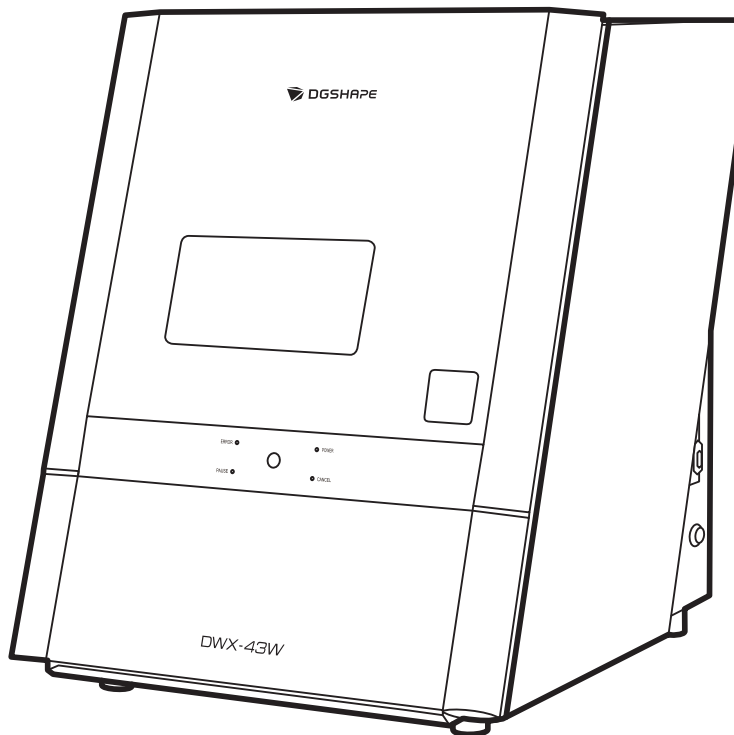


# DWX-43W

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## Safety Precautions



# Contents

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Usage Precautions .....	2
To Ensure Safe Use.....	3
Incorrect operation may cause injury .....	4
Danger of electrical short, electrical shock, or fire .....	6
Additives and coolant are toxic. ....	9
This is a heavy machine. ....	10
Danger of pinching, entanglement, and burns.....	11
Milling waste and workpieces are flammable and toxic.....	13
Danger of components flying off or becoming damaged .....	14
Handling Precautions .....	16
Warning Labels.....	17
Important Notes on Handling and Use .....	19
Other important notes .....	20
Disclaimers/Standard Information .....	21
Location of the Power Rating and Serial Number Label .....	27

# Usage Precautions



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To Ensure Safe Use .....	3
Incorrect operation may cause injury.....	4
Danger of electrical short, electrical shock, or fire .....	6
Additives and coolant are toxic.....	9
This is a heavy machine. ....	10
Danger of pinching, entanglement, and burns .....	11
Milling waste and workpieces are flammable and toxic. ....	13
Danger of components flying off or becoming damaged .....	14
Handling Precautions .....	16
Warning Labels.....	17
Important Notes on Handling and Use.....	19










# 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









 <b>WARNING</b>	Used for instructions intended to alert the user to the risk of death or severe injury should the unit be used improperly.
 <b>CAUTION</b>	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 as 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  symbol. The symbol at left means "danger of electrical shock."
	The  symbol alerts the user to items that must never be carried out (are forbidden). The specific meaning of the symbol is determined by the design contained within the  symbol. 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 meaning of the symbol is determined by the design contained within the  symbol. The symbol at left means the power-cord plug must be unplugged from the outlet.

## Incorrect operation may cause injury

### WARNING

	<p><b>Always unplug the power cord when attaching or removing parts and optional parts and when performing cleaning or maintenance that does not require the machine to be connected to a power source.</b> Attempting such operations while the machine is connected to a power source may result in injury or electrical shock.</p>
	<p><b>Keep children away from the machine.</b> The machine includes areas and components that pose a hazard to children and may result in injury, blindness, choking, or other serious accident.</p>
	<p><b>Never attempt to disassemble, repair, or modify the machine.</b> Doing so may result in fire, electrical shock, or injury. Entrust repairs to a trained service technician.</p>
	<p><b>Be sure to follow the operation procedures described in this machine's documentation. Never allow anyone unfamiliar with the usage or handling of the machine to touch it.</b> Incorrect usage or handling may lead to an accident.</p>
	<p><b>Never operate the machine while tired or after ingesting alcohol or any medication.</b> Operation requires unimpaired judgment. Operating with impaired judgment may result in an accident.</p>
	<p><b>Be careful around the milling tool.</b> The milling tool is sharp. Broken milling tools are also dangerous. To avoid injury, exercise caution.</p>
	<p><b>Never use a milling tool that has become dull. Perform frequent maintenance to keep the machine in good working order.</b> Inappropriate usage may result in fire or injury.</p>
	<p><b>Be careful of the pointed portion inside the front cover.</b> There is a pointed portion inside the front cover. Exercise caution when cleaning.</p>

