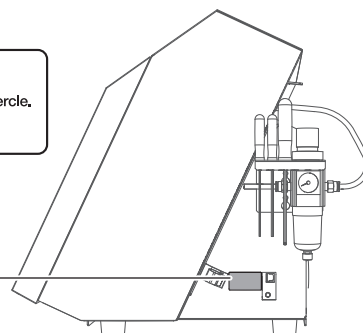
Attention : voltage élevé
Il peut être dangereux de retirer le couvercle puisqu'il y aurait des risques de chocs électriques ou d'électrocution à cause du voltage élevé.



Disconnect the power cord before opening this cover.
Débranchez le cordon d'alimentation avant d'ouvrir ce couvercle.
このカバーを開ける際は電源ケーブルを抜いてください。

Install software (driver) in PC
before connecting USB.

USBを接続するまえに、
PCにソフトウェア(ドライバー)を
インストールしてください。



Important Notes on Handling and Use

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

This machine is a precision device.

- Handle carefully, and never subject the machine to impact or excessive force.
- Diligently keep clean of cutting waste.
- Use within the range of specifications.
- Never attempt to move the spindle unit and rotary axis unit by hand with undue force.
- Never needlessly touch anywhere inside the machine except for locations specified in this manual.

Install in a suitable location.

- Install in a location that meets the specified conditions for temperature, relative humidity, and the like.
- Install in a quiet, stable location offering good operating conditions.
- Never install in out doors.
- Never install the machine in an environment where silicone substances (oil, grease, spray, etc.) are present. Doing so may cause poor switch contact and breakdown of the ionizer.

This machine becomes hot.

- Never cover the ventilation holes with cloth, tape, or anything else.
- Install in well-ventilated location.

This machine is exclusively for cutting modeling zirconia, wax and PMMA.

- Never cut any material other than modeling zirconia, wax, and PMMA.

About Tools

- The tip of the tool is breakable. Handle with care, being careful not to drop it.

Chapter 1

Installation and Setup

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Introduction

The Feature of this Machine

This machine is exclusively for creating artificial teeth and tooth models.

This machine is exclusively for making artificial teeth and tooth models. It is used to produce artificial teeth and tooth models using zirconia, wax, or PMMA. Installing and setting up the exclusive programs on your computer and connecting the machine to the computer enables you to create high-quality artificial teeth and tooth models.

For the latest information about this machine (including manuals), see the DGSHAPE Corp. website (<http://www.dgshape.com/>).

Documentation Included with the Machine

The followings documentations are included with the machine.

DWX-4 Setup Guide (this manual)

This document explains how to set up the machine, how to install the supplied software. Be sure to read it first.

DWX-4 User's Manual (electronic-format manual)

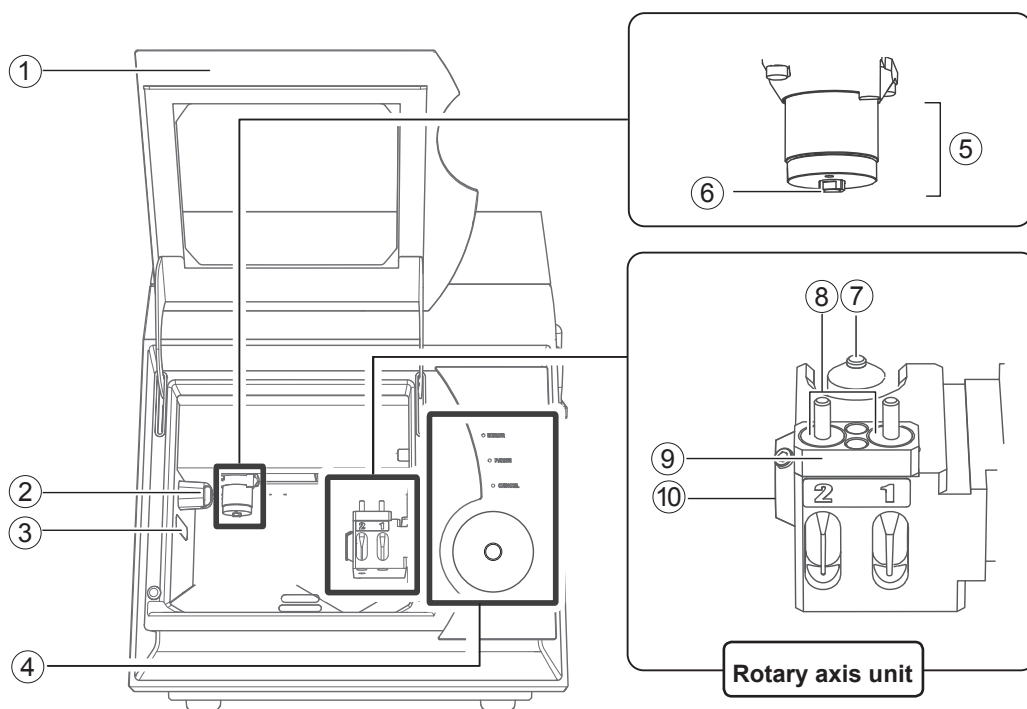
This document explains how to operate the software and how to perform cutting by using this machine. The manual is in electronic-format, and no printed document is included. You can find it on the included DGSHAPE Software Package CD.

☞ P. 33, "Installing the Software"

Part Names / Included Items

Part Names and Functions

Front and Interior

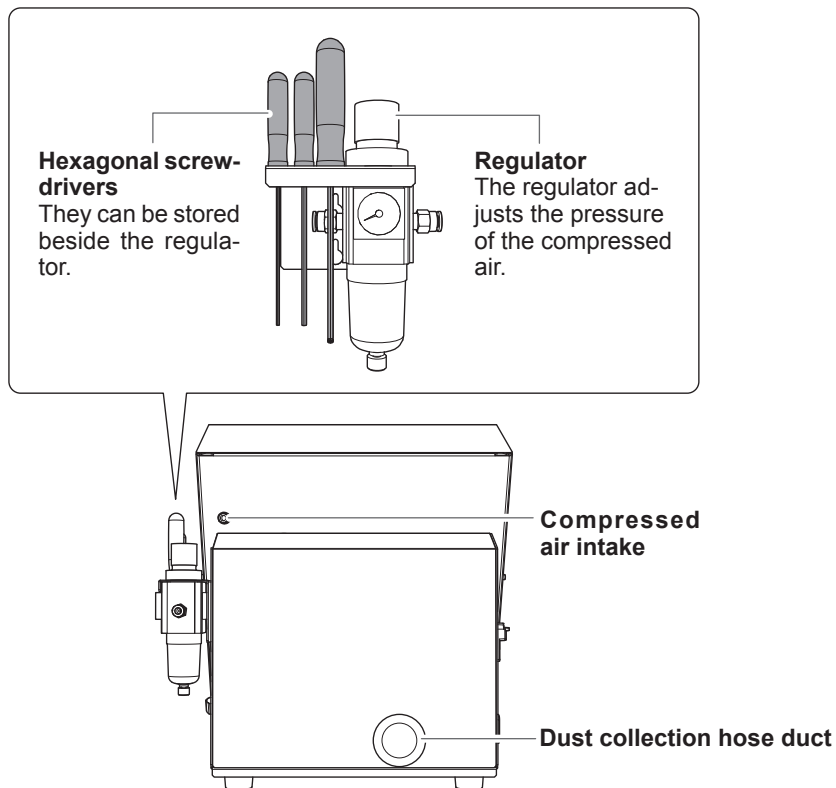


No.	Name	No.	Name	No.	Name
①	Front cover *1	⑤	Spindle unit	⑨	ATC magazine
②	Ionizer *2	⑥	Collet	⑩	Mounting part
③	Signal LED lamp	⑦	Tool sensor		
④	Built-in panel	⑧	Stocker		

