

# User Instruction Manual

ELECTRIC ROUTER DL-MX12-E1



## Power Tool Safety Rules

#### I WADNING

Read and understand all instructions. Failure to follow all instructions liste below, may result in electric shock, fire and/or serious personal injury. SAVE THESE INSTRUCTIONS

## Work Area

Keep your work area clean and well lit. Cluttered benches and dark areas invite accidents. Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust +. Power tools create sparks which may ignite the dust or fumes. Keep by -standers, children, and visitors away while operating a power tool. Distractions can cause you to lose control.

## **Electrical Safety**

Before plugging in the tool, be certain the outlet voltage supplied is within the voltage marked on the nameplate. Do not use "AC only" rated tools with a DC power supply. Avoid body contact with grounded surfaces such as pipes, radiators, ranges and refrigerators. There is an increased risk of electric shock if your body is grounded. If operating the power tool in damp locations is unavoidable, a Ground Fault Circuit Interrupter must be used to supply the power to your tool. Electrician's rubber gloves and footwear will further enhance your personal safety.

Don't expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.

Do not abuse the cord. Never use the cord to carry the tools or pull the plug from an outlet. Keep cord away from heat, oil, sharp edges or moving parts. Replace damaged cords immediately. Damaged cords increase the risk of electric shock.

When operating a power tool outside, use an outdoor extension cord marked "W -A" or "W." These cords are rated for outdoor use and reduce the risk of electric shock.

## Personal Safety

Stay alert, watch what you are doing and use commonsense when operating a power tool. Do not use tool while tired or under the influence of drugs, alcohol, or medication. A moment of inattention while operating power tools may result in serious personal injury. Dress properly. Donot wear loose clothing or jewelry. Contain long hair.Keep your hair, clothing, and gloves away from moving parts. Loose clothes, jewelry, or long hair can be caught in moving parts. Keep handles dry, clean and free from oil and grease. Avoid accidental starting. Be sure switchis "OFF" before plugging in. Carrying tools with your finger on the switch or plugging in tools that have the switch "ON" invites accidents. Remove adjusting keys or wrenches before turning the tool "ON". A wrench or a key that is left attached to a rotating part of the tool may result in personal injury.

Donot overreach. Keep proper footing and balance at all times. Proper footing and balance enables better control of the tool in unexpected situations. Use safety equipment. Always wear eye protection. Dust mask, non -skid safety shoes, hard hat, or hearing protection must be used for appropriate conditions.

## Tool Use and Care

Use clamps or other practical way to secure and support the workpiece to a stable platform. Holding the work by hand or against your body is unstable and maylead to loss of control. Do not force tool. Use the correct tool for your application. The correct tool will do the job better and safer at the rate for which it is designed.

Do not use tool if switch does not turn it "ON" or "OFF". Any tool that cannot be controlled with the switch is dangerous and must be repaired.

Disconnect the plug from the power source before making any adjustments, changing accessories, or storing the tool. Such preventive safety measures reduce the risk of starting the tool accidentally.

Store idle tools out of reach of children and other untrained persons. Tools are dangerous in the hands of untrained users.

Maintain tools with care. Keep cutting tools sharp and clean. Properly maintained tools, with sharp cutting edges are less likely to bind and are easier to control. Any alteration or modification is a misuse and may result in a dangerous condition.

Check for misalignment or binding of moving parts, breakage of parts, and any other condition that may affect the operation. If damaged, have the toolserviced before using. Many accidents are caused by poorly maintained tools. Develop a periodic maintenance schedule for your tool.

Use only accessories that are recommended by the manufacturer for your model. Accessories that may be suitable for one tool, may become hazardous when used on another tool.

## Service

Tool service must be performed only by qualified repair personnel. Service or maintenance performed by unqualified personnel could result in a risk of injury. For example: internal wires may be misplaced or pinched, safety guard return springs may be improperly mounted.

When servicing a tool, use only identical replacement parts. Follow instructions in the Maintenance section of this manual. Use of unauthorized parts or failure to follow Maintenance Instructions may create a risk of electric shock or injury. Certain cleaning agents such as gasoline, carbon tetrachloride . ammonia, etc. may damage plastic parts.

## Safety Rules for Router

DO NOT let comfort or familiarity with product replace strict adherence to router safety rules. If you use this tool unsafety or incorrectly, you can suffer serious personal injury. Hold power tools by insulated gripping surfaces when performance an operation where the cutting tool may contact hidden wire or its own cord.

Contact with a "live" wire will make exposed metal parts of the tool "live" and shock the operator

Use clamps or another pratical way to secure and support the workpiece to a stable platform. Holding the work by hand or against your body leaves it unstable and may lead to loss of control

Wear hearing protection during extended period of operation After long working periods external metal parts and accessories could be hot.

