

DURATOOL

Part No: D01965

INSTRUCTION MANUAL

18V Li-Ion CORDLESS DRILL DRIVER



WARNING: Read and understand all instruction.

Contents

Cordless Drill.....	1
Introduction.....	1
Technical data.....	1
Safety precautions.....	2
Important safety instructions for charging unit and battery.....	2
Electrical safety.....	3
Using an extension lead.....	3
Package contents.....	3
Main parts.....	4
Fitting accessories.....	4
Inserting and removing drill bits.....	4
Adjusting the torque.....	5
Drilling.....	5
Speed selector.....	5
Wood Drilling.....	6
Metal Drilling.....	6
Inserting and removing the battery.....	6
Operation.....	7
Adjusting coupling.....	7
Fastening and undoing screws.....	7
Turning on/off.....	7
Charging the battery.....	8
Charging process.....	8
Cleaning and maintenance.....	9
Service and repair.....	9
Storage.....	9
Warranty.....	9
Servicing and information.....	10
Plug replacement.....	10

Cordless drill



Instruction manual

Read the instruction manual carefully before use, and keep it for future reference.



Voltage/frequency

Indicates the required voltage and frequency of the power supply to which the machine is connected.



Battery

Gives the voltage, strength and type of battery.



Charging time

Indicates the suggested battery charging time.



Speed

Indicates the machine's speed(s) or speed range in revolutions per minute.



Reversible drive

Indicates that the machine can work in either direction.



Chuck capacity

Gives the maximum spindle diameter or the spindle diameter range for drills and bits that can be fitted into the machine's chuck.

Introduction

The following pictograms are used in this instruction manual:



Indicates risk of bodily injury, danger to life or damage to machinery if the instructions in this manual are not followed. Indicates electric voltage.



Read this user manual carefully before using the machine. Familiarise yourself with the machine's functions and operation. Maintain the machine in accordance with the instructions to ensure optimum performance. Keep this manual and other documentation in a safe place.

Technical data

Voltage	18 V
Voltage, charger	230 V
Frequency, charger	50Hz
Capacity, battery	1.3 Ah (L i-Ion)
Charging time	1 hour
Rpm (no load)	0-400/0-1200min ⁻¹
Torque	16+1
Hammer Action	No
Chuck Size	10mm

Safety precautions

When using electrical machinery always follow local safety precautions regarding risk of fire, electric shock and injury. In addition to the instructions below, please read the safety precautions in the separate safety folder.

1. Remove the battery.

When the electric tool is not in use, is undergoing maintenance or when a device such as a chuck or drill bit is to be replaced.

2. Check the tool for any damage.

Before using the tool again, e.g. after charging the battery, check all parts carefully for correct and problem-free functioning. Check that the moving parts are functioning problem-free and not jamming, and also check for any damage to All parts must be correctly fitted and fulfil all requirements with regard to parts. problem-free functioning of the electric tool. Any damaged parts must be repaired or replaced correctly by a qualified professional, unless otherwise stated in the instruction manual. If the power switch is damaged, it must be replaced by an authorised workshop. If the switch will not turn on and off, the tool must not be used.

Important safety instructions for charging unit and battery

If you come into contact with battery acid, wash it off immediately with water. In case of contact with the eyes, rinse with water and seek immediate medical advice.

1. The operating instructions and safety instructions for the charging unit and battery must be read and complied with before use.
2. Note: Only use the charging unit and battery supplied by the manufacturer, as otherwise there is a risk of accidents.
3. The charging unit, battery and electric tool must be protected against damp, such as rain and snow.
4. Before using the charging unit, check that all cables are correctly connected.
5. If any of the cables are damaged, the charging unit must not be used. The damaged cable must be replaced immediately.
6. When the charging unit is not in use, you must remove the mains plug from the socket. Do not pull on the cable to remove the plug.
7. If the charging unit falls on the floor or is subjected to any other form of mechanical impact, it should be checked by an authorised workshop before being used again. Any damaged parts must be repaired.
8. The battery must be handled with care. It must not be dropped or subjected to impacts.
9. You must not attempt to repair the charging unit or battery yourself. Repairs must always be carried out by an authorised workshop, as otherwise there is a risk of accidents.
10. Before any cleaning or maintenance of the charging unit or battery, the unit must be unplugged from the mains.