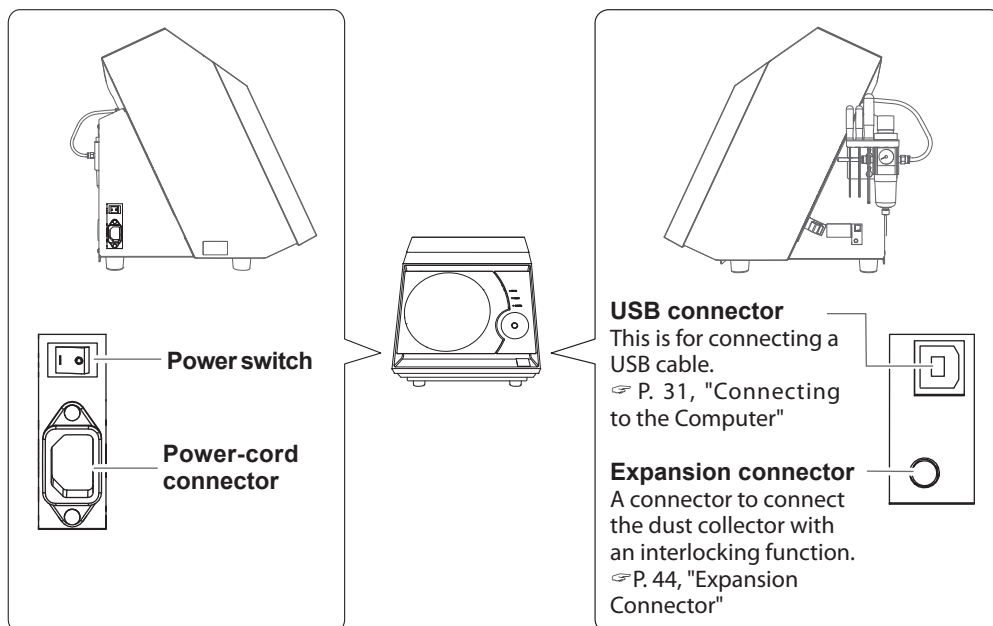
*1 To ensure safety, opening the cover during spindle rotation causes an emergency stop.

*2 The ionizer has a function to remove electrostatic of cutting dust from PMMA cutting.

Rear

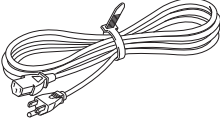
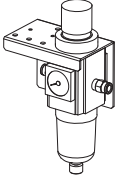
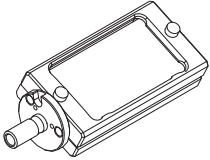
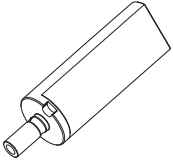
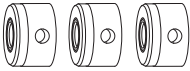
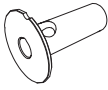
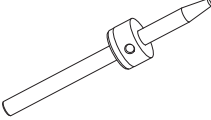
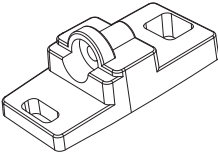
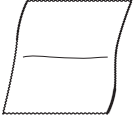
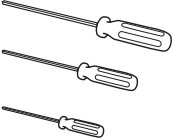
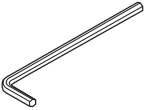
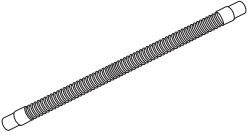
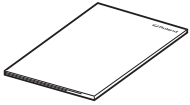


Side



Checking the Included Items

The following items are included with the machine. Make sure they are all present and accounted for.

			
Power cord (1)	USB cable (1)	Regulator (1)	Clamp for block work-piece (1)
			
Automatic correction jig (1)	Mounting screw L (2)	Mounting screw S (6)	Tool holder (3)
			
Adapter for workpiece with pin (1)	Detection pin (1)	Tool positioner (1)	Cloth for care (1)
			
Hexagonal screwdriver (L, M, S one for each)	Spanner (1)	Hexagonal wrench (1)	Dust collection hose (1)
			
Grease (1)	Grease application stick (1)	DGSHAPE Software Package CD (1)	DWX-4 Setup Guide (this document) (1)

About Items to Prepare Separately

Dust Collector

IMPORTANT!

You need a dust collector separately to collect cutting dust for this machine. If no dust collector is available, this machine cannot perform cutting.

⚠ WARNING

Be sure to operate a dust collector.

The cutting waste or workpiece may catch fire or pose a health hazard.

⚠ WARNING

Never use a vacuum cleaner to take up cutting waste.

Taking up fine cuttings using an ordinary vacuum cleaner may cause danger of fire or explosion.

Provide a dust corrector that meets the following conditions.

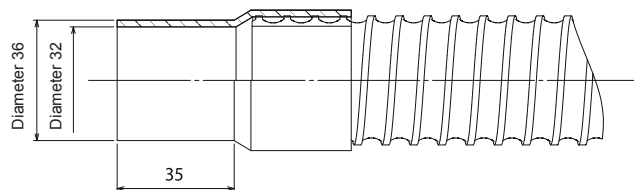
- **Static pressure: 4 kPa or more**
- **Air quantity: 2 m³/min or more**

Use the supplied dust collection hose.

You should clean the dust collector regularly.

Opening Size to Connect a Dust Collector

Unit: mm



Compressed Air Supply Source (Compressor)

Compressed air is necessary for this machine. You need to prepare a compressor separately.
You also need to prepare an air hose to connect the compressor with the regulator in addition.

⚠ WARNING

The pressure of the compressed air must be 1.0 MPa or less.
Exceeding this may cause ruptures or other serious accidents.

⚠ WARNING

Ensure no contamination of the supplied compressed air by any water, oil, chemicals, or foreign objects.
Components may deteriorate or rupture, or the contaminants may be scattered, posing a hazard.

⚠ WARNING

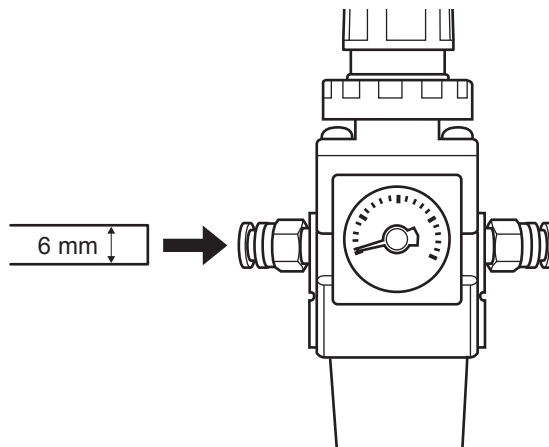
Supply the compressed air after the air hose is connected securely.
Failure to do so may cause an accident.

Provide a Compressor that Meets the Following Conditions

- **Air pressure: 0.2 to 1.0 MPa.**
- **Air capacity: 30 L/min or more**
- **Contamination of the compressed air by foreign material is undesirable. Use an oil-free compressor.**
- **Moist air may cause rust. Use a device equipped with a dryer.**
- **Stable pressure is required. Select a source that has an adequate tank capacity.**

Provide a Hose that Meets the Following Conditions

- **Hose outer diameter: 6 mm (polyurethane tube)**



Important

Be sure to use the included regulator for compressed air supply of this machine.
For the information on the compressed air pressure of each workpiece, see "User's Manual (electronic-format manual)" ("Preparation for Compressed Air Supply (Regulator Setting)" in "Preparation for Cutting").

About Emplacement and Installation

WARNING

Unloading and emplacement are operations that must be performed by 2 persons or more.

Tasks that require undue effort when performed by a small number of persons may result in physical injury. Also, if dropped, such items may cause injury.

The weight of the machine alone is 22 kg (48.5 lbs.) Perform unloading and emplacement with care.

Installation Environment

WARNING

Install in a location that is level and stable.

Installation in an unsuitable location may cause an accident, including a fall or tip over.

WARNING

Never install in a location exposed to open flame.