### CAUTION

	<p><b>Conduct operations in a clean, brightly lit location.</b> 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.</p>
	<p><b>Never climb or lean on the machine.</b> The machine is not made to support a person. Climbing or leaning on the machine may dislodge components and cause a slip or fall, resulting in injury.</p>
	<p><b>Never operate the machine if the cover is cracked or broken.</b> Doing so may result in injury. If the cover is cracked or broken, contact your authorized Roland DG Corporation dealer.</p>

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 CAUTION



**Wipe up any water around the main unit.**  
Failure to do so may cause a slip or fall, resulting in injury.













**Use a dry cloth to clean the inside of the equipment.**  
Failure to do so may cause the components inside the equipment to degrade, which can lead to injury.









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## Danger of electrical short, electrical shock, or fire

### WARNING

	<p>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.</p>
	<p>If sparks, smoke, burning odors, unusual sounds, or abnormal operation occur, 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 dealer.</p>
	<p>Never use outside or in any location where exposure to water or high humidity may occur. Do not touch the power cord, plug, or electrical outlet with wet hands. Doing so may result in fire or electrical shock.</p>
	<p>Never allow any foreign object to get inside. Never place liquids on the machine or expose it 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 dealer.</p>
	<p>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 could occur.</p>
	<p>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.</p>
	<p>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.</p>
	<p>Position the machine 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.</p>
	<p>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.</p>
	<p>Never use the machine for any purpose for which it is not intended, or use the machine in an excessive manner that exceeds its capacity. Doing so may result in injury or fire.</p>

 **WARNING**

	<p><b>Do not use the supplied power cord for other products.</b></p>
	<p><b>If the machine will not be used for a long period, disconnect the power cord.</b> This prevents an accident caused by unexpected electric leakage or unintentional start of the machine.</p>
	<p><b>Connect to ground.</b> This can prevent fire or electrical shock due to current leakage in the event of malfunction.</p>
	<p><b>Never use cutting oil.</b> This machine is not designed for the flow of cutting oil. Oil may get inside the machine and cause fire or electrical shock.</p>
	<p><b>Never use a pneumatic blower.</b> This machine is not compatible with a pneumatic blower. Milling waste may get inside the machine and cause fire or electrical shock.</p>
	<p><b>Use a dry cloth when cleaning silicone resin parts, and be careful to prevent the silicone resin from being damaged.</b> The silicone resin being damaged may lead to electric leakage.</p>
	<p><b>Do not place any electronic devices in the vicinity of this machine.</b> Because coolant flows within this machine, water may be sprayed on objects in the vicinity of the machine when its front cover is opened. To prevent malfunctions, do not place any electronic devices in the vicinity of this machine.</p>
	<p><b>Handle the coolant filter carefully.</b> Dropping the filter or grasping it too strongly may damage the filter. If the filtration function does not work due to damage, the line may be clogged with milling waste, which may lead to coolant leaks and fire and electrical shock due to current leakage.</p>



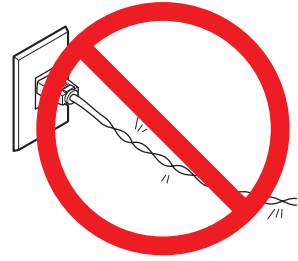
Important notes about the power cord, plug, and electrical outlet



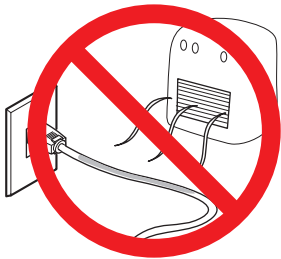
Never place any object on top or subject to damage.



Never allow to get wet.



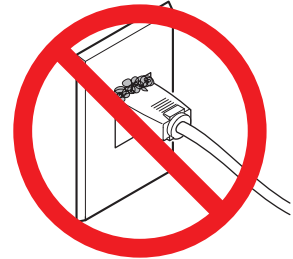
Never bend or twist with excessive force.