Handle router bits with care, they can be extremely sharp. Check the bit carefully for signs of damage or cracks before use. Replace cracked or damaged bits immediately. Remove all nails, screws and other objects from the workpiece. You can damage the bit and the tool by cutting into a nail or other metal. It can also present asafety hazard. Always use both handles and make sure that you have a good grip on the router before proceeding with any work. Keep your hands away from the rotating bit. Make sure that the bit is not in contact with the workpiece when you switch the machine on.

Before using the tool to make a cut, switch on and let it run for a while.

Watch for vibration or wobbling that could indicate an improperly installed bit.

Take notice of the direction of rotation of the bit and the direction of feed. Do not I eave the machine running unattended. Operate the tool only when controlled by both hands. Always switch off and wait until the bit has come to a complete standstill before removing the machine from the workpiece. Do not touch the bit immediately after operation. It may be extremely hot and could burn your skin. Rags, cloths, cord, string and the like should never be left around the work area.

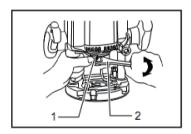
Use safety equipment including safety goggles or shield, ear protection, dust mask and protec tive clothing including safety gloves.

WARNING. Before connecting a tool to a power source (power point receptacle, outlet, etc.) be sure that the voltage supply is the same as that specified on the nameplate of the tool. A power source with a voltage greater than that specified for the tool can result in serious injury to the user, as well as damage to the tool. If in doubt, do not plug in the tool. Using a power source with a voltage less than the nameplate rating is harmful to the motor.

The tool must be used only for its prescribed purpose. Any use other than those mentioned in this Manual wil be considered a case of misuse. The user and not the manufacturer shall be liable for any damage or injury resulting from such cases of misuse.

## ASSEMBLING

Inst alling and removing router bits



- 1, Spindle lock
- 2 Wrench

CAUTION: Always ensure that the router is switched off and unplugged from the mains supply before installing or removing a router hit

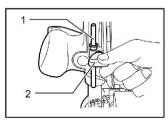
NOTE: Ensure the router bit being used has the correct shank size matching the inserted collet, that is a 1/2" router bits with the 1/2" collet (12MM router bits with the 12MM collet). Never use the incorrect router bit in a collet of the wrong size, this can be very dangerous.

- 1. Loosen the collet nut by depressing and holding the spindle lock button and then rotating the collet nut.
- 2. Insert the router bit ensuring that the shaft of the bit goes all the way into the collet
- 3. Tighten the collet nut assembly by depressing and holding the spindle lock button and then tightening the collet nut.

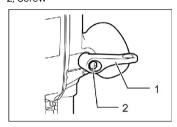
CAUTION: Ensure the bit is firmly secured before commencing operation.

# Adjusting the cutting depth

CAUTION: Always ensure that the router is switched off and unplugged from the mains supply before adjusting the depth of cut.



- 1, Depth gauge
- 2 Screw

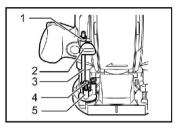


- 1. Depth lock lever
- 2. Screw

- 1. Place the machine on a flat surface and loosen the depth gauge locking knob.
- 2. Allow the depth gauge to make contact with the turret stop.
- 3. Loosen the depth lock lever and lower the machine body until the router bit just touches the flat surface. Tighten the depth lock lever to maintain the position of the bit just touching the flat surface.
- 4. Take note of the measurement on the depth

label.

5. Raise the depth gauge and tighten using the depth gauge locking knob. The difference in distance between the new measurement and the original measurement will be equivalent to the depth of cut. Use the depth adjustment (6) to set the cutting depth. The micrometer depth adjustment (26) can be used for precision setting. One complete turn of the micrometer depth adjustment represents 1mm.

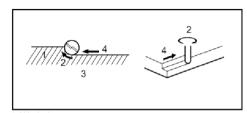


- 1. Depth point
- 2. Screw
- 3. Depth guage
- 4. adjusting hex bolt
- 5, Depth turret stop

- 6. Loosen the depth lock lever and raise the machine body.
- 7. When making a subsequent cutting operation, the final depth of cut will be reached when the depth gauge touches the turret stop.
- 8. The depth turret stop has eight steps. By rotating the depth turret stop it is possible to quickly and easily set the depth at eight

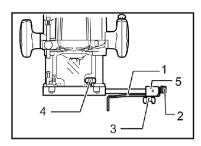
different levels. This procedure is particularly useful when you wish to make a deep cut in a number of stages.

# **OPERATION**



- 1. Workpiece
- 2. Bit revoling direction
- 3. View from the top of the tool
- 4.Feed direction

# Using the parallel guide



- 1, Straight guide
- 2, Fine adjusting screw
- 3, Clamping screw B
- 4. Clamping screw A
- 5. guide holder

any contact. Then turn the tool on and wait until the bit attains full speed. Lower the tool body and move the tool forward over the workpiece surface. Keeping the tool base flush and advancing smoothly until the cutting is complete.

