

## THANKS FOR CHOOSING THIS PRODUCT

**Durofix** provides you with products at an affordable price, and we would like you to be fully satisfied with this product and our technical support. If any help or advice is needed, please kindly contact us.

## INTENDED USE

This tool is intended for trained adult use only.

This oil pulse tool is designed to remove and install threaded fasteners.

## RECOGNIZE SAFETY SYMBOLS, WORDS AND LABELS

The safety instructions provided in this manual are not intended to cover all possible conditions and practices that may occur when operating, maintaining and cleaning power tools.

Always use common sense and pay particular attention to all the **DANGER**, **WARNING**, **CAUTION** and **NOTE** statements of this manual.



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

**⚠ DANGER**

**DANGER** indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

**⚠ WARNING**

**WARNING** indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

**⚠ CAUTION**

**CAUTION** indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

**NOTE**

**NOTE** provides additional information that is useful for proper use and maintenance of this tool. If a NOTE is indicated make sure it is fully understood.

## WARNING LABEL IDENTIFICATION



Read Manuals Before Operating Product.



Wear Eye Protection.



Wear Hearing Protection.



Wear Dust Mask.



Power tools can vibrate in use.



Keep body stance balanced and firm. Do not overreach when operating this tool.



Recycling



Do not drop the battery and charger into trashcan.

## IMPORTANT SAFETY RULES

### **⚠ DANGER**

**When using power tools, always prevent exposure and breathing of harmful dust and particles.**

**WARNING:** Some dust created by power sanding, sawing, grinding, drilling and other construction activities contains chemicals known to the State of California 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, and arsenic and chromium from chemically-treated lumber.

Your risk from these exposures 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.

**WARNING:** Handling the power cord on corded products may expose you to lead, a chemical known to the State of California to cause cancer and birth defects or other reproductive harm. ***Wash hands after handling.***

## GENERAL SAFETY RULES

### **WARNING**

**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.*

## WORK AREA SAFETY

### **WARNING**

- a. **Keep work area clean and well lit.** Cluttered and 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.

## ELECTRICAL SAFETY

### **WARNING**

- 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.

### WARNING

- 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 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 energising 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, clothing and gloves 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 these devices 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.

## TOOL USE AND CARE

### WARNING

- a. **Do not force the power 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.
- b. **Do not use the power tool if switch does not turn it on or off.** A 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 tool accidentally.
- d. **Store idle tools out of reach of children and other untrained persons.** 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. **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 may lead to loss of control.

- i. **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 sparks, burns, or a fire.
- j. **Maintain tools with care. Keep cutting tools sharp and clean.** Properly maintained tools with sharp cutting edge are less likely to bind and are easier to control.
- k. **Check for misalignment or binding of moving parts, breakage of parts, and any other condition that may affect the tool's operation. If damaged, have the tool serviced before using.** Many accidents are caused by poorly maintained tools.
- l. **Use only accessories that are recommended by the manufacturer for your model.** Accessories that may be suitable for one tool may create a risk of injury when used on another tool.

### BATTERY TOOL USE AND CARE

#### WARNING

- a. **Ensure the switch is in the off position before inserting battery pack.** Inserting the battery pack into power tools that have the switch on invites accidents.
- b. **Recharge only with the charger specified by the manufacturer.** A charger that is suitable for one type of battery pack may create a risk of fire when used with another battery pack.
- c. **Use power tools only with specifically designated battery packs.** Use of any other battery packs may create a risk of injury and fire.
- d. **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.
- e. **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.
- f. **Do not use a battery pack or tool that is damaged or modified.** Damaged or modified batteries may exhibit unpredictable behaviour resulting in fire, explosion or risk of injury.
- g. **Do not expose a battery pack or tool to fire or excessive temperature.** Exposure to fire or temperature above 130 °C may cause explosion.
- h. **Follow all charging instructions and do not charge the battery pack or tool outside the temperature range specified in the instructions.** Charging improperly or at temperatures outside the specified range may damage the battery and increase the risk of fire.
- i. **Do not immerse the charging dock in water or other liquids.**

### 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.

**Tool service must be performed only by qualified repair personnel.** Service or maintenance performed by unqualified personnel may result in a risk of injury.