Cutting waste may ignite. Powdered material is extremely flammable, and even metal material may catch fire.

WARNING

Never install close to any flammable object or in a gas-filled location.

Combustion or explosion may be a danger.

WARNING

Never install outdoors or in any location where exposure to water or high humidity may occur.

Doing so may result in fire or electrical shock.

WARNING

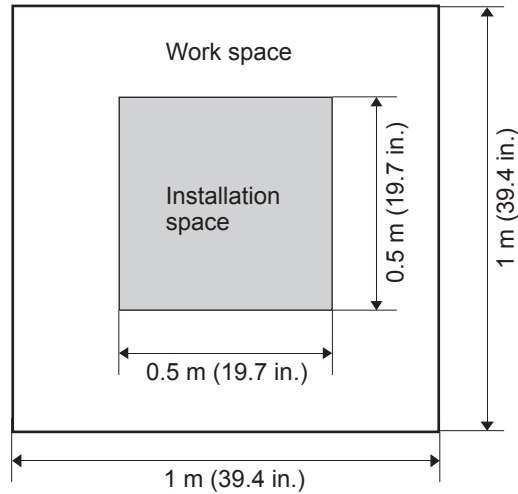
Position so that the power plug is within immediate reach at all times.

This is to enable quick disconnection of the power plug in the event of an emergency. Install the machine next to an electrical outlet. Also, provide enough empty space to allow immediate access to the electrical outlet.

- Never locate in a location subject to wide fluctuations in temperature or humidity.
- Never install in a location subject to shaking or vibration.
- Never install in a dusty or dirty location.
- Never install in a location exposed to direct sunlight or near air-conditioning or heating equipment.
- Never install in a location exposed to considerable electrical or magnetic noise, or other forms of electro-magnetic energy.
- Never install the machine in an environment where silicone substances (oil, grease, spray, etc.) are present. Doing so may cause poor switch contact and breakdown of the ionizer.

Installation Space

Ensure that at least the following amount of space is available.



About the Installation Location

The height of installation should be 0.6 m (23.7 in.) or higher above the work floor.

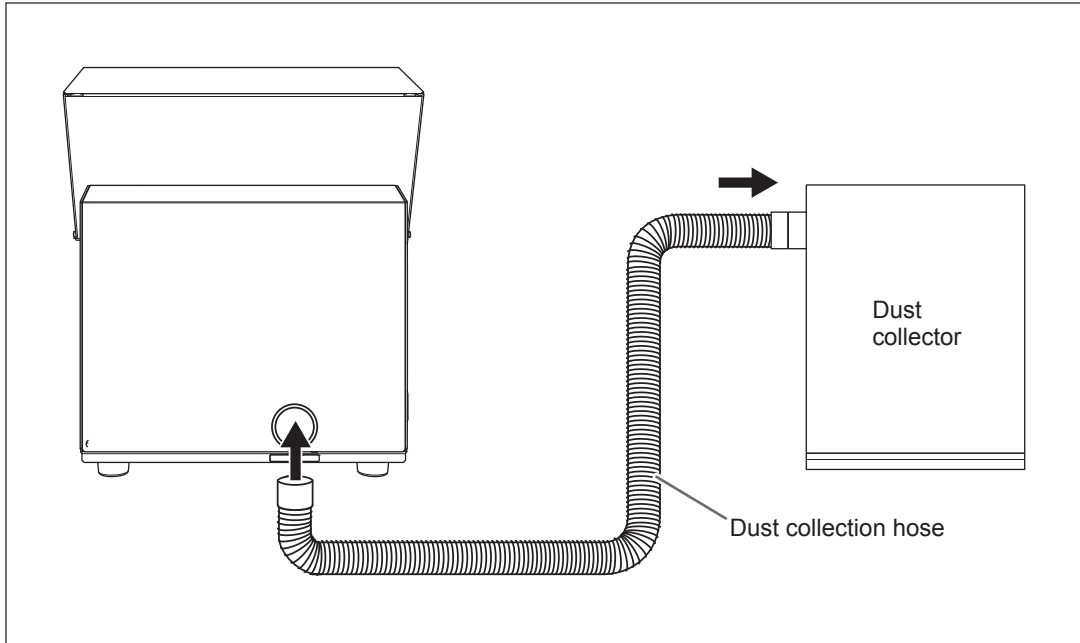
This machine is desktop type. Install in a location that allows easy access to areas such as the power switch during operation.

How to Connect the Dust Collection Hoses

Connect the supplied hose and the dust collector as shown in the figure.

*You need to prepare a dust collector separately.

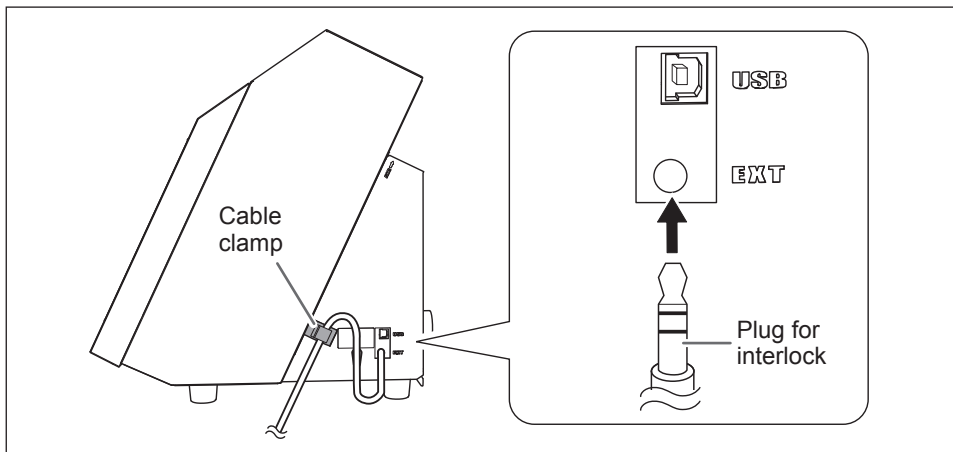
☞ P. 24, "Opening Size to Connect a Dust Collector"



Dust Collector with Interlocking Function

Insert the plug of a dust collector with an interlocking function into the expansion connector. Secure the cable with a cable clamp.

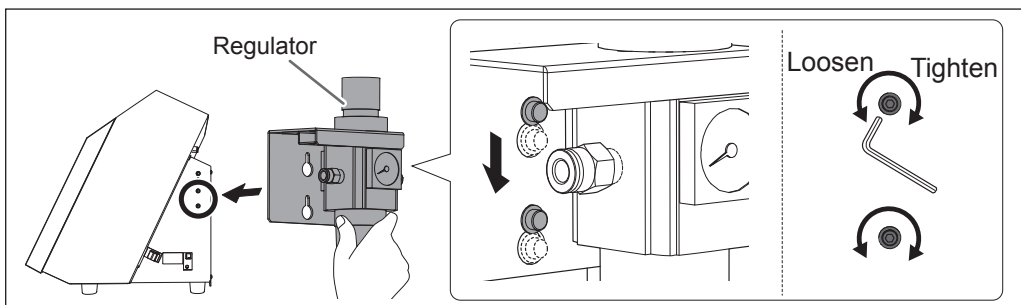
☞ P. 44, "Expansion Connector"



