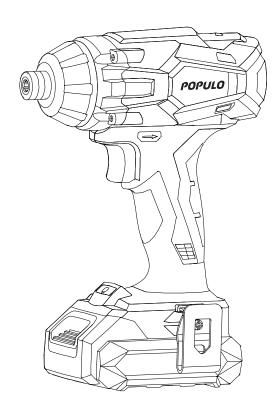


USER MANUAL

20V MAX LITHIUM-ION **IMPACT DRIVER KIT**

CIDL-2003



WHAT'S IN THE BOX



Battery Pack



Battery Charger



Belt Clip



2" Impact Driver Bit X 2



Tool Bag



ELECTRICAL SAFETY WARNINGS



WARNING! When using mains powered tools, basic safety precautions should always be followed to reduce the risk of fire, electric shock, personal injury and material damage.

Before operating the unit, carefully read the entire manual and be certain you know how to switch the unit off in case of an emergency. Be sure to save these instructions and any other documents supplied with this unit for future reference.

Note: Populo cordless tools are interchangeable for use in the United States and Canada.

Note: The power outlet used for the power tools/charger must be protected by a 30mA ground fault circuit interrupter or earth leakage circuit breaker. If the supply cord is damaged, it must be replaced by an electrician or a power tool repairer in order to avoid a hazard. **Note**: Double insulation does not take the place of normal safety precautions when operating this tool. The insulation system is added to prevent against potential injury should an electrical failure occur within the tool.

GENERAL POWER TOOL SAFETY WARNINGS



WARNING! Read all safety warnings and all 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 atmosphere, such as in the presence of flammable liquids, gases or dust. Power tools create sparks which may ignite the dust or fumes.
- Keep children and bystanders at a safe distance while operating a power tool. Getting distracted while using the tool may lead to injury for the operator or bystanders if not exercising proper safety.

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 the risk of electric shock.
- Avoid bodily 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.
- Do not 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 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 ground fault circuit interrupter (GFCI) protected supply with a rated leakage current of 30 mA or less. Use of a GFCI reduces the risk of electric shock.

Personal safety

- Always be sure to pay close attention to what you are doing when operating a power tool. Do not use a power tool when 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 eye protection. Under the appropriate condition, protective equipment such as a dust mask, non-skid safety shoes, hard hat, or hearing protection can reduce personal injuries.
- Prevent unintentional starting. Make sure the switch is in the off-position before picking up or carrying the tool or connecting the unit to a power source/battery pack. Carrying power tools with your finger on the switch or energizing power tools that have the switch on may lead to 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 over reach. 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 jewelry. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewelry or long hair, can get caught in moving parts resulting in serious injury.
- If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.

GENERAL POWER TOOL SAFETY WARNINGS (CONT.)

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 a better and safer job when used for its designed purpose.
- Do not use the power tool if the on/off switch is malfunctioning. 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. This helps reduce the risk of starting the power tool accidentally.
- Store idle power tools out of the reach of children. Do not allow persons unfamiliar with the power tool to operate it without first reading these instructions. Power tools are dangerous in the hands of untrained users.
- Properly 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
- Use the power tool, accessories, and tool bits, etc. by following 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 create a hazardous situation.

Service

- Have your power tool serviced by a qualified repair person using only identical replacement parts. This will ensure that the power tool is properly and safely maintained.
- If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons to prevent any potential hazard.

IMPACT DRIVER SAFETY WARNINGS

This appliance should only be used by able-bodied individuals. Younger persons should only use the tool when supervised by a responsible person who can ensure the tool is being used safely. Young children should not be allowed to use the tool - it is not a toy!



WARNING! Read all safety warnings and instructions listed below. Failure to follow the warnings and instructions may result in serious injury.

- Wear ear protectors when drilling. Exposure to noise can cause hearing loss.
- Use auxiliary handle(s), if supplied with the tool. Loss of control can cause personal injury.
- Hold power tool by insulated gripping surfaces, when performing an operation where the cutting accessory may contact hidden wiring or its own cord. Cutting accessory contacting a "live" wire may make exposed metal parts of the power tool "live" and could give the operator an electric shock. Before drilling into walls, ceilings etc, ensure that there are no concealed power cables or pipes in the cavity.



WARNING! Some dust created by power sanding, sawing, grinding, drilling and other construction activities contain chemicals known to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- Lead from lead-based paints.
- Crystalline silica from bricks and cement and other masonry products.
- Arsenic and chromium from chemically treated timber.