**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 shock or injury.

## SPECIFIC SAFETY RULES AND SYMBOLS

**⚠ CAUTION**

**Hold the power tool by insulated gripping surfaces, when performing an operation where the fastener may contact hidden wiring or its own cord.** *Fasteners contacting a "live" wire may make exposed metal parts of the power tool "live" and could give the operator an electric shock.*

**Be aware that this tool is always in an operating condition, because it does not have to be plugged into an electrical outlet.** Always set the trigger switch to the locked OFF position when installing or removing the battery pack or bits.

**Do not use bits or sockets larger than those recommended.** Large bits or drills may overload the wrench/driver and damage the motor and gears.

**Do not use if chuck jaws or other parts are cracked or worn.**

**Never change direction of rotation until motor has completely stopped.**

**Never hold work in your hand, lap, or against other parts of your body when driving.**

**Do not use drill as a router or try to elongate or enlarge holes by twisting the drill bit.** Drill bits may break and cause injury.

**Keep hands away from rotating parts.**


**Keep drill bit clear of yourself and all objects while installing and removing bit.**

**Some wood contains preservatives which can be toxic.** Take extra care to prevent inhalation and skin contact when working with these materials. Request, and follow, all safety information available from your material supplier.

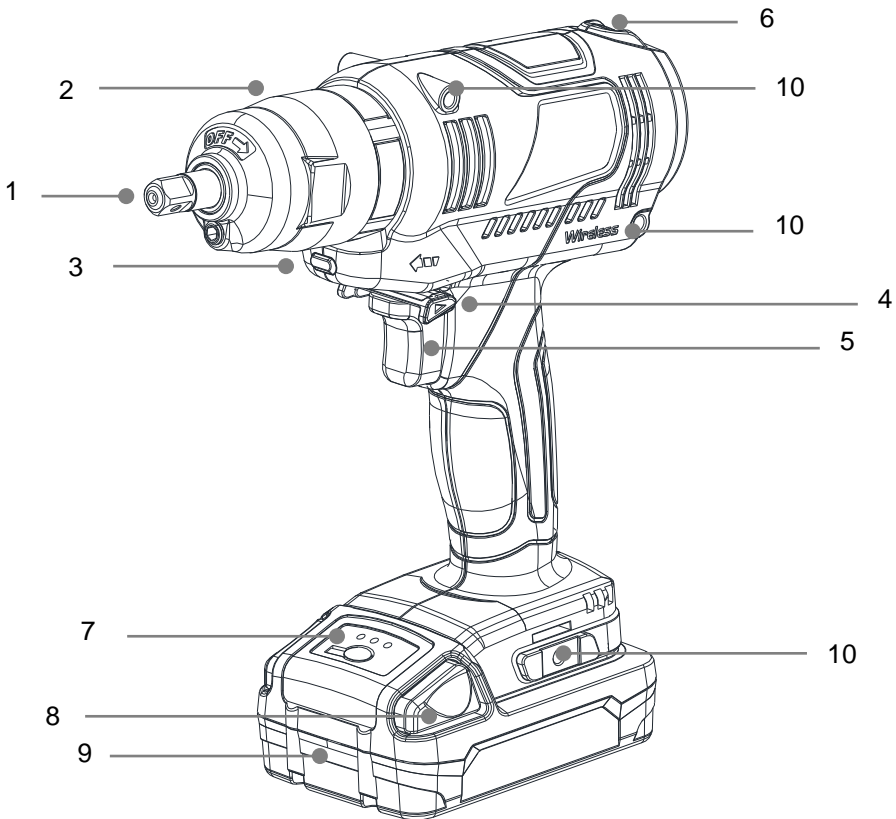
**Do not stare at operation lamp.**

## SYMBOLS

The label on your tool may include the following symbols. The symbols and their definitions are as follows:

SYMBOL	NAME	EXPLANATION
V	Volts	Voltage (potential)
n <sub>0</sub>	No Load Speed	No-load Rotational Speed
kg	Kilograms	Weight
 d.c.	Direct Current	Type of Current IEC60417.5031(2002.10)
.../min	Revolutions per Minute	Revolutions, Surface Speed, Strokes, etc. per Minute
rpm	Revolutions per Minute	Revolutions, Surface Speed, Strokes, etc. per Minute

## FUNCTIONAL DESCRIPTION



- |                       |   |
|-----------------------|---|
| 1. 3/8" Anvil         | 2. Aluminium Gearbox Housing              |
| 3. Built-in LED light | 4. Forward / Reverse Lever                |
| 5. Trigger            | 6. LED Lamp Shut off (green)/ Error (red) |
| 7. Power indicator    | 8. Battery Pack Release Button            |
| 9. Battery Pack       | 10. Hook                                  |