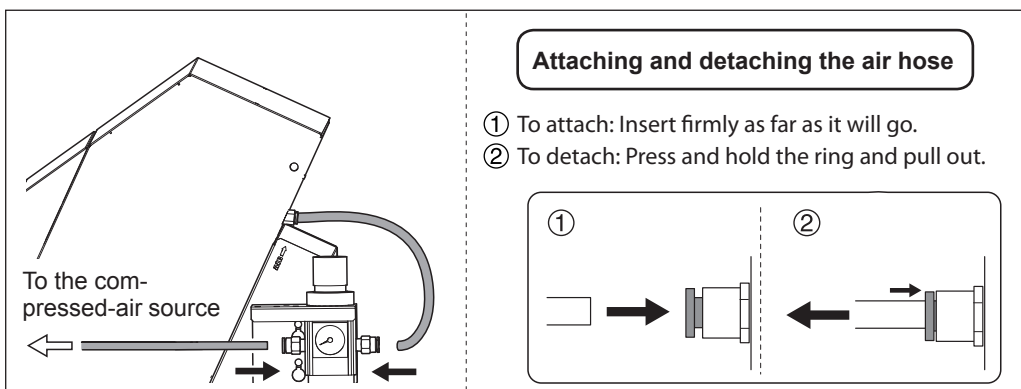
Preparing the Regulator

1 Install the regulator to the machine.

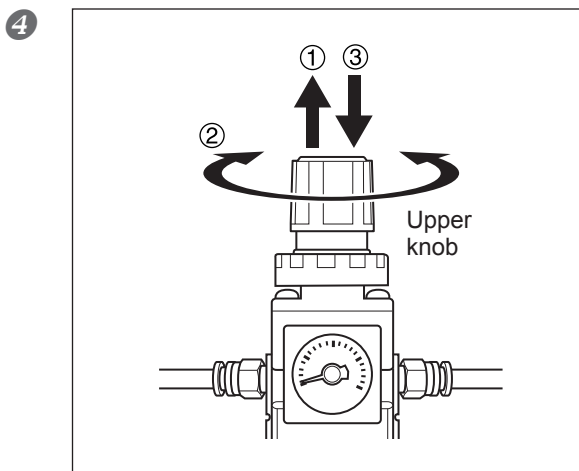
- ① Loosen the fixing screws (2 locations) on the right side of the machine with a hexagonal wrench.
- ② Insert the holes on the rear side of the regulator into the screws loosened in ①.
- ③ Retighten the securing screws.



2 Install the air hose to the regulator.



3 Supply compressed air and check that air does not leak from the connections, etc.



Adjust the air pressure.

- ① Pull up the upper knob.
- ② Slowly turn the upper knob.

Adjust until the meter reads 0.02 to 0.2 MPa. For the setting value of each workpiece, see "Preparation for Cutting" in "User's Manual (electronic-format manual)."

- ③ Push down the upper knob.

IMPORTANT!

Be sure to adjust to an air pressure of not more than 0.2 MPa. Exceeding this may cause malfunction.

Cable Connections

Connecting the Power Cable

⚠️WARNING

Connect to an electrical outlet that complies with this machine's ratings (for voltage, frequency and current).

Incorrect voltage or insufficient current may cause fire or electrical shock.

⚠️WARNING

Handle the power cord, plug, and electrical outlet correctly and with care. Never use any article that is damaged.

Using a damaged article may result in fire or electrical shock.

⚠️WARNING

When using an extension cord or power strip, use one that adequately satisfies the machine's ratings (for voltage, frequency, and current).

Use of multiple electrical loads on a single electrical outlet or of a lengthy extension cord may cause fire.

⚠️WARNING

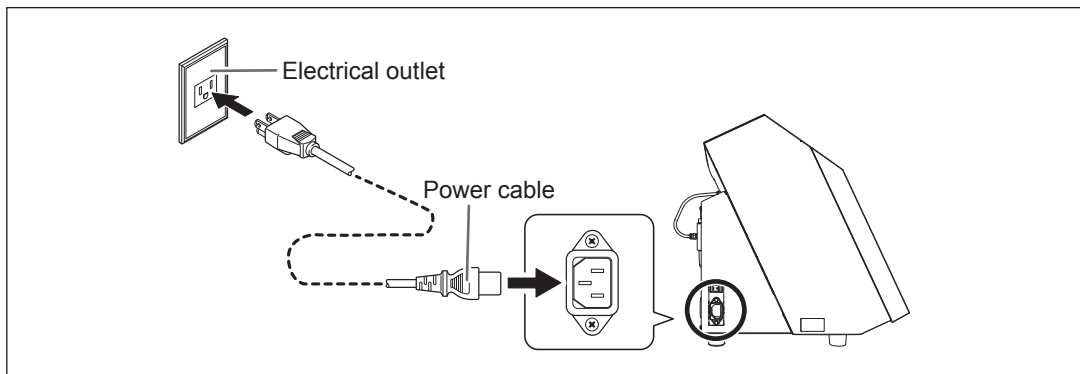
Connect to ground.

This can prevent fire or electrical shock due to current leakage in the event of malfunction.

⚠️WARNING

Connect to an electrical outlet. Never connect directly to a power distribution panel or other such fixed wiring equipment.

Doing so increases the hazard of fire or electrical shock.



Connecting to the Computer

IMPORTANT!

You make the connection to the computer after you install the Windows-based driver.

You use a USB cable to connect the machine and the computer. At this time, however, the connection to the computer must not be made yet. Be sure to make the connection according to the instructions on P. 33, "Installing the Software". Making the connection without doing so may cause driver installation to fail and make use impossible.

IMPORTANT!

If you connect more than one machine, the machine ID needs to be changed for the second and later machines.

If you connect more than one unit of this machine to a single computer, be sure to follow the procedure given on P. 39, "Connecting Multiple Units". If you connect an additional machine without changing the ID, you might not be able to use the machine.

Installing the Software

System Requirements

Operating system	Windows 10, 8.1 ,7 (32, 64 bit edition)
CPU	The minimum required CPU for the operating system
Memory	The minimum amount of required RAM for the operating system
Optical drive	CD-ROM drive
Video card and monitor	At least 256 colors with a resolution of 1,024 x 768 or more recommended

- This software is a 32-bit application and therefore runs in WOW64 (Windows-On-Windows 64) when running on 64-bit versions of Windows operating systems.
- This software has not been tested when running in the Windows XP mode in Windows 7.

For the latest information, see the DGSHAPE Corp. website (<http://www.dgshape.com/>).

The Software You Can Install

VPanel for DWX-4	This is a dedicated program for controlling this machine. You operate this machine and make various settings using this program.
Windows Driver (DWX-4 driver)	This is a Windows-based driver required for sending data from a computer to the machine.
User's Manual (electronic-format manual)	This document explains how to operate the software, how to perform cutting using this machine, and how to perform maintenance.

Installing the Software

You can install the driver, software and electronic-format manual at a time. You can also install them separately.

☞ "User's Manual" (electronic-format manual) "To Install Driver Separately"

IMPORTANT!

Make sure to connect the machine and the computer following the procedures. To follow wrong procedure may make installation impossible.

Procedure

- 1 **Before installation, confirm that the machine and the computer are not connected with the USB cable.**
- 2 **Log on to Windows as "Administrators."**
- 3 **Insert the DGSHAPE Software Package CD into the CD-ROM drive of the computer.**
When the automatic playback window appears, click [Run menu.exe]. The [User Account Control] appears, click [Allow], and install the software.
The setup menu appears automatically.



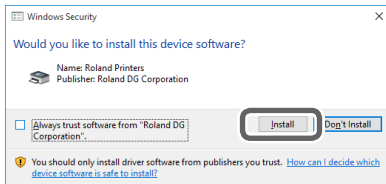
Click [Install].

Install the DWX-4 driver and each software at a time. Proceed with the installation by following the displayed instructions.

☞ P. 32, "The Software You Can Install"

If the Following Window Is Displayed during Installation

Windows 10



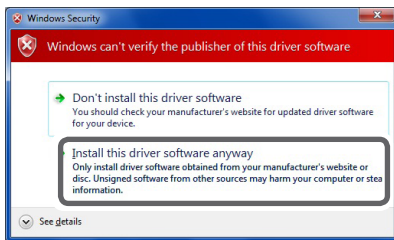
If the screen shown in the figure appears, click [Install].