Set the tool base on the workpiece to be cut without the bit making

The parallel guide is an effective aid to cutting in a straight line when chamfering or grooving.

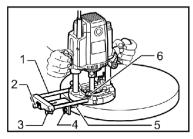
- 1. Loosen the Clamping screw A.
- 2. Feed the bars on the parallel guide through the holes in the router base plate on the right hand side of the router in the feed direction. This will assist in keeping the guide flush with the side of the work piece.
- 3. Adjust the distance between the router bit and parallel guide by moving the guide until it is at the correct distance.
- 4. Tighten the Clamping screw A to hold the parallel guide in position.
- 5. It is possible to make fine adjustments to

the distance between the parallelguide and the router bit, by loosening the centre lockonthe guide and turning knob. One complete turn of the knob is equivalent to 1.5 mm.

6. Tighten the centre lock on the guide when you have made your fine adjustment.

NOTE: If the distance between the side of the work piece and the cutting position is too wide, or the side of the work piece is not straight, firmly clam p a straight board to the work piece and use this as a guide against the router base.

## Using the trimmer guide

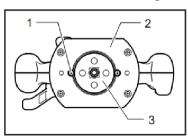


- 1 Guide holder
- 2. Adjusting screw
- 3, Clamping screw B
- 4. Clamping screw C
- 5, Trimmer guide
- 6. Clamping scre w A

- It is quite easy to process the trimming and curve cutting on the surface of furniture. The guide rolling pole proce eds along the curve to ensure the elaborate cut.
- 1, Install the parallel guide as above showed.
- 2, Replace the straight guide fence with trimmer guide.
- 3, Tighten the centre lock on the guide when you have made your fine adjustment.

CAUTION: Make sure that the guide rail rolls along the rim of the workpiece in the cutting.

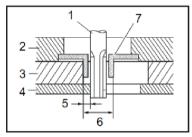
## Using the template guide



The template guide provides a sleeve through which the bit passes, allowing use of the tool with template patterns.

To install the template guide, loosen the screw on the tool base, in sert the template guide and then tighten the screws.

- 1. Clamping Screw
- 2. Sub base
- 3, Template guide



- 1, Bit
- 2. Base
- 3. Templ ate
- 4. Work piece
- 5. Distance X
- 6, Ou tside diameter of the template guide
- 7, templ ate guide

If you wish to make your own templates it is best to use a hardwood such as plywood. Use a piece that is just thicker than the depth of the template guide. Allow for the thickness of the guide in your template to ensure that the work piece is cut to the correct size.

Secure the template to the workpiece. Place the tool on the template and move the tool with the template guide sliding along the side of the template.

# Switching on and off

CAUTION: Before plugging in the tool always check that the trigger switch engages and disengages properly.

THE TOOL IS EQUIPED ON/OFF ROCKER SWITCH, PLEASE ENSURE THE SWITCH ROCKER IS ON THE "OFF" (0) POSTION BEFORE YOUR PLGGING IN

- 1. First set up the work so you are e ready to cut your wood.
- 2. Plug the router into the mains socket.
- 3. Push the rocker to "ON" or "I" position.
- 4. To switch off, just push the rocker to "OFF" or "O" position.

# Maintenance Service

## ! WARNING

Preventive maintenance performed by unauthorized personnel may result in misplacing of internal wires and components which could cause serious hazard. We recommend that all tool service be performed by a Factory Au thorized Service Station.

Tool Lubrication

Your tool has been properly lubricated and is ready to use. It is recommended that tools with gears be regreased with a special gear lubricant at every brush change.

## Carbon Brushes

The brushes and commutator in your tool have been engineered for many hours of dependable service. To maintain peak effic iency of the motor, we recommend every two to six months the brushes be examined. Only genuine replacement brushes specially designed for your tool should be used.

## Bearings

After about 300-400 hours of operation, or at every second brush change, the bearings should be replaced at Factory Authorized Service Station. Bearings which become noisy (due to heavy load or very abrasive material cutting) should be replaced at once to avoid overheating or motor failure.

## Cleaning

## ! WARNING

To avoid accidents always disconnect the tool from the power supply before cleaning or performing any maintenance. The tool may be cleaned most effectively with compressed dry air. Always wear safety goggles when cleaning tools with compressed air. Ventilation openings and switch lev ers must be kept clean and free of foreign matter. Do not attempt to clean by inserting pointed objects through openings.

## ! CAUTION

Certain cleaning agents and solvents damage plastic parts. Some of these are: gasoline, carbon tetrachloride, chlorinated c leaning solvents, ammonia and household

detergents that contain ammonia.

Accessories

Collet Bush

Wrench

Parallel Guide

Trimming Guide

Template Guide

Carbon Brush