## SPECIFICATIONS

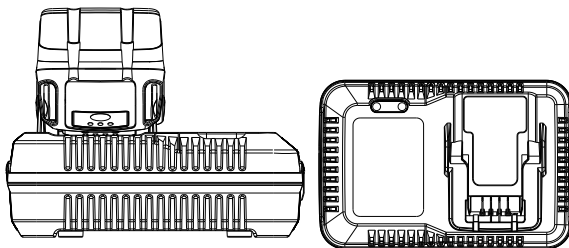
Model Number	Unit	RZ2013-D-WR30	RZ2013-3-WR40	RZ2013-3-WR50
<b>Voltage</b>	V d.c.	20	20	20
<b>Anvil / Drive</b>	in.	HEX	3/8"	3/8"
<b>Max. Tightening Torque</b>	ft-lbs	7.4~22.1	11.1~29.5	22.1~36.9
	Nm	10~30	15~40	30~50
<b>No Load Speed</b>	rpm	1,500-6,000		
<b>Capacity (Nominal bolt size)</b>	mm	M8-M12		
<b>Tool Weight</b> (with battery 2.0Ah)	lbs	3.62	3.57	3.83
	kg	1.64	1.62	1.74

Note: Low speed operation requires adjustment via the controller. Please refer to the manual for the DR002/DONGLE for operating settings.

### ⚠ WARNING

- that the vibration emission during actual use of the power tool can differ from the declared total value depending on the ways in which the tool is used; and
- of the need 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).

<b>Charger Model Number</b>	DC20UN26-C60
<b>Input</b>	100-240 V a.c., 50-60 Hz
<b>Output</b>	21.0 Vdc
<b>Output Amps</b>	6.0 A
<b>Input Power</b>	120 W
<b>Charger Weight</b>	1.23 lbs (0.56 kg)
<b>Battery Pack Model Number</b>	B2036LA / B2036LB
<b>Type</b>	Li-ion
<b>Voltage</b>	20V
<b>Battery Capacity</b>	2.0Ah / 2.5Ah





## CAUTION

- Always set switch (5) to off position when installing and removing socket.
- When the lithium battery pack cannot generate enough power for tasks that were previously easy to perform, it means the lithium battery pack should be charged. In this case, do not continue to use it and follow the charging instructions.
- When charging, it is normal to feel warmth when touching the charging dock and lithium battery pack.
- In some cases, when the charging dock is connected to the power source, the exposed charging terminals in the charging dock may short circuit due to external conductive contaminants. For example, fine steel wires, aluminium foil, or any accumulated metal particles should be removed from the charging dock terminals.
- When the charging dock is not in use for charging, be sure to unplug the charging dock from the power outlet.
- Charging the lithium battery pack at a temperature between 18°C and 24°C (65°F and 75°F) will provide the longest life and best performance. Never charge the lithium battery pack below 0°C (32°F) or above 40°C (105°F) to avoid serious damage to the lithium battery pack

## CHARGER LIGHT INDICATOR

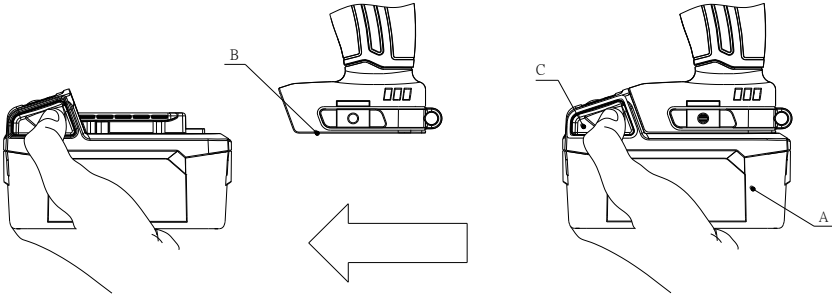
LED INDICATOR		SITUATION
GREEN	RED	
Alternately Fast Blinking		Power Turn On
OFF	ON	Standing by
Slow Blinking	OFF	Charging
ON	OFF	Charging is complete
OFF	Slow Blinking	Damaged or faulty battery pack, Replace with a new battery pack
Alternately Slow Blinking		Low/High Temperature Protection, Wait for the battery pack to return to normal temperature
Simultaneously Slow Blinking		Insufficient battery capacity, it is recommended to replace the battery Pack with a new one

## ASSEMBLY

### INSTALLING OR REMOVING BATTERY PACK

**TO REMOVE BATTERY PACK:** Depress the battery pack release button and pull the battery pack out of tool.

**TO INSTALL BATTERY PACK:** Push the battery pack onto tool until it locks in place.



### INSTALLING SOCKETS

Always follow the procedure below to install a socket.