Windows 8.1



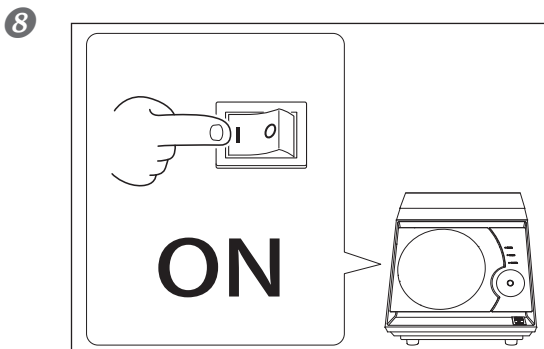
If the screen shown in the figure appears, click [Install].

Windows 7



If the screen shown in the figure appears, click [Install this driver software anyway].

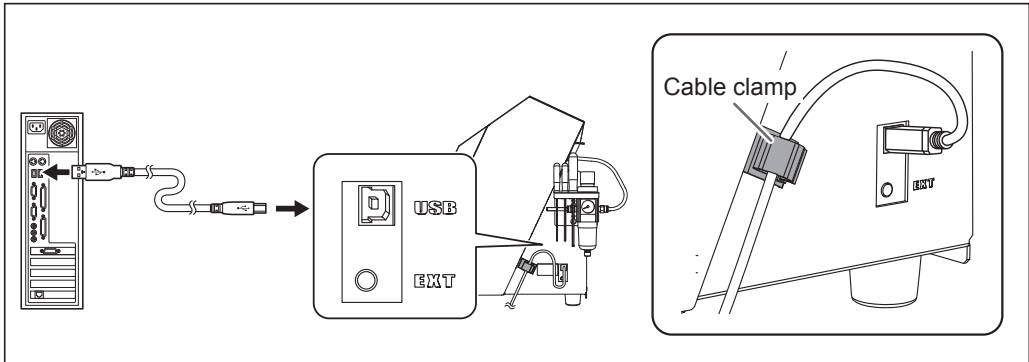
- 5 Follow the displayed instructions and continue with the installation.
Installation information for each software item will be displayed automatically as needed.
- 6 When installation finishes, click  of the setup menu.
- 7 Remove the CD-ROM from the CD-ROM drive.



Turn on the power switch of the machine.
Initialization starts.

9 Connect the machine and the computer with a USB cable.

- If you connect more than one unit of this machine to a single computer, refer to P. 39, "Connecting Multiple Units".
- Use the supplied USB cable.
- Be sure to refrain from using a USB hub. If a USB hub is used, there is a possibility that the machine cannot be connected.
- Secure the USB cable with a cable clamp.



The driver will be installed automatically.

How to View the Electronic-Format Manual

Windows 10, 7

From the [Start] menu, click [All Apps] (or [Program]), then [Roland DWX-4]. Then click [User's Manual].

Windows 8.1

On the [Start] screen, click . On the [Apps] screen, click the [User's Manual] icon under [Roland DWX-4].

Be Sure to Perform the Below Steps First After the Installation

Before Starting the Operation

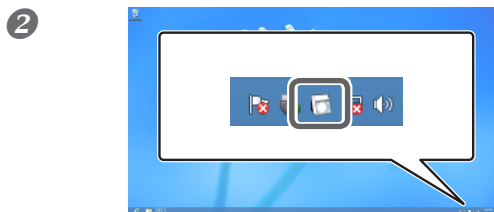
When you finish installing this machine, be sure to perform the following tasks. These are required when you change the installation location of the machine, too.

- STEP 1: Spindle Run-in (Warm-up)
- STEP 2: Correction of Milling Machine

STEP 1: Spindle Run-in (Warm-up)

Procedure

- 1 Close the front cover and switch on the power switch.



Display VPanel.

Click  (VPanel icon) in the task tray. VPanel appears on the screen. When you cannot find the  in the task tray, start the program from the Windows [Start] screen (or [Start] menu).

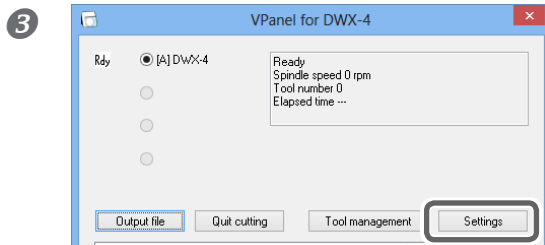
How to start VPanel from [Start] screen (or [Start] menu) of Windows

Windows 10, 7

From the [Start] menu, click [All Apps] (or [Program]), then [Roland DWX-4]. Then click [VPanel for DWX-4].

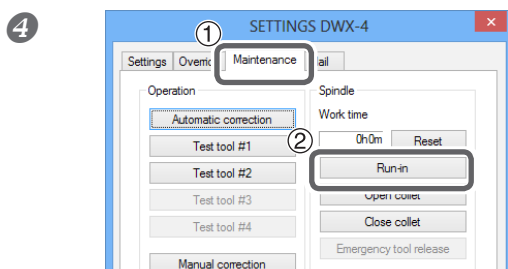
Windows 8.1

On the [Start] screen, click . On the [Apps] screen, click the [VPanel for DWX-4] icon under [Roland DWX-4].



Click [Settings].

The Setting window is displayed.



① Click [Maintenance] tab.

② Click [Run-in].

The run-in operation starts.

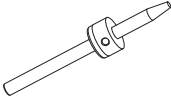
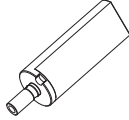
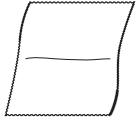
When the message, "Operation was completed" appears, the operation is completed.

Go on to "STEP 2: Correction of Milling Machine."

STEP 2: Correction of Milling Machine

You can perform automatic correction for the position of ATC magazine and rotary axis.

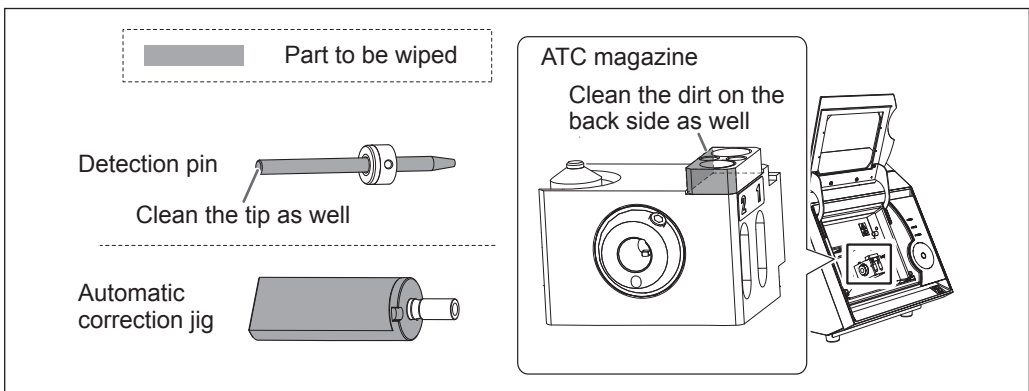
Required items

				
Detection pin	Automatic correction jig	Mounting screw (L)	Hexagonal screw-driver (M)	Cloth for care

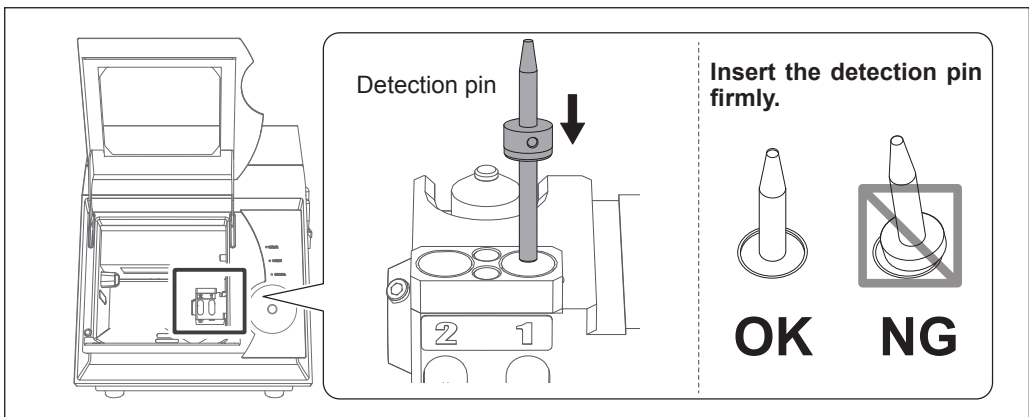
Procedure

- 1 Clean the detection pin, automatic correction jig and ATC magazine with the supplied cloth for care.**

If any dirt is affixed, correction might not be done properly.