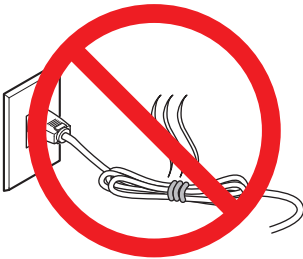
Never make hot.



Never pull with excessive force.



Dust may cause fire.



Never bundle, bind, or roll up.

## Additives and coolant are toxic.

### WARNING



Never drink or sniff the additives or coolant or allow them to come in contact with the eyes or skin.  
Doing so may be hazardous to your health.



After milling, wash away any products with purified water or the like.  
After milling, there will be coolant on the product. Using the product as is may cause an inflammation or the like.

Refer to the appropriate safety data sheet (SDS) for the chemical substances used in the grease and the safety related to those substances.

Refer to the appropriate safety data sheet (SDS) for the chemical substances used in the additives and the safety related to those substances.

### RELATED LINKS

- <https://www.rolanddg.com/en/about-us/sustainability/safety-data-sheet>

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**This is a heavy machine.**

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 **WARNING**



**Unloading and emplacement are operations that must be performed by the specified number of the workers or more as referring to the operation manual on the installation of the machine.**

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.

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 **CAUTION**



**Install in a level and stable location.**

Failure to do so may result in falling of the machine, leading to injury.

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## Danger of pinching, entanglement, and burns

### ⚠ WARNING



Securely fasten the milling 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.



Do not touch the spindle unit or the surrounding areas immediately after milling has ended.

Doing so may result in burns.



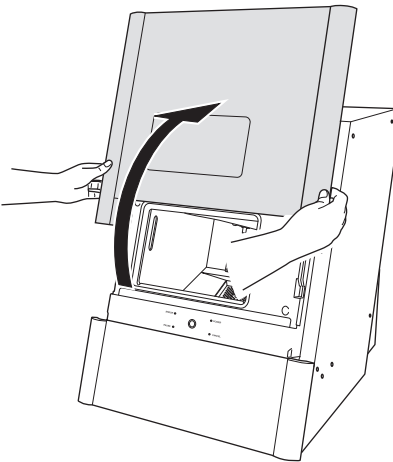
Never attempt operation while wearing a necktie, necklace, or loose clothing. Bind long hair securely. When performing operations while wearing gloves, exercise sufficient caution to prevent entanglement in the machine.

Such items may become caught in the machine, resulting in injury.

### ⚠ CAUTION

When opening or closing the Front cover, hold the parts indicated in the following figure with both hands.

Failing to do so may result in your fingers being pinched, leading to injury.



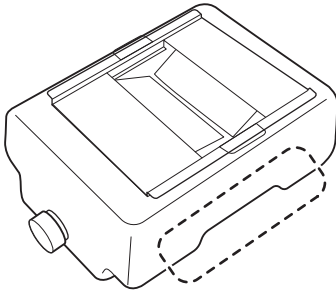
Do not use hot water for the coolant.

Using hot water may cause burns.





**⚠ CAUTION**

When raising or lowering the coolant tank, hold the parts indicated in the following figure.

Failing to do so may result in your fingers being pinched, leading to injury.















**Milling waste and workpieces are flammable and toxic.****⚠ WARNING**

	<b>Never attempt to mill magnesium or any other such flammable material.</b> Fire may occur during milling.
	<b>Keep open flame away from the work area.</b> Milling waste may ignite. Powdered material is extremely flammable, and even metal material may catch fire.
	<b>Never use a vacuum cleaner to clean up milling waste.</b> Picking up fine cuttings using an ordinary vacuum cleaner may result in fire or explosion.
	<b>Wear dust goggles and a mask. Wash away any milling waste remaining on the hands.</b> Accidentally swallowing or inhaling milling waste may be hazardous to your health.