1. Insert a socket into the anvil (
2. Make sure the bit is fixed in the anvil while clicking on the ball of the anvil.

### REMOVING SOCKETS

Always follow the procedure below to remove a socket.

### BATTERY POWER INDICATOR

Trigger the tool and Battery Indicator to show the battery pack's remaining capacity

1. One light ON: 30% remaining capacity.
2. Two lights ON: 60% remaining capacity.
3. All lights ON: 100% remaining capacity.



**NOTE**

1. Always check the direction of the rotation before use.
2. Adjust the torque appropriately according to the size of the bolt to be tightened. When tightening smaller bolt, reduce the torque or use a tool with a lower torque setting to prevent the bolt from breaking or stripping.
3. Avoid overusing the tool. Doing so may damage the motor or the tool itself. The tool will allow tightening an average of 8 cycles per minute when average on a B Joint. Softer joints will require less aggressive duty cycles.
4. When fastening bolt, align the tool straight with the bolt.
5. If the tightening torque is excessive, the screw may be overstressed, cracked, or damaged. Before starting your work, be sure to measure the torque to determine the appropriate tightening torque for your bolt.
6. This tool uses hydraulics. If the tool is left in a temperature below 5°C for an extended period, or if the tool is idle for a period of time in an excessively low temperature environment, you may feel that the tightening is slow and weak, and the tool may not be able to provide adequate tightening force when started. This can be remedied by repeatedly tightening and loosening screws to preheat the hydraulic oil to the normal operating range. Use a torque wrench or torque plate to confirm the torque.
7. After 100,000 fastenings, the tool will activate a maintenance signal. The green light will flash for 3 seconds before normal use can resume. At this time, it is recommended to have the tool disassembled, adjusted, and lubricated by a qualified service center.

**NOTE**

Brushless tools are precision instruments. Disassembly, assembly, and adjustment require Specialized testing equipment and trained technicians. Incorrect disassembly, reassembly, or adjustment Can result in power loss and accidents. The manufacturer or supplier assumes no liability for any damage Found to be caused by use or repair by the user or unauthorized service due to such factors.

The tightening torque is affected by a number of factors, including:

- a. The way the tool is held or the material being fastened can affect the torque.
- b. Not using the correct size of screwdriver or socket to fasten the bolt.
- c. Worn sockets or screwdrivers will reduce power and should not be used.
- d. Bolts:
  - Even if bolts have the same torque coefficient and grade, the allowable tightening torque varies depending on their diameter.
  - Even if the diameter of the bolts is the same, the allowable tightening torque varies depending on their torque coefficient, grade, and length.

## ELECTRONIC CONTROL SWITCH (EC SWITCH)

The EC switch provides safety feature to the user for socket and bolt entry and tentative fastening.

Half press the trigger; the driver will run in slow speed for socket and bolt entry firstly.

Full press the trigger, the driver will change to fast speed for regular fastening.

To turn the tool on, squeeze the trigger. To turn the tool off, release the trigger (Fig. 1).

Your tool is equipped with a brake. The motor will stop as soon as the trigger is fully released. The EC switch enables you use the best speed for a particular application. The farther you squeeze the trigger, the tool will operate. For maximum tool life, use slow speed only for starting fasteners.

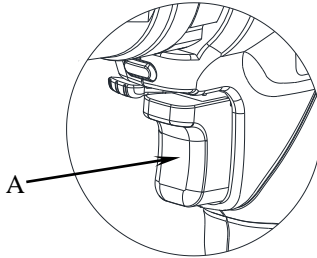


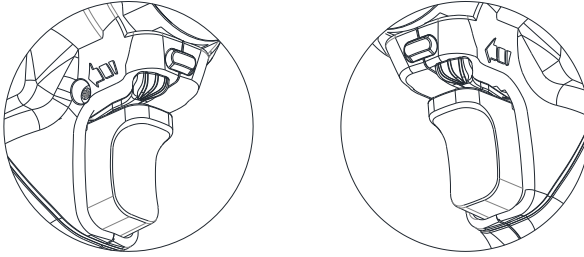
FIG. 1

### NOTE

Continuous use in two speed range is not recommended. It may damage the switch and should be avoided.