- 2 Insert the detection pin to No.1 on ATC magazine.**

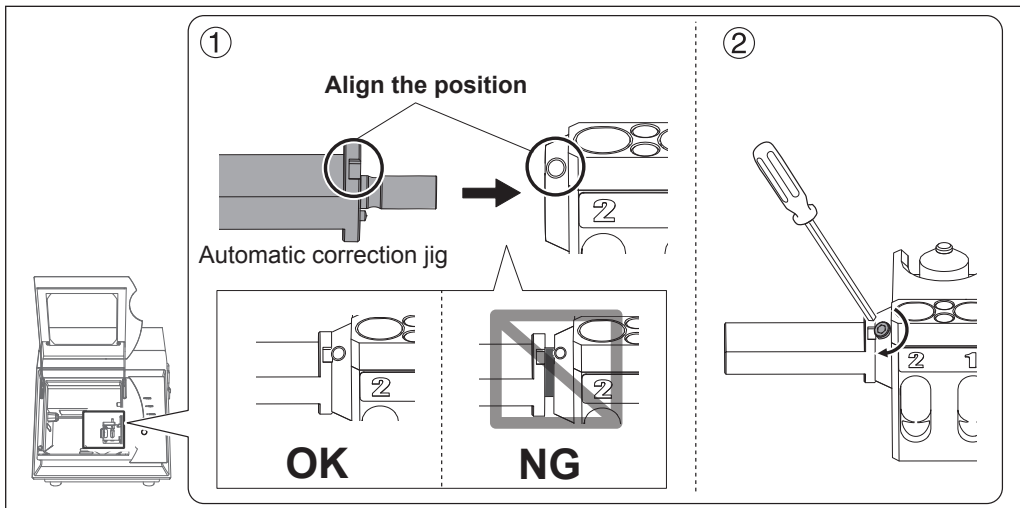


3 Install the automatic correction jig.

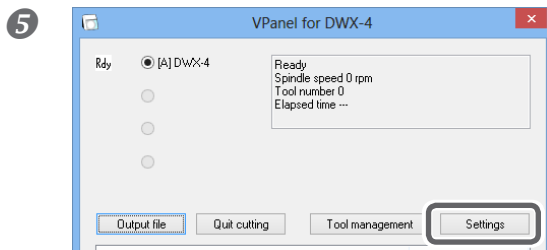
① Install the automatic correction jig without making space.

If you align the recess of the jig with the screw hole of the mounting part, you can insert the jig completely.

② Tighten the mounting screw (L) with a hexagonal screwdriver (M).



4 Close the front cover.

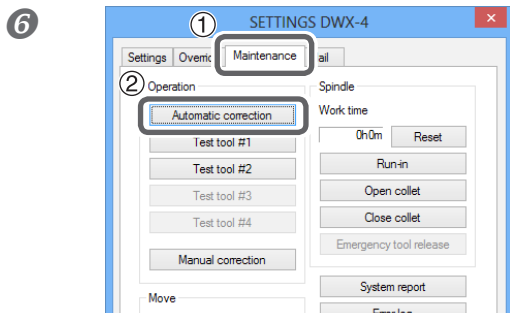


① Display VPanel.

➤ P. 36, "STEP 1: Spindle Run-in (Warm-up)" procedure **2**

② Click [Settings] on the top window of VPanel.

The Setting window is displayed.



① Click [Maintenance] tab.

② Click [Automatic correction].

Start the automatic correction by following the displayed instructions.

7 When the automatic correction is finished, remove the detection pin and automatic correction jig.

You can remove the automatic correction jig by rotating the mounting screw which secures the automatic correction jig about 2 turns.

Connecting Multiple Units

How to Connect Multiple Units

Up to 4 units of this machine can be concurrently connected to a computer. When more than one machine is connected, each machine needs to be identified on VPanel. An ID (A, B, C, and D) must be assigned to each machine to make the setting for each machine.

The explanations in this section assume that one machine is already connected, and describe how to connect one or more additional machines.

☞ P. 33, "Installing the Software"

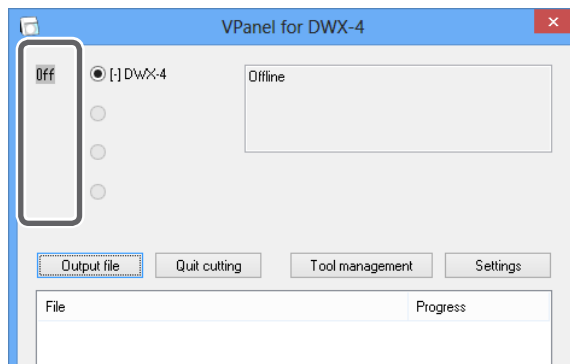
Procedure

1 Display VPanel.

☞ P. 36, "STEP 1: Spindle Run-in (Warm-up)" procedure 2

2 Turn off the power of the connected machine, and then disconnect the USB cable from the computer.

3 Check that Off is displayed as the operation status of all the machine and that Rdy is not displayed.



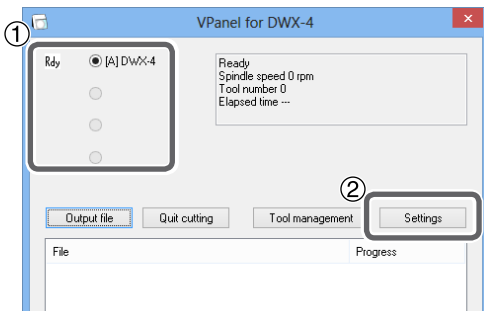
4 Turn on a machine newly connecting, and connect the USB cable to the computer.

➤ Make the connection setting of the machines one by one. Be sure to connect only the machine of which the setting is made. If you connect the machines with a same ID at the same time, the computer might shut down or it might make the driver installation impossible.

➤ For the USB cable, use the included cable.

➤ Be sure to refrain from using a USB hub. If a USB hub is used, there is a possibility that the machine cannot be connected.

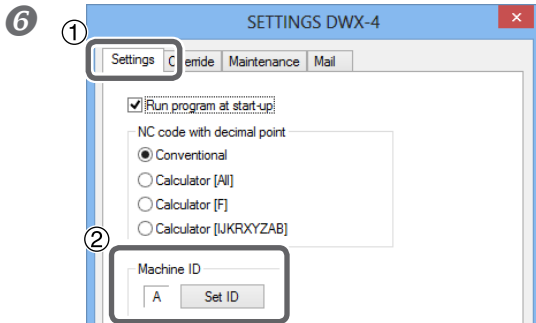
5



1 Select the machine that Rdy is displayed.

2 Click [Settings].

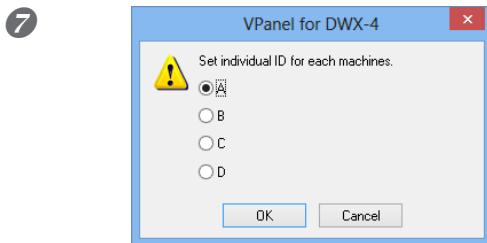
The Setting window is displayed.



① Click [Settings] tab.

② Click [Set ID].