11. The battery must not be charged if the ambient temperature is below 10°C or above 40°C.
12. The ventilation openings on the charging unit must not be blocked.
13. The battery must not be short-circuited.



In the event of short-circuit, high-intensity current is present. This may cause the battery to overheat, burst into flames or explode. This may result in damage to the battery and/or injury to the user.

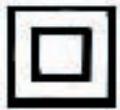
Therefore:

1. no cable may be connected to the poles on the battery.
 2. make sure that there are no metal objects (pins, clips, coins, etc.) in the battery port.
 3. the battery must not be exposed to water or rain.
14. A battery that is damaged or will no longer charge must be disposed of as hazardous waste. It must not be disposed of with ordinary household waste.
 15. The battery must not be thrown into fire or water due to the risk of explosion.

Electrical safety



Always check that the mains voltage corresponds to the value on the rating plate.



The battery is double-insulated in accordance with EN- 60335; an earth connection is therefore not necessary.

Using an extension lead

Always use approved extension leads suitable for the machine's output. Cables must have a cross-section area of at least 1.5 mm². If the extension lead is on a reel, it must be fully extended.

Package contents

- 1 Cordless drill
- 1 Battery
- 1 Charger
- 1 Instruction manual / Safety folder

Check that the machine, separate parts and accessories are all there and no parts have been damaged in transit

Main parts



- 1 ON / OFF button
- 2 Forward and reverse
- 3 Drill chuck
- 4 Torque/Drill Selector
- 5 Battery
- 6 Speed Selector
- 7 Button for battery latch
- 8 Magnet block

Fitting accessories

Always remove the battery before fitting accessories.

Inserting and removing drill or screw bits



In addition to drill bits, the machine can also take screwdriver bits with a hexagonal shaft.

- To loosen the drill chuck, turn the coupling in the direction of the arrows on the chuck to release (a) and secure the block (b).
- Position the drill bit shaft in the bit chuck.
- Turn the coupling in the direction of the arrows on the chuck to grip tight so that the bit is fixed securely.
- Turn the coupling again when you want to change the drill bit.

Adjusting the torque

The torque is adjusted by rotating the torque setting (4), the torque is greater when the torque setting is set on a higher position. The torque is less when the torque setting is set on a low position "1" denote lowest and "Drill bit image" denote highest. Torque is set by means of a torque setting according to different screw and different material, you can adjust suitable torque, if the screw is long and material is hard, you can adjust to a bigger setting.

Drilling

Before use for drilling, the torque setting should be set on drill position "2".

When drilling hard smooth surface, use a center punch to mark the desired hole location. This will prevent the drill bit from slipping off center as the hole is started. Hold the tool firmly and place the tip of the drill or bit into the work piece, applying only enough pressure to keep the bit cutting.

Do not force or apply side pressure to elongate a hole.

