

INSTRUCTION MANUAL / ELECTRIC IMPACT DRILL See page 1





▲IMPORTANT:

Read this instruction manual before operating this product. Keep the instruction manual for future reference.





General Power Tool Safety Warnings

AWARNING: Read all safety warnings, instructions, illustrations and specifications provided with this power tool. Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury. Save all warnings and instructions for future reference.

The term "power tool" in the warnings refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

1) Work area safety

- a) Keep work area clean and well lit. Cluttered or dark areas invite accidents.
- b) 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.
- c) Keep children and bystanders away while operating a power tool. Distractions can cause you to lose control.

2) Electrical safety

- a) Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools. Unmodified plugs and matching outlets will reduce risk of electric shock.
- b) Avoid body contact with earthed or grounded surfaces, such as pipes, radiators, ranges and refrigerators. There is an increased risk of electric shock if your body is earthed or grounded.
- c) Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.
- d) Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts. Damaged or entangled cords increase the risk of electric shock.
- **e)** When operating a power tool outdoors, use an extension cord suitable for outdoor use. Use of a cord suitable for outdoor use reduces the risk of electric shock.
- f) If operating a power tool in a damp location is unavoidable, use a residual current device (RCD) protected supply. Use of an RCD reduces the risk of electric shock.

3) Personal safety

- a) Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating power tools may result in serious personal injury.
- **b)** Use personal protective equipment. Always wear eye protection. Protective equipment such as a dust mask, non-skid safety shoes, hard hat or hearing protection used for appropriate conditions will reduce personal injuries.
- c) Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and/or battery pack, picking up or carrying the tool. Carrying power tools with your finger on the switch or energizing power tools that have the switch on invites accidents.
- **d)** Remove any adjusting key or wrench before turning the power tool on. A wrench or a key left attached to a rotating part of the power tool may result in personal injury.
- e) Do not overreach. Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations.
- f) Dress properly. Do not wear loose clothing or jewellery. Keep your hair and clothing away from moving parts. Loose clothes, jewellery or long hair can be caught in moving parts.
- g) If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used. Use of dust collection can reduce dust-related hazards.
- h) Do not let familiarity gained from frequent use of tools allow you to become complacent and ignore tool safety principles. A careless action can cause severe injury within a fraction of a second.

4) Power tool use and care

- **a) Do not force the power tool. Use the correct power tool for your application.** The correct power tool will do the job better and safer at the rate for which it was designed.
- **b)** Do not use the power tool if the switch does not turn it on and off. Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
- c) Disconnect the plug from the power source and/or remove the battery pack, if detachable, from the power tool before making any adjustments, changing accessories, or storing power tools. Such preventive safety measures reduce the risk of starting the power tool accidentally.
- d) Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool. Power tools are dangerous in the hands of untrained users.
- e) Maintain power tools and accessories. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use. Many accidents are caused by poorly maintained power tools.
- **f) Keep cutting tools sharp and clean.** Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
- g) Use the power tool, accessories and tool bits etc. in accordance with these instructions, taking into account the working conditions and the work to be performed. Use of the power tool for operations different from those

intended could result in a hazardous situation.

- h) Keep handles and grasping surfaces dry, clean and free from oil and grease. Slippery handles and grasping surfaces do not allow for safe handling and control of the tool in unexpected situations.
- 5) Service
- a) Have your power tool serviced by a qualified repair person using only identical replacement parts. This will ensure that the safety of the power tool is maintained.

Safety Instructions for Impact drill

DO NOT let comfort or familiarity with product (gained from repeated use) replace strict adherence to rotary hammer safety rules. If you use this tool unsafely or incorrectly, you can suffer serious personal injury.