## Danger of components flying off or becoming damaged

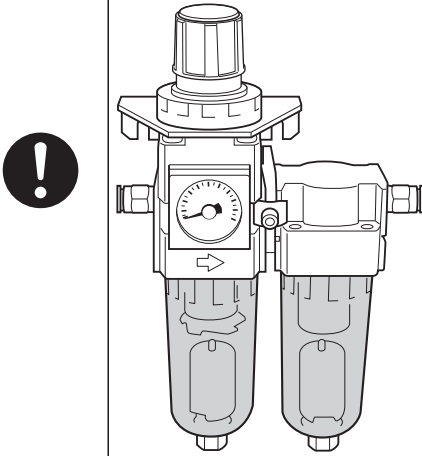
 **WARNING**

	<p>Ensure that the supplied compressed air is not contaminated by water, oil, chemicals, or foreign objects. The components may deteriorate or rupture, or the contaminants may be scattered, posing a hazard.</p>
	<p>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.</p>
	<p>Never use in a location exposed to direct sunlight. Components may deteriorate or rupture under the pressure of compressed air.</p>
	<p>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.</p>
	<p>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.</p>
	<p>Before attempting to attach or detach the air hose or optional items or before attempting to perform cleaning or maintenance that does not require the machine to be connected to a power source, 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.</p>
	<p>Use an air hose of the specified diameter and having adequate pressure resistance. Otherwise the article may come loose or rupture.</p>
	<p>Keep the supply of compressed air within the specified pressure range. Exceeding the specified pressure may result in rupture or other major accident.</p>
	<p>Never strike or subject the object to impact. Components may suffer damage or rupture under the pressure of compressed air.</p>
	<p>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.</p>
	<p>Never damage the air hose, or bend or twist it with excessive force. Never use an item that has deteriorated. A damaged air hose may rupture.</p>
	<p>Be sure to bleed off the air pressure before removing the regulator bowl. Failure to do so may result in a rupture or components flying off.</p>

**⚠ WARNING**

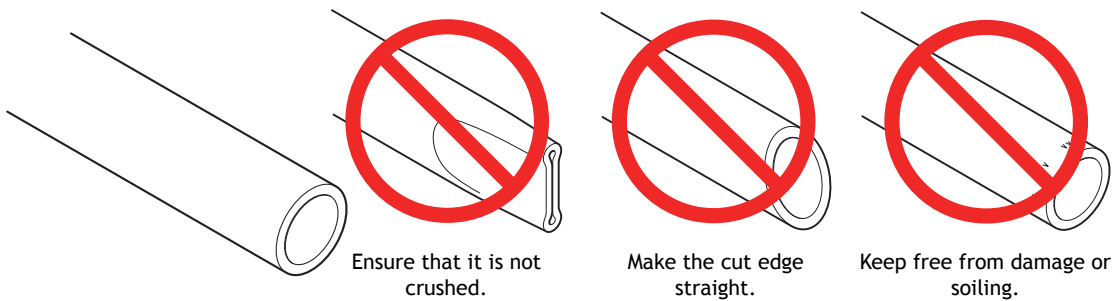
**Clean the regulator bowl using a neutral detergent. Never use solvents such as gasoline, alcohol, or thinner.**

Using solvents may degrade the bowl and may result in a 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.





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## Handling Precautions

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 **WARNING**



**Do not overfill or tilt the coolant tank.**

The fluid inlet on the coolant tank is open. Overfilling or tilting will cause fluid to spill out.



**Be sure to put the specified additive in the coolant tank.**

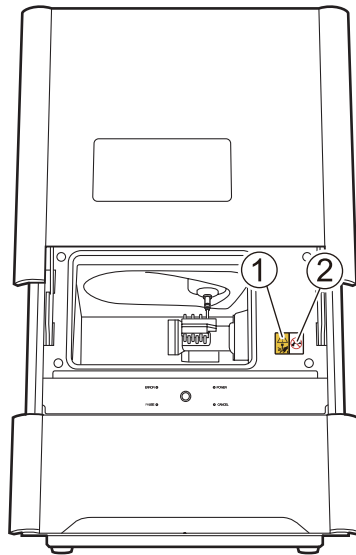
Additives are effective in reducing coolant deterioration and raising the milling efficiency in order to maintain product performance. If additives are not used, the coolant may generate an unpleasant odor.



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## Warning Labels

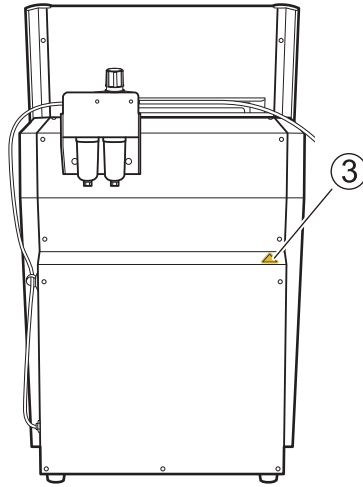
Warning labels are affixed to make areas of danger immediately clear. The meanings of these labels are as follows. Be sure to heed their warnings. Also, never remove the labels or allow them to become obscured.