The ID selection window is opened.

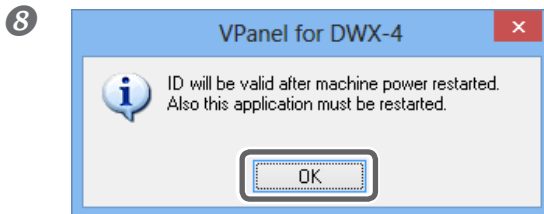


Select any unused ID, and click [OK].

In the initial setting, "A" is assigned as an ID of the machine. Since A is assigned to the first machine, be sure to select B, C, or D.

IMPORTANT!

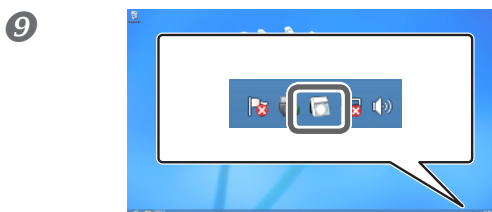
Do not assign a same ID. If you connect the machines with the same ID at the same time, the computer might shut down or it might make the driver installation impossible.



When the window shown on the left appears, click [OK].

The machine is restarted.

If the selected ID is used for the first time, a corresponding driver is requested.



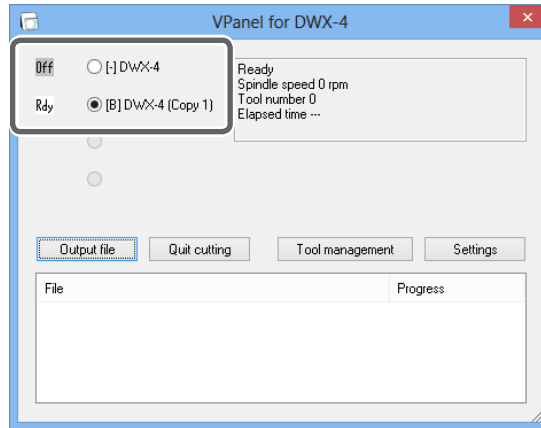
Restart VPanel.

Right-click  (VPanel icon) in the task tray and select "Exit" to exit VPanel.

10 Start VPanel.

☞ P. 36, "How to start VPanel from [Start] screen (or [Start] menu) of Windows"

Then, the selected ID is enabled. Check that the selected ID is displayed on the top window. If the name of the machine has not been changed, "DWX-4 (Copy 1)" is displayed. ("DWX-4 (Copy 2)" is displayed for the third machine.)



You can connect all the machines of which the setting has been done to the computer by USB cables. At this point, if you connect the machines with a same ID at the same time, the computer might shut down.

When you connect the third and fourth machines, repeat the above steps ② to ⑩.

**Point**

To change the name of a machine that has been set, change the name of the installed printer (the machine you are using) as follows.

① Windows 10, 8.1

Right-click the [Start] , click [Control Panel] then [View devices and printers].

Windows 7

From the [Start] menu, click [Control Panel], [Hardware and Sound], and then [Devices and Printers].

- ② Select the name of the machine (Printer) you are using, and change the name.
- ③ Restart VPanel.

The changed name appears on the top window.

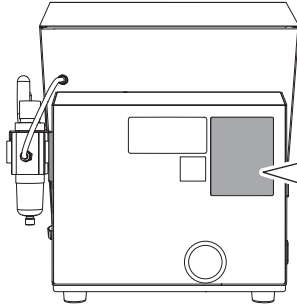
Chapter 2

Appendix

Power Rating and Serial Number Locations.....	44
Expansion Connector	44
Coordinate.....	45
Dimensional Drawings.....	45
Main Specifications.....	47
System Requirements for USB Connection	47

Specifications

Power Rating and Serial Number Locations



Serial Number

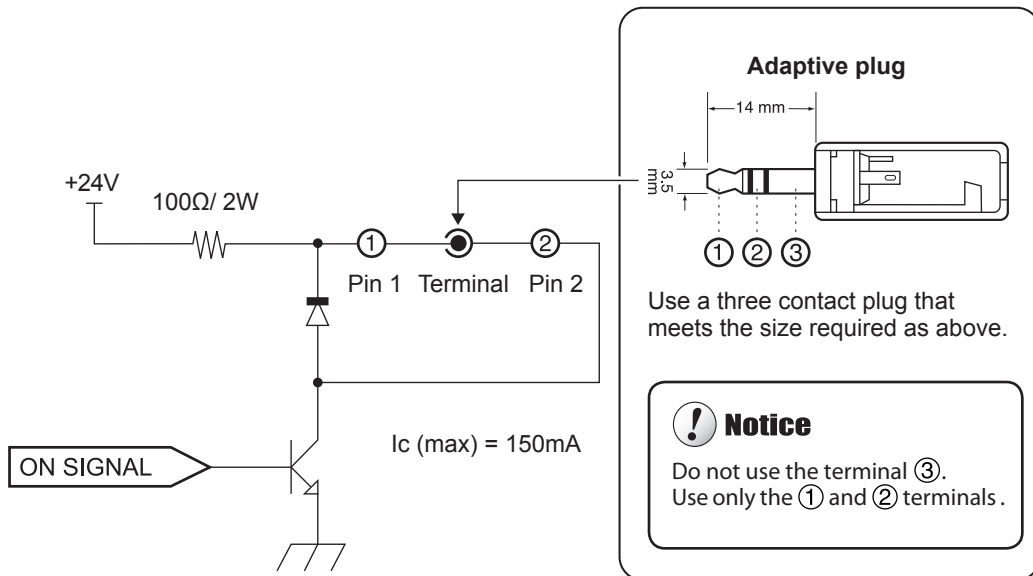
This is required when you seek maintenance, servicing, or support. Never peel off the label or let it get dirty.

Power Rating

Use an electrical outlet that meets the requirements for machine's ratings (voltage, frequency, and current) given here.

Expansion Connector

* We are not responsible for devices connected to this connector.

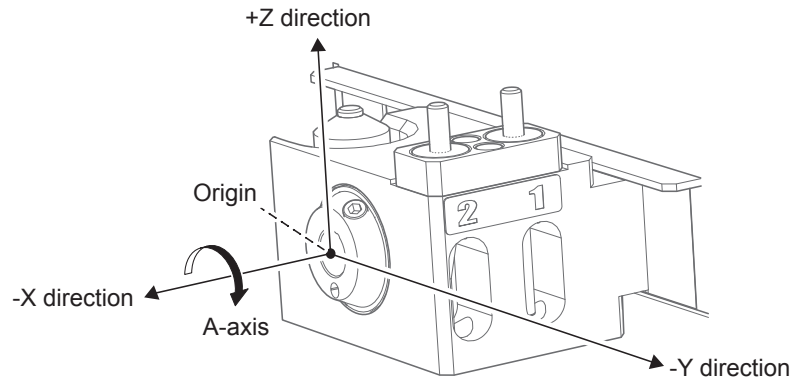


This circuit works while the ON signal is output from the machine.
(i.e., while cutting is performed or ATC is operating)

! Notice

- Be sure to use the connector within the rated range shown above.
- Do not apply an additional voltage to the connector.
- Do not short-circuit the connector and earthing.