**FORWARD / REVERSE LEVER**

A forward/reverse lever determines the direction of the tool. To select forward rotation, **RELEASE THE EC SWITCH** (Fig.2), and push the forward/reverse lever (Fig.2), toward left side of the tool. To select reverse, push the forward/reverse lever, toward right side of the tool. When change the position of the control button, making sure the trigger is released.

**FIG. 2****BUILT-IN LED LIGHT**

A built-in LED light can illuminate the work area and improve vision when driving in areas with insufficient light.

**ELECTRIC BRAKE**

The EC switch is equipped with a circuit design electric of brake function. The tool will consistently operate to quickly stop rotating after the EC switch release.

**NOTE**

When change the position of the forward/reverse lever, making sure the EC switch is released.

**NOTE**

The first time the tool is run after changing the direction of rotation, you may hear a click on start up. This is normal and does not indicate a problem.

## TORQUE ADJUSTMENT IN FORWARD ROTATION (CW) ONLY

1. Release the trigger, then push the forward/reverse lever to centre.
2. Use an Allen key (4.0mm) to release the nut counter-clockwise. (FIG.3)

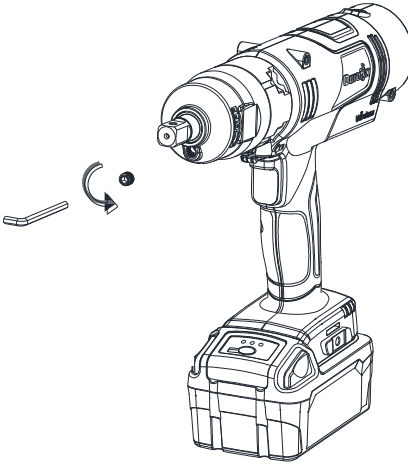


FIG. 3

3. Adjust the relief valve with Allen key (2.0mm) as the following FIG.4 to increase the oil pressure or decrease the oil pressure. Turn in clockwise smoothly for rise the torque; turn in counter clockwise for decrease the torque. Do not over-rotate the relief valve

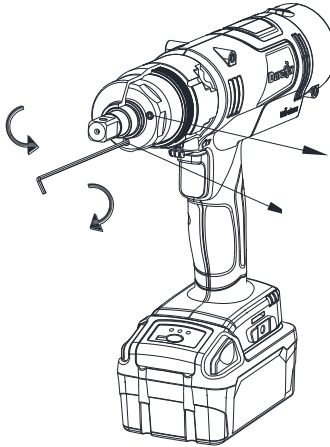


FIG. 4

## English

4. Use a torque wrench to measure the actual torque output of the tool. Based on the measured torque value, repeat Step 1 to select the loosening or tightening torque.