- 1) Hold tools by insulated gripping surfaces when performing an operation where the cutting tool may contact hidden wiring or it own cord. Contact with a "live" wire will make exposed metal parts of the tool "live" and shock the operator. Do not drill, fasten or break into existing walls or other blind areas where electrical wiring may exist. If this situation is unavoidable, disconnect all fuses or circuit breakers feeding this worksite.
- 2) Wear ear protectors when using the tool for extended periods. Prolonged exposure to high intensity noise can cause hearing loss.
- 3) Use a metal detector to determine if there are gas or water pipes hidden in the work area or call the local utility company for assistance before beginning the operation. Striking or cutting into a gas line will result in explosion. Water entering an electrical device may cause electrocution.
- 4) Use auxiliary handle(s), if supplied with the tool. Loss of control can cause personal injury.
- 5) Use clamps or another practical 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.
- 6) **Hold the machine with a firm grip.** High reaction torque can briefly occur while driving in and loosening screws. Secure the workpiece. A workpiece clamped with clamping devices is held more secure than by hand.
- 7) **Never operate at higher speed than the maximum speed rating of the drill bit.** At higher speeds, the bit is likely to bend if allowed to rotate freely without contacting the workpiece, resulting in personal injury.
- 8) Keep handles dry, clean and free from oil and grease. Slippery hands cannot safely control the power tool.
- 9) **Do not use dull or damaged bits and accessories.** Dull or damaged bits have a greater tendency to bind in the workpiece.
- 10) When removing the bit from the tool avoid contact with skin and use proper protective gloves when grasping the bit or accessory. Accessories may be hot after prolonged use.
- 11) If the bit becomes bound in the workpiece, release the trigger immediately, reverse the direction of and slowly squeeze the trigger to back out the bit. Be ready for a strong reaction torque. The drill body will tend to twist in the opposite direction as the drill bit is rotating.
- 12) **Do not run the drill while carrying it at your side.** A spinning drill bit could become entangled with clothing and injury may result.

AWARNING: Even if you use the impact drill properly and follow all safety notes, there are always residual risks. The following risks may occur:

- Lung injury if a suitable dust mask is not worn.
- Hearing loss if suitable ear protection is not worn.
- Eye injury caused by flying materials or parts if no suitable eye protection is worn.
- Injury to health attributed to hand-arm vibrations if the rotary hammer drill is used for a prolonged period of time
- Risk of injury if long hair, loose-fitting clothing or jewellery get caught by rotating parts of the rotary hammer drill.

Reduce residual risks by using the rotary hammer drill with care and following all safety notes as well as other instructions.

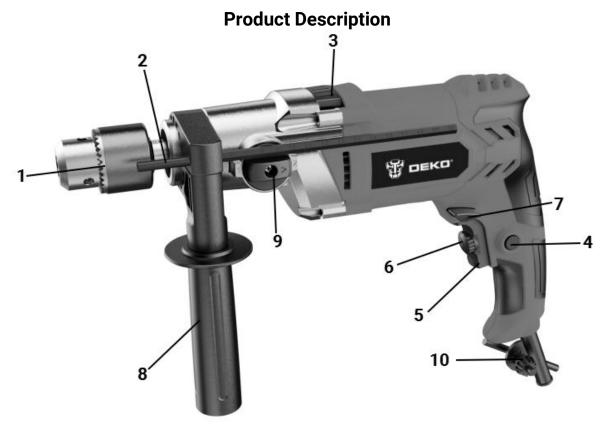
Symbols

In this manual and/or on the machine the following symbols are used:

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<u> </u>	Denotes risk of personal injury or damage to the tool.	
	Read instruction manual before use.	
CE	Conforms to relevant legislation and safety standards.	
	Do not dispose of power tools and batteries/rechargeable batteries into household waste! Dispose the products according to the regulation and requirement of local council.	
	Double insulation. Class II device. The device must not be earthed.	
	Wear safety goggles. Wear ear protection. Always use breathing apparatus when machining materials which generate dust.	
	Wear gloves.	

Product Specifications

Froduct Specifications			
Model Number	DKID16G120		
Rated Voltage	220-240V~50/60Hz		
Rated Power	1200W		
No-Load Speed	0-1100/0-3000RPM		
Impact Frequency	0-48000BPM		
Chuck	16mm		
	Wood: 35mm		
Max. Drilling Capacity	Steel: 16mm		
	Concrete: 16mm		
Protection Class	II/回		



- 1 Drill chuck
- 2 Depth gauge
- 3 Function switch
- 4 Locking button
- 5 On/off switch
- 6 Variable speed dial
- 7 Rotational direction switch
- 8 Auxiliary handle
- 9 2-speed gear switch
- 10 chuck key

Intended Use

The intended use of this hammer drill includes:

- Drilling in wood, plastic and metal;
- Impact drilling in stone, concrete and similar materials.

Operation

AWARNING: Before you connect the equipment to the mains supply, make sure that the data on the rating plate are identical to the mains data. Always pull the power plug before making adjustments to the equipment.

Auxiliary handle

For safety reasons, the auxiliary handle must be installed when working with this power tool.

- 1) Push the ring of the auxiliary handle over the drill chuck onto the drill chuck collar, if necessary, turn the handle part of the auxiliary handle counter-clockwise to open the ring sufficiently.
- 2) Align the auxiliary handle downwards, to the right or to the left according to your personal habit or work.



Attaching the depth gauge

- 1) Loosen the auxiliary handle (8).
- 2) Insert the depth gauge into the holder
- 3) Set the depth gauge to the required depth.
- 4) Tighten the additional handle (8).