Your risk from exposure to these chemicals varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area and work with approved safety equipment, such as dust masks that are specially designed to filter out microscopic particles.

BATTERY PACK AND CHARGER SAFETY WARNINGS



WARNING! This manual contains important safety and operating instrucitons for your battery pack and charger.

Before using the charger, read all instructions and cautionary markings on the charger, battery pack and the product using the battery pack.

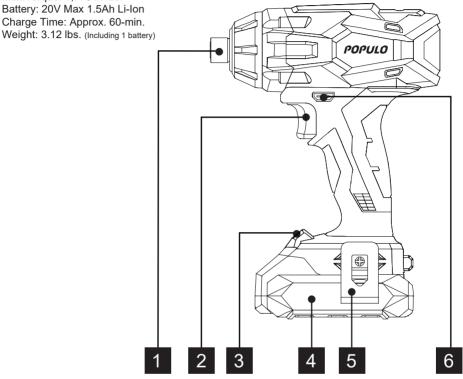
- This charger is not intended for any uses other than charging rechargeable batteries. Any other use may result in risk of fire, electric shock or electrocution.
- Since battery tools do not have to be plugged into an electric outlet, they are always in an operational condition. Be aware of possible hazards when not using the battery tool or when changing accessories. Following this rule will reduce the risk of electric shock, fire and serious personal injury.
- Do not place battery tools or batteries near fire or heat. This will reduce the risk of explosion and possibly injury.
- Do not crush, drop or damage battery pack. Do not use a battery pack or charger that has been dropped or has received a sharp blow.
- A damaged battery is subject to explosion. Properly dispose of a dropped or damaged battery immediately.
- To avoid damage to the electric plug and cord when disconnecting the charger, be sure to pull by the plug and not the cord. Make sure the cord is placed where it will not be stepped on, tripped over, or otherwise subjected to damage or stress.
- To reduce risk of electric shock, unplug the charger from the outlet before attempting any cleaning. Removing the battery pack will not reduce this risk.
- A battery can explode if set near a source of ignition, such as a pilot light. To reduce the risk of serious personal injury, never use any cordless product near an open flame. If a battery explodes, it can propel debris and hazardous chemicals. If exposed to debris or chemicals, use water immediately to flush away particles/residue.
- Do not charge battery tool in a damp or wet location. Do not use, store or charge battery packs or products in locations where the temperature is less than 50°F or more than 100°F.
- Under extreme usage or temperature conditions, battery leakage may occur. If liquid comes in contact with your skin, wash immediately with soap and water. If liquid gets into your eyes, flush them with clean water for at least 10 minutes, then seek immediate medical attention. Following this rule will reduce the risk of serious personal injury.
- Never attempt to open the battery pack or charger for any reason. If the plastic housing of the battery pack or charger breaks or cracks, immediately discontinue use and do not recharge.
- The battery pack is not fully charged out of the carton. First read the safety instructions and then follow the charging notes and procedures.
- Save these instructions. Refer to them frequently and use them to educate others who may use this tool. If you loan this tool to someone, be sure they are familiar with these instructions too.

KNOW YOUR PRODUCT

SPECIFICATIONS

Voltage: 20VDC Max

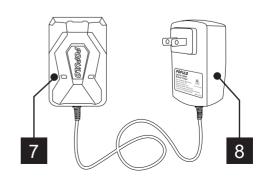
Chuck Size: 1/4" Quick Connect No Load Speed: 0-2,900/min Impact Rate: 0-3,000ipm Max.Torque: 1,770 in-lbs. Battery: 20V Max 1.5Ah Li-Ion Charge Time: Approx. 60-min.



- 1. Drive Bit Retaining Ring
- 2. Variable Speed Trigger
- 3. LED Work Light
- 4. Battery Pack
- 5. Belt Clip
- 6. Forward/Reverse Lever

Battery Charger

- 7. Charging Base
- 8. AC/DC Charging Adaptor



UNPACK AND SET-UP

BATTERY PACK AND CHARGING

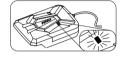


CAUTION: The charger for this product should be protected by a leakage current device (rated at 30mA or less).

The purchased battery will be shipped in a low charge condition, and requires charging prior to use. Allow several cycles of charging and discharging (through use of the tool) for the battery to reach its optimum performance/runtime.

Charging Your Lithium-ion Battery

- 1. Connect the AC/DC charging adaptor into a mains power outlet.
- 2. The charger LED will illuminate green showing power is being supplied to the charger.