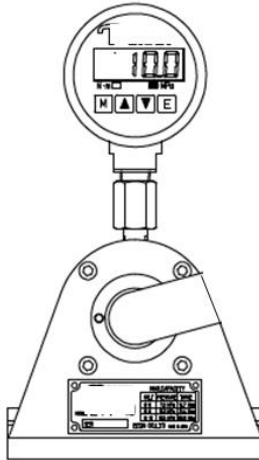


FIG. 5

5. Finally use an Allen key (4.0mm) to tighten the nut clockwise. (FIG.6)

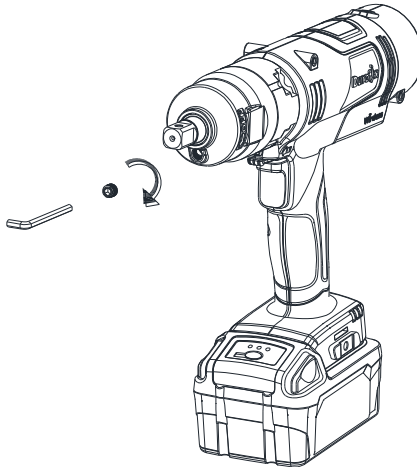


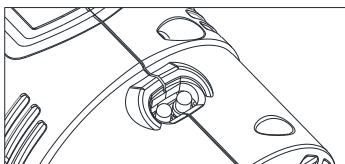
FIG. 6

**NOTE**

1. Please use the provided hex wrench to disassemble and adjust. The oil filling screw and relief valve are different to prevent accidental loosening. Do not loosen the oil filling screw. This screw is for maintenance purposes only. Loosening it may cause oil leakage and damage the tool.
2. Before adjusting the torque, always remove the battery from the tool. Accidental activation of the trigger switch may cause tool damage or personal injury.
3. Torque adjustment is only available for clockwise rotation.
4. Use only the included 2.0mm hex wrench to adjust the torque. Using other tools may damage the tool or prevent adjustment.
5. To adjust the torque valve to maximum torque, slowly turn the valve until it stops and then stop turning. Do not attempt to force the valve beyond its maximum position. Turning the torque valve beyond its maximum position may severely damage the tool.

**LED INDICATOR**

The operation indicator is a red/green light (Figure 7). When the set tightening torque is reached, the green light will stay on. Conversely, if the torque is not reached, the red light will be on. Starting without a load is equivalent to not reaching the torque and will cause the red light to turn on. If the operation is reversed, both the red and green lights will flash. For detailed troubleshooting information for abnormal light conditions, please refer to below.

**FIG. 7**



**TROUBLESHOOTING**

Check the following before you ask for repair

Situation	LED Indicator	Troubleshooting
Tools Gets Hot	RED Steady Green Blinking	Rest the Tool to Room Temperature
Battery Pack Temperature is Too High	RED Blinking	Rest the Battery Pack to Room Temperature or Change Battery Pack.
Battery Pack Temperature is Too Low	RED Blinking Green Steady	Rest the Battery Pack to Room Temperature or Change Battery Pack,
Battery Pack Voltage is Too Low	RED Steady	Change Battery Pack and Charge the Used Pack
Over Current Protection	RED & Green Blinking Alternatively	Abnormal Shutoff Release Trigger, then Re-tightening
Trigger released before Torque Reach	RED Blink 0.5s, Buzzer 0.5s	Release Trigger, then Re-tightening
Forward Rotate 5s	RED Blink, Motor keep Running	Inspect the fasteners for any abnormalities./ Allow the
Forward Rotate 10s	RED Blink 2.0s, Buzzer 2.0s Motor Stops.	hydraulic head to cool down to room temperature
Push lever to reverse position	Both the red and green lights will blink together for duration of 5 seconds.	Push lever to forward position, blinking stop
Setting Torque Reached and Motor Shut-off Right Away	Upon completion, the green light will flash for 0.5 seconds, accompanied by a 0.5-second audible signal, motor stopped.	Normal Shutoff
Hydraulic Oil Changing Alert (Tightening over 100,000 cycles)	Green Blinking for 3 Sec (If no use lasting 3 min, alert signal will blink again once pressing the trigger.)	Contact Service Centre to Replace Oil

### Wireless Data Communication

The Device stores up to 1000 joints fastening data internally. To retrieve joint rundown data, connect Device to DR001 / DR002 / DONGLE to see real time data or download stored data.

### Connect to RD002 / Dongle/ DR001

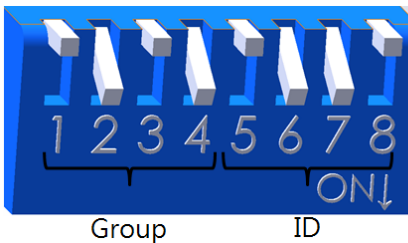
Long press the switch for 3 seconds to switch functions. The left light indicates DR002 and Dungle connection, and the right light indicates DR001 connection. (FIG. 8)



FIG. 8

### Connect to DR001

#### DR001 setting and installation



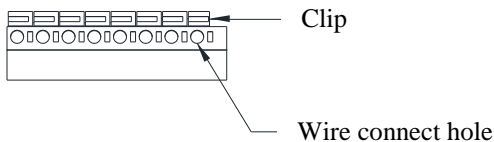
0  
⇕  
1

Set the Group and ID of the control box to the same as the tool. The dip switch of the control box is an eight-digit binary sequence, the On direction is 1, and the other is 0. The first four codes are Group, the last four codes are ID, as shown here are 0101 and 0110, after looking up the table, it can be known as Group 5, ID 6

Comparison table between binary system and decimal system

0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
0000	0001	0010	0011	0100	0101	0110	0111	1000	1001	1010	1011	1100	1101	1110	1111

