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# **User manual**



## **Cordless Brushless Impact Driver**

MODEL NUMBER: SERIAL NUMBER: ☐ CEDIDB200Li

Model number and serial number should be on nameplate. You should write them down and store in a safe place.



## IDENTIFICATION

- 1. Sleeve
- 2. Head Cover
- 3. Aluminum cover
- 4. Switch Trigger
- 5. Reversing Switch Lever
- 6. Soft Handle
- 7. Speed Adjust Button
- 8. Work Lamp
- 9. Button of Battery Cartridge
- 10. Battery Cartridge
- 11. Speed Adjust Indicator Lamp



## SPECIFICATIONS

Model: Impact head		CEDIDB200Li 1/4" Hex drive	
	Medium impact mode	0 - 1,800 min-1	
	Soft impact mode	0 - 800 min-1	
Impacts per minute	Hard impact mode	0 – 3,500 min-1	
	Medium impact mode	0 - 2,500 min-1	
	Soft impact mode	0 - 1,100 min-1	
Max. Torque	Hard impact mode	200 Nm	
	Medium impact mode	130 Nm	
	Soft impact mode	40 Nm	
Rated voltage		D.C. 20 V	
Overall length (Bare tool)		155 mm	
Net weight (Bare tool)		1.09 kg	

- Due to our continuing program of research and development, the specifications herein are subject to change without notice.
- Specifications and battery cartridge may differ from country to country.
- Weight, with battery cartridge, according to EPTA-Procedure 01/2003

### Applicable battery cartridge and charger

battery cartridge	CEDLi-Ion 2Ah, CEDLi-Ion 4Ah, CEDLi-Ion 6Ah	
battery charger	CEDFCH2.4, CEDDCH3.0, CEDFCH3.5	

 Some of the battery cartridges and chargers listed above may not be available depending on your region of residence.

**AWARNING:** Only use the battery cartridges and chargers listed above. Use of any other battery cartrid and chargers may cause injury and/or fire.

#### Symbols

The following show the symbols used for the equipment. Be sure that you understand their meaning before use.



Read instruction manual.



Only for EU countries

Do not dispose of electric equipment or battery pack together with household waste material!

In observance of the European Directives, on Waste Electric and Electronic Equipment and Batteries and Accumulators and Waste Batteries and Accumulators and their implementation in accordance with national laws, electric equipment and batteries and battery pack(s) that have reached the end of their life must be collected separately and returned to an environmentally compatible recycling facility.

#### Intended use

The tool is intended for screw driving in wood, metal and plastic or fastening bolts and nuts.

#### Noise

The typical A-weighted noise level determined according to EN 62841-2-2:

Sound pressure level (LpA) : 87.7 dB(A) Sound power level (LWA) : 98.7 dB (A) Uncertainty (K): 3 dB(A)

The noise level under working may exceed 100 dB (A).

**A** WARNING: Wear ear protection.

#### **Vibration**

The vibration total value (tri-axial vector sum) determined according to EN 62841-2-2:

Work mode: impact tightening of fasteners of the maximum capacity of the tool

Vibration emission (a): 7.53 m/s<sup>2</sup> Uncertainty (K): 1.5 m/s2

**NOTE:** The declared vibration emission value has been measured in accordance with the standard test method and may be used for comparing one tool with another.

**NOTE:** The declared vibration emission value may also be used in a preliminary assessment of exposure.

■ WARNING: The vibration emission during actual use of the power tool can differ from the declared emission value depending on the ways in which the tool is used.

▲ WARNING: Be sure to identify safety measures to protect the operator that are based on an estimation of exposure in the actual conditions of use (taking account of all parts of the operating cycle such as the times when the tool is switched off and when it is running idle in addition to the trigger time).

## **SAFETY WARNINGS**

#### General power tool salety warnings

instructions. Failure to follow the warnings and instructions 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.

#### Work area safety

- Keep work area clean and well lit. Cluttered or 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 furmes.
- Keep children and bystanders away while operating a power tool. Distractions can cause you to lose control.