Installing the drill bit

This hammer drill is fitted with a key chuck (1).

- 1) Open the chuck (1). The drill bit opening (1) must be large enough to fit the drill bit into.
- 2) Select a suitable drill bit. Push the drill bit as far as possible into the chuck opening.
- 3) Close the chuck (1) with the chuck key (10). Check that the drill bit is secure in the chuck (1).
- 4) Check at regular intervals that the drill bit or tool is secure (pull the mains plug).



NOTE: Use only suitable tools. Never use a metal drill bit to drill into wood.

Illustration	Description	Application area	Rotational speed
	Concrete drill	Impact drilling/drilling in stone, concrete	High
	Metal drill	Drilling in metal and plastic	Medium to low
	Wood drill	Drilling in wood	Medium to low

AWARNING: Tools can be very sharp and very hot after use! Handle them carefully to avoid injuries! If necessary, wear protective gloves when removing or replacing tools!

- 1) Open the tool holder as described and pull out the tool insert.
- 2) Insert a new/different accessory tool and attach it as described above.

Changing the rotation direction

- 1) To drill and screw screws into place, press the rotation direction switch (7) to the left (rotation in clockwise direction).
- 2) To remove screws, press the rotation direction switch to the right (rotation in an anti- clockwise direction).

Switching on and off

- 1) First fit a suitable drill bit into the tool.
- 2) Connect the mains plug to a suitable socket.
- 3) Position the drill in the position you wish to drill.

To switch on:

Press the On/off switch (5)

Continuous operation:

Secure the On/off switch (5) with the locking button (4).

To switch off:

Press the On/off switch (5) briefly.

2-speed gear switch

The 2-speed feature of your tool allows you to shift gears for greater versatility.

AWARNING: Do not change speed when the tool is running. Always allow the drill to come to a complete stop before changing speeds.

Adjusting the speed

- 1) You can infinitely vary the speed whilst using the tool.
- 2) Select the speed by applying a greater or lesser pressure to the On/off switch (5).
- 3) Select the correct speed: The most suitable speed depends on the workpiece, the type of use and the drill bit
- 4) Low pressure on the On/off switch (5): Lower speed (suitable for: small screws and soft materials)

Greater pressure on the On/off switch (5): Higher speed (suitable for large/long screws and hard materials) **Tip:** Start drilling holes at low speed. Then increase the speed in stages.

Benefits:

- 1) The drill bit is easier to control when starting the hole and will not slide away.
- 2) You avoid drilling messy holes (for example in tiles).

Preselecting the speed

The variable speed dial (6) enables you to define the maximum speed. The On/off switch (5) can only be pressed to the defined maximum speed setting.

Set the speed using the variable speed dial (6) on the on/off switch (5).

A WARNING: Do not attempt to make this setting whilst the drill is in use.

Selecting the operating mode

Use the mode selector switch (3) to switch between drilling and hammer drilling

- 1) Position [] for hammer drilling in cement or stone.
- 2) Position [1] for drilling without the hammer function into wood, metal, ceramics and plastics and for the screwdriver function.

Work instructions

- 1) Always keep the ventilation openings of the power tool free and clean. Do not cover them during use.
- 2) Fix small workpieces or clamp them in a vice or clamp them with screw clamps.
- 3) Mark the drill holes in metal with a center punch, this prevents the drill from slipping.
- 4) If you clamp a piece of old wood under the workpiece when drilling in wood, the drill hole on nthe back will be splinter-free.
- 5) Always make sure that the accessory tool turns fast enough, do not apply too much pressure on it.

Cleaning and Maintenance

Correct and regular care is not only important for the safe use of this power tool, it can also extend the service life of the power tool.

 Λ **WARNING:** Always pull out the mains power plug before starting any cleaning work.

Cleaning

- 1) Keep all safety devices, air vents and the motor housing free of dirt and dust as far as possible. Wipe the equipment with a clean cloth or blow it with compressed air at low pressure.
- 2) We recommend that you clean the device immediately each time you have finished using it.
- 3) Clean the equipment regularly with a moist cloth and some soft soap. Do not use cleaning agents or solvents; these could attack the plastic parts of the equipment. Ensure that no water can seep into the device.

Maintenance

There are no parts inside the equipment, which require additional maintenance.

Carbon brushes

The brushes and commutator in your tool have been engineered for many hours of dependable service. To maintain peak efficiency of the motor, we recommend every two to six months the brushes be examined.

Disposal



The machine and packaging should be sorted for environmental-friendly recycling. Do not dispose of power tools into household waste! Please recycle them at collection points provided for the purpose. Ask your local authority for information about recycling.