- 3. With the battery pack sitting on at flat surface, align the raised ribs on the battery with the recess in the charging base and slide onto the battery ensuring a firm connection.
- 4. The charger LED will illuminate red signifying that the battery is charging.



5. When removing the charging base from the battery, first press the battery release button, then slide the charging base from its position.

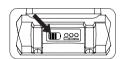


Charger LED Indicator (on the charging base)
LED Indicator	Situation
GREEN	Stand by (no battery pack is inserted)
RED (illuminated)	Battery is charging (low charge)
GREEN (illuminated)	Battery is fully charged
GREEN (illuminated)	Battery or charger fault (If charging a partially drained battery, the charger LED indicator could not turn from green to red.)

NOTE: The battery needs to be removed from the tool to check the state of charge.

Battery Gauge Indicator

The purchased battery is equipped with a battery gauge indicator to show the charged state of the battery. Press the indicator button and look to see which LED illuminate



$\circ \circ \bullet$

Red (illuminated), battery requires immediate charging



Green (illuminated), low-state of charge, requires charging soon.



Green (illuminated), mid state of charge.



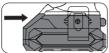
Green (illuminated), fully charged.

UNPACK AND SET-UP (CONT.)

INSTALLING/REMOVING BATTERY PACK

Installing the Battery Pack

Slide the battery pack into the impact driver base until it clicks into place.

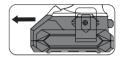


Removing the Battery Pack

1. Hold down the battery pack and release button.



2. Slide the battery pack out.



NOTICE: Before installing/removing battery pack, please be sure that the switch trigger is locked.

ASSEMBLY



WARNING! Ensure the tool is switched off and the battery is removed before performing any of the following tasks.

Inserting & Removing Accessories

1. Pull the drive retaining ring forward.



2. Insert the hex shank of the appropriate (1/4") driving nut.



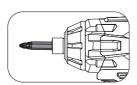
3. Release the drive bit retaining ring then pull on the driving nut to ensure it is firmly in place.



4. To remove, pull the drive retaining ring forward & remove the driving nut.



The way of inserting/removing of driving bits is the same as that of driving nuts above.



CAUTION: Do not handle accessories without gloves as they are sharp and can become hot after use, potentially causing personal injury.

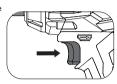
OPERATION

CONTROLS

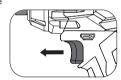
Variable Speed Trigger

The variable speed switch trigger delivers high speed with increased trigger pressure and lower speed with decreased trigger pressure.

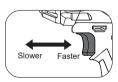
1. To start driving, squeeze the variable speed trigger.



2. To stop driving, release the trigger.



Control the speed by adjusting the amount of pressure applied to the trigger.



Direction of Forward/Reverse Lever

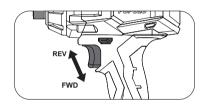
(Forward/Reverse/Center Lock)

Position the direction of forward/reverse lever to the left of the switch trigger (press the forward arrow in) for forward operation.

Position the direction of forward/reverse lever to the right of the switch trigger (press the reverse allow in) to reverse the direction.

Set the forward/reverse lever in the middle then the switch is locked (center locked).

For safety reasons, keep the switch trigger in the lock position when not in use.



LED Work Light

When the switch trigger is pressed, the LED work light shows ON.

When the switch trigger is released, the LED work light will automatically shut off in a few seconds.

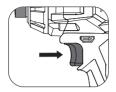


NOTE: Do not stare at light or light source.
Use a clean cloth when wiping the lamp holder to avoid scratching which can reduce luminance.

OPERATION (CONT.)

DRIVING PROCEDURE

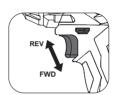
1. Depress and release the variable speed trigger to ensure it is not locked.



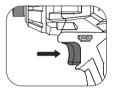
4. Hold the driver firmly against the fastener to stop it slipping.



2. Check whether the forward/reverse lever is on the desired setting.



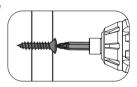
5. Lightly squeeze the variable speed trigger to start the driver.



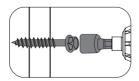
3. Ensure the material to be drived in a vice or clamp to prevent it from moving whilst driving.



6. Slowly increase pressure on trigger with appropriate torque until screw or bolt is tightened.



To drive hex head screws, using the proper sized hex driving nut and drive in the same way as picture above.



NOTE: Do not force the driver or apply side pressure to elongate the hole. Let the impact driver do all the work. Remember to always firmly grip the impact driver while driving.