#### **Electrical Safety**

- 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.
- Avoid body contact with earthed or grounded surfaces such as pipes, radiators, ranges and There is an increased risk of elecrefrigerators.
  - tric shock if your body is earthed or grounded.
- Do not expose power tools to rain or wet confile risk of electric shock.
- 4. Mane talure ประชาชาย เพลา และ decord 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.
- 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.
- 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.

#### Personal Safety

- 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.
- Use personal protective equipment. Always wear syntaction of protective equipment auch hearing protection used for appropriate conditions will reduce personal injuries.

- 3. 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 energising power tools that have the switch on invites accidents.
- 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.
- Do not overreach. Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations.
- Dress properly. Do not wear loose clothing or jewellery. Keep your hair, clothing, and gloves away from moving parts. Loose clothes, jewellery or long hair can be caught in moving parts.
- 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.

#### Power tool use and care

- 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.
- 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.
- Disconnect the plug from the power source and/or the battery pack 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.
- 4. 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.
- 5. Maintain power tools. 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.
- Keep cutting tools sharp and clean. Properly
  maintained cutting tools with sharp cutting edges
  are less likely to bind and are easier to control.
- 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.

#### Battery tool use and care

- 1. Recharge only with the charger specified by the manufacturer. one type of battery packnarger mateis siskabile്rfor when used with another battery pack.
- 2. Use power tools only with specifically designated battery packs. Use of any other battery packs may create a risk of injury and fire.

- When battery pack is not in use, keep it away from other metal objects, like paper clips, coins, keys, nails, screws or other small metal objects, that can make a connection from one terminal to another. Shorting the battery terminals together may cause burns or a fire.
- 4. Under abusive conditions, liquid may be ejected from the battery; avoid contact. If contact accidentally occurs, flush with water. If liquid contacts eyes, additionally seek medical

**help.** Liquid ejected from the battery may cause irritation or burns.

#### Service

- 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.
- 2. Follow instruction for lubricating and changing accessories.
- Keep handles dry, clean and free from oil and grease.

## Cordless impact driver safety warnings

- Hold power tool by insulated gripping surfaces, when performing an operation where
  the fastener may contact hidden wiring.
  Fasteners contacting a "live" wire may make
  exposed metal parts of the power tool "live" and
  could give the operator an electric shock.
- Always be sure you have a firm footing.

  Be sure no one is below when using the tool in high locations.
  - Hold the tool firmly.
- Wear ear protectors.
- 4. Do not touch the bit or the workpiece immedi-
- 5. ately after operation. They may be extremely hot and could burn your skin.
- Keep hands away from rotating parts.

### SAVE THESE INSTRUCTIONS.

**MARNING:** DO NOT let comfort or familiarity with product (gained from repeated use) replace strict adherence to safety rules for the subject product.

MISUSE or failure to follow the safety rules stated in this instruction manual may cause serious personal injury.

## Important safety instructions for battery cartridge

- Before using battery cartridge, read all instructions and cautionary markings on (1) battery charger, (2) battery, and (3) product using battery.
- 2 Do not disassemble battery cartridge.
- If operating time has become excessively shorter, stop operating immediately. It may result in a risk of overheating, possible burns and even an explosion.

- If electrolyte gets into your eyes, rinse them out with clear water and seek medical attention right away. It may result in loss of your eyesight.
- Do not short the battery cartridge:
  - (1) Do not touch the terminals with any conductive material.
  - (2) ductive material.

    Avoid storing battery cartridge in a container with other metal objects such as nails, coins, etc.
  - (3) Do not expose battery cartridge to water or rain.

A battery short can cause a large current flow, overheating, possible burns and even a breakdown.

- Do not store the tool and battery cartridge in locations where the temperature may reach or exceed 50 °C (122 °F).
- Do not incinerate the battery cartridge even if it is severely damaged or is completely worn out. The battery cartridge can explode in a fire.
- 8. Be careful not to drop or strike battery.
- 9. Do not use a damaged battery.
- The contained lithium-ion batteries are subject to the Dangerous Goods Legislation requirements

For commercial transports e.g. by third parties, forwarding agents, special requirement on packaging and labeling must be observed. For preparation of the item being shipped, consulting an expert for hazardous material is required. Please also observe possibly more detailed national regulations.