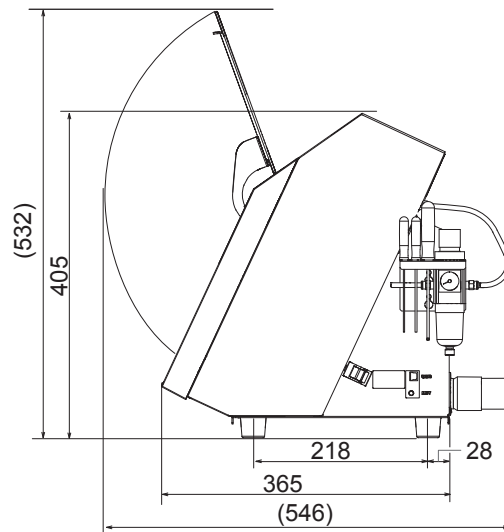
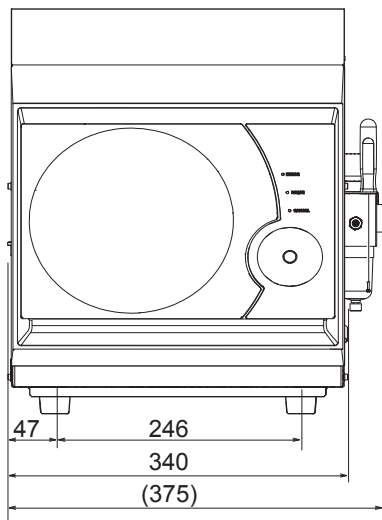
Coordinate



Dimensional Drawings

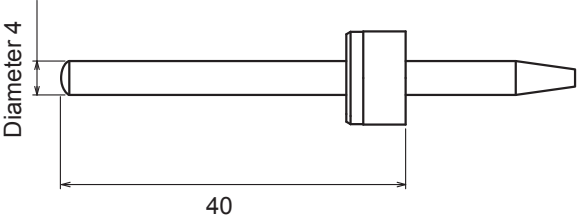
Dimension of Outline

Unit: mm



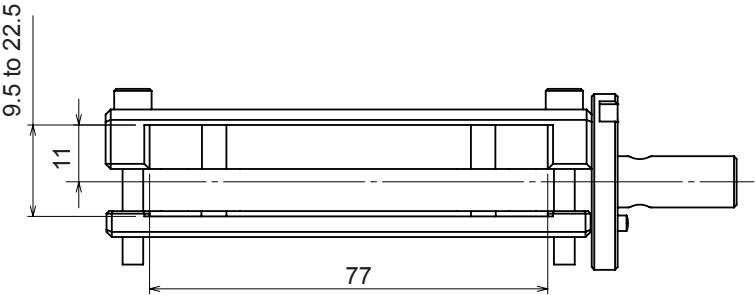
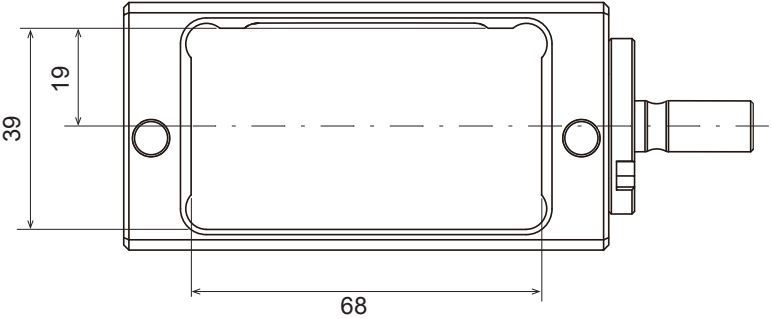
Detection Pin Dimension

Unit: mm



Clamp Dimension

Unit: mm



Main Specifications

	DWX-4	
Cuttable Material *	Zirconia (pre-sintered), Wax, PMMA, Composite resin	
Loadable work-piece shape	Block	Width x Depth: 76×38, Height: 10 to 22 mm
	PIN type	Width x Depth x Height: Maximum 85 x 40 x 22 mm
Operating speed	XYZ axis: 6 to 1800 mm/min. (0.24 to 70.8 in./min.)	
Spindle motor	Brushless DC motor	
Spindle speed	6,000 to 30,000 rpm	
Rotary axis travel angle	A: ±360°	
Number of tools housed	2	
Attachable tool	Shank diameter: 4 mm, Length: 40 to 55 mm	
Compatible compressed air	0.02 to 0.2 MPa	
Interface	USB	
Control command set	RML-1, NC code	
Power requirements	AC100 to 240 V ± 10 %, 50/60 Hz, 0.8 to 0.4 A (overvoltage category II, IEC 60664-1)	
Power consumption	Approx. 70 W	
Operating noise	During operation: 70 dB (A) or less (when not cutting) During standby: 40 dB (A) or less	
External dimensions	Width x Depth x Height: 340×365×405 mm (13.4×14.4×16.0 in.)	
Weight	22 kg (48.5 lbs)	
Installation Environment	Indoor Use, altitude: up to 2000 m Temperature: 5 to 40 °C (41 to 104 °F) Relative humidity: 35 to 80 % (no condensation) Ambient pollution degree: 2 (as specified by IEC 60664-1) Short-Term Temporary Overvoltage: 1440 V Long-Term Temporary Overvoltage: 490 V	
Included items	Power cord, USB cable, Manual, Software Package CD-ROM, Detection pin, Automatic correction jig, Clamp for block workpiece, Hexagonal screwdriver, spanner, Tool holder, Tool positioner, Dust collection hose, Regulator, etc.	

* Even if the material is listed as “cuttable” above, there may be cases where it cannot be processed depending on the specification or physical property. For detailed information, contact your authorized Roland DG Corp. dealer.

System Requirements for USB Connection

Computer	Model preinstalled with the 32- or 64-bit edition of Windows 10, 8.1, 7 or up-graded computer originally preinstalled with Windows 7 or later
USB cable	Use the included USB cable.

产品中有毒有害物质或元素的名称及含量

部件名称	有毒有害物质或元素					
	铅(Pb)	汞(Hg)	镉(Cd)	六价铬 (Cr(VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
印刷电路板	×	○	×	○	○	○
头部	×	○	○	○	○	○
壳体、底架	×	○	○	○	○	○
电源	×	○	×	○	○	○
其他(电缆、附件等)	×	○	○	○	○	○

○：表示该有毒有害物质在该部件所有均质材料中的含量均在 GB/T26572-2011 标准规定的限量要求以下。

×：表示该有毒有害物质至少在该部件的某一均质材料中的含量超出 GB/T26572-2011 标准规定的限量要求。

环保使用期限



此标志适用于在中国国内销售的电子信息产品，表示环保使用期限的年数。所谓环保使用期限是指在自制造日起的规定期限内，产品中所含的有害物质不致引起环境污染，不会对人身、财产造成严重的不良影响。环保使用期限仅在遵照产品使用说明书，正确使用产品的条件下才有效。不当的使用，将会导致有害物质泄漏的危险。

For EU Countries



This product must be disposed of separately at your local waste recycling center. Do not dispose of in household waste bin.



Lever dit product in bij een lokaal afvalverzamelpunt. NIET met normaal huishoudelijk afval afvoeren.



Bitte führen Sie dieses Produkt separat Ihrer örtlichen Entsorgungsstelle zu. Bitte nicht mit dem normalen Hausmüll entsorgen.



Dette Produkt skal smides særskilt væk på den lokale affalds- og genbrugsstation. Må ikke smides ud sammen med almindeligt husholdningsaffald.



Ne jetez pas le produit avec vos ordures ménagères. Portez-le dans un centre recyclage des déchets.



Tätä tuotetta ei saa hävittää normaalien talousjätteiden mukana, vaan se on toimitettava ongelmajätteiden keräilypisteeseen hävitettäväksi.



Questo prodotto deve essere smaltito negli appositi contenitori per la raccolta differenziata, non buttare nel cestino dei rifiuti casalinghi.



Produkten måste kasseras separat på din lokala återvinningscentral. Släng inte produkten tillsammans med hushållssoporna.



Este producto debe devolverse al centro de reciclaje más cercano a su domicilio para su correcta eliminación. No lo tire a la basura.



Μην πετάξετε το αντικείμενο αυτό στο καλάθι των απορριμμάτων. Αφαιρέστε τις μπαταρίες και προσκομίστε το στο τοπικό κέντρο ανακύκλωσης.



Deite fora separadamente este produto no seu centro de reciclagem local. Não o deite fora no seu caixote do lixo.