### Front



①		<p><b>Caution: Sharp Tool</b> The milling tool is sharp. Inadvertent contact may cause injury.</p>
②		<p><b>Never use a pneumatic blower.</b> This machine is not compatible with a pneumatic blower. Milling waste may get inside the machine and cause fire or electrical shock.</p>

Back



③		<b>Caution: High Voltage</b> Removing the cover may result in high-voltage electrical shock.
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# 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 this machine carefully and never subject it to impacts or excessive force.
- Carefully clean away milling waste.
- Use this machine within the range of its specifications.
- Never attempt to move the spindle unit or rotary axis unit by hand with undue force.
- Never needlessly touch anywhere inside the machine except for locations specified in this manual.

## Install this machine in a suitable location.

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

## Leave the machine and the compressor on at all times.

- Turning the machine off leads to moisture collecting inside of the machine, which may lead to malfunction.
- If the compressor is turned off, the supply of air to the machine will be stopped, which may lead to malfunction.

## This machine becomes hot.

- Never cover the ventilation holes with cloth or anything else.
- Install this machine in a well-ventilated location.

## About workpieces that can be milled with this machine

The following workpieces can be milled with this machine. Do not cut workpieces that are not listed below.

- Zirconia,
- PMMA, PEEK, composite resin,
- Dental non-cast titanium alloys

## About the milling bur

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

# Other important notes

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Disclaimers/Standard Information .....	21
Location of the Power Rating and Serial Number Label .....	27

# Disclaimers/Standard Information

## 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.
- Unauthorized copying or transferal, 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 Roland DG Corporation.
- DGS SHAPE 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.
- DGS SHAPE Corporation assumes no responsibility for any direct or indirect loss or damage which may occur with respect to any article made using this product.

## Company names and product names are trademarks or registered trademarks of their respective holders.

### For the USA

#### **FEDERAL COMMUNICATIONS COMMISSION RADIO FREQUENCY INTERFERENCE STATEMENT**

Responsible Party: Roland DGA Corporation

Address: 15363 Barranca Parkway Irvine, CA 92618, U.S.A.

Telephone: 949-727-2100

Type of Equipment: Engraving Machine

Model Name: DWX-43W

#### **NOTE:**

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.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

#### **FCC CAUTION**

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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

**For Canada**

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

**For EU Countries**



Manufacturer:

DGSHAPE CORPORATION

1-1-2 Shinmiyakoda, Hamana-ku, Hamamatsu-shi, Shizuoka-ken, 431-2103 JAPAN

The importer in the EU:

Roland DG EMEA N.V.

Bell Telephonelaan 2G, 2440 Geel, Belgium

**For UK**



Manufacturer:

DGSHAPE CORPORATION

1-1-2 Shinmiyakoda, Hamana-ku, Hamamatsu-shi, Shizuoka-ken, 431-2103 JAPAN

The importer in the UK:

Roland DG (U.K.) Ltd.

Dominions House Lime Kiln Close, Stoke Gifford, Bristol, England, BS34 8SR, United Kingdom

**NOTICE**

**Grounding Instruction**

- 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.

### Operating Instructions

- KEEP GUARDS IN PLACE and in working order.
- MAKE WORKSHOP KID PROOF with padlocks, master switches, or by removing starker keys.
- DON'T OVERREACH. Keep proper footing and balance at all times.
- 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.
- 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.



**For EU Countries**



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



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



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



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



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



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



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



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



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



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



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

**For China**

**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 California**



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](http://www.P65Warnings.ca.gov).

**EN 61326-1, EN55011 (Group 1, Class A)**

Basic electromagnetic environment

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Group 1 equipment.

Equipment does not generate and/or use locally radio-frequency energy for industrial, scientific, medical, domestic or similar purpose.

Class A equipment

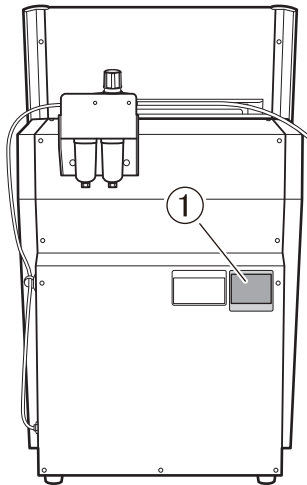
Equipment suitable for use in all locations other than those allocated in residential environments and those directly connected to a low voltage power supply network which supplies buildings used for domestic purposes.

**Caution:** This equipment is not intended for use in residential environments and may not provide adequate protection to radio reception in such environments.

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# Location of the Power Rating and Serial Number Label

Back



①	Serial number The serial number is required for maintenance, servicing, and support. Never peel off the label.
	Power rating Use a power supply that meets the requirements for voltage, frequency, and amperage given here.