MAINTENANCE

- When not in use, the impact driver should be kept in a dry, frost free location. Keep out of reach of children.
- Keep the impact driver air vents clean at all times and prevent anything from entering them.
- If the housing of the impact driver requires cleaning, do not use solvents. Use of a cloth only is recommended.
- Blow out the air vents with compressed air periodically .

Note: Populo will not be held responsible for any damage or injury caused by mishandling the impact driver or any repair made by an unauthorized person.

Battery Protection System

The tool is equipped with the battery protection system, which helps to ensure a long service life.

The output power automatically cuts off if the tool and/or battery gets overload or when the remaining battery capacity becomes low. If the tool gets overload, release the trigger switch and remove the cause of the overload. Depress the switch trigger again to restart. If the remaining battery capacity becomes low, recharge the battery pack.

Note:

The battery protection system does not in any way damage the tool.

The indicated capacity may be lower than the actual level during use or immediately after using the tool.

TROUBLESHOOTING

LED lights do not illuminate on charger

Check the charging adaptor is securely plugged into the wall outlet. Check the battery is firmly connected to the charging base.

The battery has a short runtime

Ensure the battery is properly charged. It will take 4-5 charging cycles before the battery reaches optimum charge and runtime.

Variable speed trigger is locked

Ensure that the forward/reverse lever is in the correct position, pressed left for forwards direction, press right for backwards direction. If it is in between the two settings, the variable speed trigger will be locked.

The impact driver is stripping the screw head

Ensure you are starting a low torque by lightly squeezing the switch trigger and holding the impact driver securely onto the screw or bolt head. Decrease the force by using a slower tigger speed.

Impact driver has cut out during use

The battery capacity could be completely depleted. Place the battery pack on the charger for recharge.

The impact driver may have been overloaded and the over current protection system stopped the driver. Reduce hand pressure to continue operation.

Sparking visible through the housing air vents

A small amount of sparking may be visible through the housing vents. This is normal and does not indicate a problem.

WARRANTY

YOUR PRODUCT IS GUARANTEED FOR A MAXIMUM PERIOD OF 24 MONTHS FROM THE ORIGINAL DATE OF PURCHASE AND IS INTENDED FOR DIY (DO IT YOURSELF) USE ONLY. Warranty excludes consumable parts (For example, bearings and O-rings, etc.).

30-DAY MONEY BACK GUARANTY

Within the first 30 days of purchase, you are allowed to return your product for a full refund.

30 DAYS TO 90 DAYS (3 MONTHS)

A defective unit will be replaced with a new one in accordance with the terms of this warranty, due to manufacturing fault.

90 DAYS TO 24 MONTHS

Up to 24 months after purchase, we will provide speedy and effective online service.



WARNING!

The following actions will result in the warranty becoming void.

- If the tool has been operated on a supply voltage other than that specified on the tool
- If the tool shows signs of damage or defects caused by or resulting from abuse, accidents or alterations
- Failure to perform maintenance as set out within the user manual
- If the product is disassembled or tampered with in any way
- Professional, industrial or high frequency use

ANY QUESTIONS, PLEASE CONTACT OUR CUSTOMER SERVICE CENTER:

support@populotools.com

TO ENSURE THE QUICKEST RESPONSE POSSIBLE, PLEASE HAVE THE MODEL NUMBER AND DATE OF PURCHASE AVAILABLE SO OUR CUSTOMER SERVICE REPRESENTATIVE CAN ANSWER ANY QUESTIONS YOU MAY HAVE RELATING TO THE WARRANTY POLICY OR PROCEDURE.

www.populotools.com

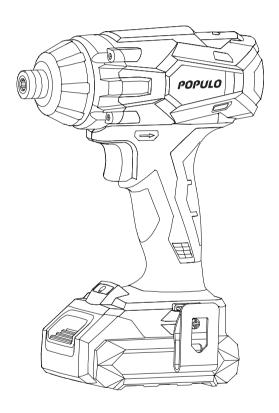
HANGZHOU AVANT GLOBE ECOMMERCE CO., LTD 3F, Bldg 9, Xixi Xintiandi Commercial Center, Wenyi West Road, Hangzhou, Zhejiang, P. R. China. 310012



MANUAL DEL USUARIO

KIT ATORNILLADOR DE IMPACTO **IONES DE LITIO 20V MAX**

CIDL-2003



LO QUE HAY EN LA CAJA



Paquete de . Batería



Cargador de Batería



Clip para el Cinturón



Puntas de 2" X2



Bolsa de la Herramienta