Tape or mask off open contacts and pack up the battery in such a manner that it cannot move around in the packaging.

Follow your local regulations relating to disposal of battery.

#### SAVE THESE INSTRUCTIONS.

A CAUTION: Only use genuine Cedrus

batteries. Use of non-genuine Cedrus batteries, or batteries that have been altered, may result in the battery bursting causing fires, personal injury and damage. It will

also void the Cedrus warranty for the Cedrus tool and charger.

## Tips for maintaining maximum battery life

- Charge the battery cartridge before completely discharged. Always stop tool operation and charge the battery cartridge when you notice less tool power.
- Never recharge a fully charged battery cartridge. Overcharging shortens the battery service life.
- Charge the battery cartridge with room temperature at 5°C - 45 °C. Let a hot battery cartridge cool down before charging it.
- 4. Charge the battery cartridge if you do not use it for a long period (more than six months).

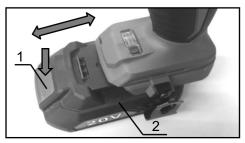
# FUNCTIONAL DESCRIPTION

ACAUTION: Always be sure that the tool is switched off and the battery cartridge is removed before adjusting or checking function on the tool.

## Installing or removing battery cartridge

A CAUTION: Always switch off the tool before installing or removing of the battery cartridge.

A CAUTION: Hold the tool and the battery cartridge firmly when installing or removing battery cartridge. Failure to hold the tool and the battery cartridge firmly may cause them to slip off your hands and result in damage to the tool and battery cartridge and a personal injury.



#### ▶ 1. Button 2. Battery cartridge

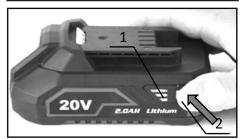
To remove the battery cartridge, slide it from the tool while sliding the button on the front of the cartridge.

To install the battery cartridge, align the tongue on the battery cartridge with the groove in the housing and slip it into place. Insert it all the way until it locks in place with a little click.

▲ CAUTION: Always install the battery cartridge fully. If not, it may accidentally fall out of the tool, causing injury to you or someone around you.

▲ CAUTION: Do not install the battery cartridge forcibly. If the cartridge does not slide in easily, it is not being inserted correctly.

## Indicating the remaining battery capacity



#### ▶ 1. Indicator lamps 2. Check button

P re s s the check button on the battery cartridge to indicate the remaining battery capacity. The indicator lamps light off immediately when release the check button.

Indicato	Remaining	
Lighted	Off	capacity
"	GREEN GRANGE RED	75% to 100%
J	25% to 50%	
RED		10% to 25%

**NOTE:** Depending on the conditions of use and the ambient temperature, the indication may differ slightly from the actual capacity.

### Tool / battery protection system

The tool is equipped with a tool/battery protection system. This system automatically cuts off power to the motor to extend tool and battery life. The tool will automatically stop during operation if the tool or battery is placed under one of the following conditions:

#### Overload protection

When the battery is operated in a manner that causes it to draw an abnormally high current, the tool automatically stops without any indication. In this situation, turn the tool off and stop the application that caused the tool to become overloaded. Then turn the tool on to restart.

### **Overheat protection**

When the tool/battery is overheated, the tool stops automatically. In this situation, let the battery cool before turning the tool on again.

### Overdischarge protection

When the battery capacity is not enough, the tool stops automatically. In this case, remove the battery from the tool and charge the battery.

#### Switch action



▶ 1. Switch trigger

**EXAUTION:** Before installing the battery cartridge into the tool, always check to see that the switch trigger actuates properly and returns to the "OFF" position when released.

To start the tool, simply pull the switch trigger. Tool speed is increased by increasing pressure on the switch trigger. Release the switch trigger to stop.

## Lighting up the front lamp



▶ 1. Work Lamp

A CAUTION: Do not look in the light or see the source of light directly.