Speed selector

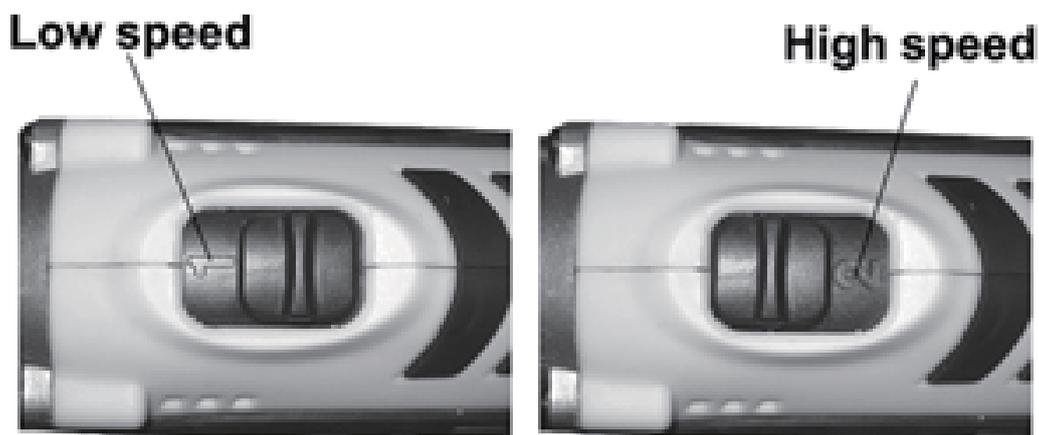


Fig. 5

The drill has a two-speed gear train designed for drilling at LOW (1) or HIGH (2) speed. A gear selector is located on top of the drill to select either LOW (1) or HIGH (2) speed. When you select LOW (1) speed range, the speed will decrease but will provide more power and torque. When using drill in the HIGH (2) speed range. Speed will increase but will provide less power and torque. Use LOW (1) speed for high power and torque application and HIGH (2) speed for fast drilling applications.

Important: NEVER adjust this switch whilst the drill is running .Always let it come to a complete stop first.

Wood Drilling

For maximum performance, use high speed steel drills for wood drilling, turn the torque setting on the drill position “**2**”. Begin drilling at a very low speed to prevent the bit from slipping off the starting point. Increase the speed as the drill bit bites into the material. When drilling through holes, place a block or wood behind the work piece to prevent rough edges on the back side of the hole.

Metal Drilling

For maximum performance, use high speed steel (HSS) bits for metal or steel drilling. Turn the torque setting on the drill position “**2**”. Begin drilling at a very low speed to prevent the bit from slipping off the starting point. Maintain a speed and pressure which allows cutting without overheating the bit. Applying too much pressure will overheat the drill, wear the bearings, bend or burn bits, produce off-center or irregular shaped holes. When drilling large holes in metal, it is recommended that you drill with a small bit at first, then finish with a large bit, also lubricate the bit with cutting lubricant, to improve drilling action and increase bit life.

Inserting and removing the battery



- Make sure that the rotation direction switch (2) is in the middle position to prevent the machine suddenly starting up.
- Push the battery into the base of the machine until it clicks into place. See drawing.
- Press the button (7) to remove the battery from the base of the machine.

Operation

Always follow the safety instructions and applicable rules.

- Hold the machine firmly and press the drill against the item using even pressure. Do not force the machine.
- Only use drill bits not yet showing signs of wear. Worn drill bits can impair the machine's efficiency.

Adjusting coupling



The machine has various coupling levels, which determine the force used to rotate screws in and out.

- Set the adjustment ring for the coupling (4) to the required coupling level.
- Pre-select the lowest possible level for manoeuvring the screw. Select a higher coupling level if the motor is struggling.

Fastening and undoing screws.

- Set the rotation direction switch (2) to position ,R' to screw in screws.
- Set the rotation direction switch (2) to position ,L' to unscrew screws.

Turning on/off



- Press the on/off button (1). You can regulate the machine's rpm by the pressure applied to the switch.
- Once the switch (1) is released, the drill chuck stops and rotation ceases.
- Push the rotation direction switch (2) into the centre to lock the machine when it is switched off. Do not put the machine down until the motor has stopped completely. Do not put the machine on a dusty surface. Dust can penetrate the mechanical parts.

Charging the Battery

The battery pack has been shipped in a low charge condition to prevent any possible problems. You should charge the battery prior to first use.

Note: Batteries will not reach full charge the first time they are charged. Allow 4-5 cycles (drilling until the battery has no more power followed by recharging) for the item to fully charge.

Allow the battery to cool down in between use and charging!

The battery pack will become slightly warm to the touch while charging, this is normal and does not indicate a problem.

Do not place the charger in an area of extreme heat or cold, it will best at normal room temperature. When the battery becomes fully charged, unplug your charger from the power supply and remove the battery pack from the charger.