Pull the switch trigger to light up the lamp. The lamp keeps on lighting while the switch trigger is being pulled. The lamp goes out approximately 10 seconds after releasing the switch trigger.

**NOTE:** Use a dry cloth to wipe the dirt off the lens of the lamp. Be careful not to scratch the lens of lamp, or it may lower the illumination.

## Reversing switch action





1. Reversing switch lever

**ACAUTION:** Always check the direction of rotation before operation.

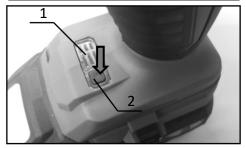
ACAUTION: Use the reversing switch only after the tool comes to a complete stop. Changing the direction of rotation before the tool stops may damage the tool.

ACAUTION: When not operating the tool, always set the reversing switch lever to the neutral position.

This tool has a reversing switch to change the direction of rotation. Depress the reversing switch lever from the A side for clockwise rotation or from the B side for counterclockwise rotation.

When the reversing switch lever is in the neutral position, the switch trigger cannot be pulled.

### Speed change



- ▶ 1. Speed adjust indicator lamp 2. Speed adjust button
- 1. Through changing the speed you can get the impact force in three steps: hard, medium, and soft mode. This allows a tightening suitable to the work.
- Three speed adjust is provided by this tool only when the tool rotating in clockwise direction. The tool rotating in anticlockwise direction only with max impact force and the speed can not be adjusted.
- 3. To change the speed, pull the switch trigger, then depress the speed adjusting button each time to select the speed that you desired.
- 4. Every time the speed adjust button is pressed, the indicator lamp will light on and changes in steps to indicator and the speed can be changed while the tool is rotating clockwise.
- Below table for detail information.

Impact force grade	Speed	Purpose	Example of application
Hard	0 –2,500/min	Tightening when force and speed are desired.	Tightening underwork materials, tightening long screws, tightening bolts
Medium	0 – 1,800/min	Tightening when a good f finishing is needed.	Tightening nishing boards, plaster boards.
Soft	0 - 800/min	Tightening with less force to avoid screw thread breakage.	Tightening sash screws, tightening small screws such as M6

**NOTE:** The indicator lamp go out approximately 10 seconds after releasing the switch trigger to save the battery power.

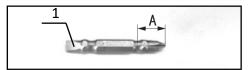
NOTE: While pulling the switch trigger, the impact force

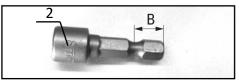
grade cannot be changed.

## **ASSEMBLY**

A CAUTION: Always be sure that the tool is switched off and the battery cartridge is removed before carrying out any work on the tool.

#### motaning of removing arriver bits socket bit





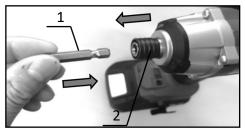
Use only driver bit/socket bit that has inserting portion shown in the figure. Do not use any other driver bit/socket bit

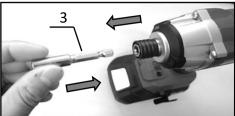
#### For tool with shallow driver bit hole

A=12mm B=9mm Use only these type of driver bit. Follow the procedure 1.

#### Procedure 1

#### For tool without one-touch type sleeve





#### ▶ 1. Driver bit 2. Sleeve 3. Socket bit

To install the driver bit, pull the sleeve in the direction of the arrow and insert the driver bit into the sleeve as far as it will go. Then release the sleeve to secure the driver bit.

To remove the driver bit, pull the sleeve in the direction of the arrow and pull the driver bit out.

**NOTE:** If the driver bit is not inserted deep enough into the sleeve, the sleeve will not return to its original position and the driver bit will not be secured. In this case, try re-inserting the bit according to the instructions above.

**NOTE:** When it is difficult to insert the driver bit, pull the sleeve and insert it into the sleeve as far as it will go.

**NOTE:** After inserting the driver bit, make sure that it is firmly secured. If it comes out, do not use it.

## Installing hook

ACAUTION: When installing the hook, always secure it with the screw firmly. If not, the hook may come off from the tool and result in the personal injury.