The normal charging time after the initial 4-5 charges should take about 1 hour. (this may take longer for the first few charges)

Charging Process:

- 1-With the battery Not Inserted, plug the charger into the mains socket. The Green light will illuminate
- 2-Insert the battery pack into the charger until the button on the battery pack clicks into place (Ensuring not to force it) .The Green light will stay on and the Red light will start to flash to indicate "Charging"
- 3-When the battery is fully charged the Red light changes to permanently on, the green light stays on
- 4-When the Red light is showing permanently. The battery should be removed and the charger disconnected from the mains supply.

IMPORTANT! Never leave the battery on charge for more than 2 hours !

Cleaning and Maintenance



Attention! Before performing any work on the equipment, pull the power plug

Cleaning

- Keep the ventilation slots of the machine clean to prevent the motor overheating
- Regularly clean the machine housing with a soft cloth, preferably after each use
- Keep the ventilation slots free from dust and dirt
- If the dirt does not come off, use a soft cloth moistened slightly with soapy water



Never use solvents such as petrol, alcohol, ammonia water, these solvents may damage the plastic parts

Service and Repair

Repair or replacement of any parts must only be carried out by a qualified person (Qualified electrician)

Storage

- Thoroughly clean the whole machine and its accessories
- Store it out of reach of children, in a stable and secure position, in a cool dry place, avoid too high and too low temperatures
- Protect it from exposure to direct sunlight. Keep it in the dark if possible
- Don't keep it in a plastic bag to avoid humidity build-up

Warranty

This Duratool product is guaranteed for a period of 1 Year, with effect from the date of purchase and applies only to the original purchaser. This guarantee only applies to defects arising from, defective materials and or faulty workmanship that become evident during the guarantee period only and does not include consumable items. The manufacturer will repair or replace the product at their discretion subject to the following. That the product has been used in accordance with the guide lines as detailed in the product manual and that it has not been subjected to misuse, abuse or used for a purpose for which it was not intended. That it has not been taken apart or tampered with in any way whatsoever or has been serviced by unauthorized persons or has been used for hire purposes. Transit damage is excluded from this guarantee, for such damage the transport company is responsible. Claims made under this guarantee must be made in the first instance, directly to the retailer within the guarantee period. Only under exceptional circumstances should the product be returned to the manufacturer. In these cases it shall be the consumer's responsibility to return the product at their cost ensuring that the product is adequately packed to prevent transit damage and must be accompanied with a brief description of the fault and a copy of the receipt or other proof of purchase. The manufacturer shall not be liable for any special, exemplary, direct, indirect, incidental, or consequential loss or damage under this guarantee.

Servicing and information

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. Contact your retailer for any other issues.

For further details visit WWW.Duratool.co.uk



Environment

Should your appliance need replacement after extended use do not discard it with the household rubbish but dispose of it in an environmentally safe way. Waste produced by electrical machine items should not be handled like normal household rubbish. Please recycle where recycle facilities exist. Check with your Local Authority or retailer for recycling advice.

Plug replacement

The fuse in the main plug of your power tool should always be replaced with one of identical rating

Check the voltage given on your power tool matches the supply voltage

The power tool is supplied with a fitted plug, however if you should need to fit a new plug follow the instructions below.

Important

The wires in the mains lead are coloured in accordance with the following code:

Blue = Neutral Brown – Live

As the colours of the wires in the mains lead of this appliance may not correspond with the colour markings identifying the terminals in your plug, proceed as follows:

The wire which is coloured blue must be connected to the terminal which is marked with N.

The wire which is coloured brown must be connected to the terminal which is marked with the letter L.

If a 13 Amp (BS 1363/A) plug is used, a BS 1362 5 Amp fuse must be fitted or if any other type of plug is used a 5 Amp Fuse must be fitted, either in the plug or adaptor, or on the distribution board.

If a moulded plug is fitted and has to be removed take great care in disposing of the plug and severed cable, it must be replaced by a service agent or a similarly qualified person in order to avoid hazard