#### ▶ 1. Groove 2. Hook 3. Screw

The hook is convenient for temporarily hanging the tool. This can be installed on left side of the tool. To install the hook, insert it into a groove in the tool housing on left side and then secure it with a screw. To remove, loosen the screw and then take it out.

## **OPERATION**

all the way until it locks in place. If not, it may accidentally fall out of the tool, causing injury to you or someone around you.

#### Screw arrying operation



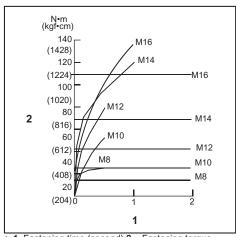
For screw driving, hold the tool firmly and place the point of the driver bit in the screw head. Apply forward pressure to the tool to the extent that the bit will not slip off the screw and turn the tool on to start operation.

### **Fastening operation**

For bolts fastening, hold the tool firmly and place the socket bolt over the bolt or nut. Turn the tool on and fasten for the proper fastening time.

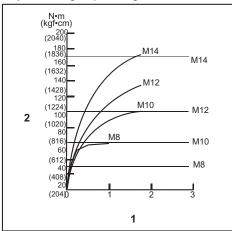
The proper fastening torque may differ depending upon the kind or size of the screw/bolt, the material of the workpiece to be fastened, etc. The relation between fastening torque and fastening time is shown in the figures.

#### Proper fastening torque for standard bolt



▶1. Fastening time (second) 2. Fastening torque

#### Proper fastening torque for high tensile bolt



▶ 1. Fastening time (second) 2. Fastening torque

NOTICE: If you use a spare battery to continue the operation, rest the tool at least 15 min.

**NOTE:** Use the proper bit for the head of the screw/ bolt that you wish to use.

**NOTE:** When fastening M8 or smaller screw, carefully adjust pressure on the switch trigger so that the screw is not damaged.

**NOTE:** Hold the tool pointed straight at the screw.

**NOTE:** If the impact force is too strong or you tighten the screw for a time longer than shown in the figures, the screw or the point of the driver bit may be overstressed, stripped, damaged, etc. Before starting your job, always perform a test operation to determine the proper fastening time for your screw.

The fastening torque is affected by a wide variety of factors including the following. After fastening, always check the torque with a torque wrench.

- When the battery cartridge is discharged almost completely, voltage will drop and the fastening torque will be reduced.
- Driver bit or socket bit
   Failure to use the correct size driver bit or socket bit will cause a reduction in the fastening torque.
- Bol
  - Even though the torque coefficient and the class of bolt are the same, the proper fastening torque will differ according to the diameter of bolt.
  - Even though the diameters of bolts are the same, the proper fastening torque will differ according to the torque coefficient, the class of bolt and the bolt length.
- The manner of holding the tool or the material of driving position to be fastened will affect the torque.
- Operating the tool at low speed will cause a reduction in the fastening torque.

**NOTICE:** Do not cover vents when operation, or it may cause over-heating and damage to the tool.



▶ 1. Vent

## **MAINTENANCE**

▲ CAUTION: Always be sure that the tool is switched off and the battery cartridge is removed before attempting to perform inspection or maintenance. NOTICE: Never use gasoline, benzine, thinner, alcohol or the like. Discoloration, deformation or cracks may result.

To maintain product SAFETY and RELIABILITY, repairs, any other maintenance or adjustment should be performed by Cedrus Authorized or Factory Service Centers, always using Cedrus replacement parts.

# OPTIONAL ACCESSORIES

A CAUTION: These accessories or attachments are recommended for use with your Cedrus tool specified in this manual. The use of any other accessories or attachments might present a risk of injury to persons. Only use accessory or attachment for its stated purpose.

If you need any assistance for more details regarding these accessories, ask your local Cedrus Service Center.

- Driver bits
- Socket bits
- Hook
- · Plastic carrying case
- · Cedrus genuine battery and charger

**NOTE:** Some items in the list may be included in the tool package as standard accessories. They may differ from country to country.