## Connecting port



### Port definition

- 1: 24V
- 2: Fasten OK
- 3: Tool protection
- 4: Fasten NG
- 8: 0V

1	2	3	4	5	6	7	8	24 Vdc
24V	OK	ERR	NOK		-		0V	⊖ — ⊕

## I/O receiver specification

Input voltage	+ 24VDC ± 20%
Maximum input current	40mA (input voltage 24VDC)
Communication system	Bluetooth 4.2
Frequency band	2.4GHz
Transmission range	10m (Note 1)
External connector	24VDC power jack * 1 8 pos wire terminal block
Operating temperature range	0 ~ 40 °C
Weight	255g

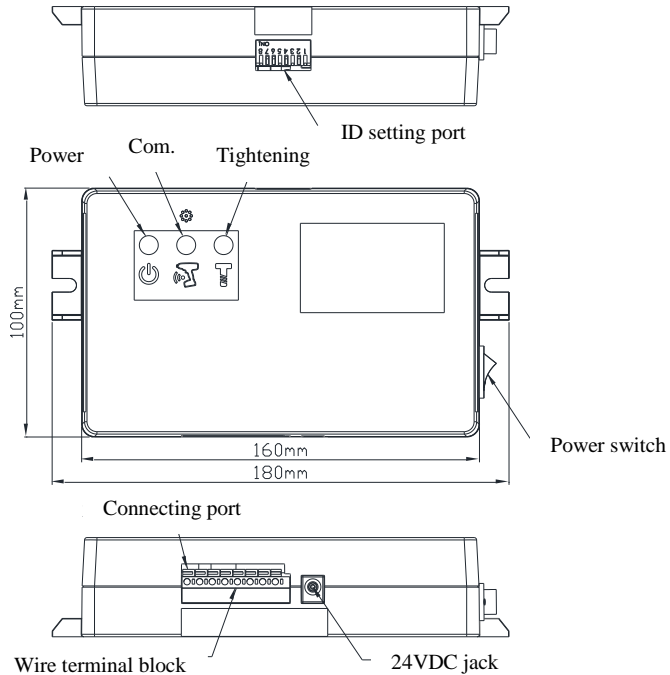
Note : The transmission distance varies depending on the operating environment. Metal walls or metal-containing walls will reduce the transmission distance.

## LED light signal

Power : Blue

Communication : Green (OK), Red (Tool Protection)

Tightening : Green(OK), Red(Not OK)



### NOTE

Device and IO Receiver is 1-to-1 pairing ONLY. Check Group/Device ID setting on Device & IO Receiver carefully to ensure data integrity & reliability.

### NOTE

- Please note that each tool can only be used with one connecting box.
- Please note that each connecting box can only be connected to one indicator light.

**WARNING**

Remove the battery pack from this tool before cleaning solutions.

**DANGER**

A battery pulse tool is a precision tool. Disassembly, assembly, adjustment require exclusive JIGS plus testers, and trained techniques. Incorrect disassembly, reassembly or adjustment can cause not only insufficient power but also accidents. Ask for these services from an authorized service centre. The maker or supplier will not be held liable for any damages caused by factors found to be the cause of faulty use or repair by users or unauthorized service provider.

**MAINTENANCE**

Pulse oil replacement is necessary. The maintenance interval varies depending on usage conditions. For example, for hard or soft connections and use in different environmental ranges, it is recommended to perform "preventive maintenance" after 100,000 tightening for optimal tool performance. However, if the tool performance deteriorates, maintenance must be performed promptly to ensure the torque accuracy and service life of the impact tool.

First, confirm the battery pack's life status.

It is recommended to perform a Level 1 maintenance on the tool after 200,000-250,000 hard tightening or 100,000-120,000 soft tightening

It is recommended to perform a Level 2 maintenance on the tool after 450,000 hard tightening or 220,000 soft tightening

[Level 1 maintenance] replacement of all hydraulic assembly seals and pulse oil.

[Level 2 maintenance] replacement of the rotary shaft blade, drill, hydraulic cylinder internal spring assembly, oil piston cover, and Level 1 maintenance.

**CLEANING**

With the motor running, blow dirt and dust out of all air vents with dry air at least once a week. Wear safety glasses when performing this. Exterior plastic parts may be cleaned a damp cloth and mild detergent. Although these parts are highly solvent resistant, NEVER use solvent.

**STORE**

Store the tool in a place that remains between 0°C-40°C, is moisture free, dust free and free from direct rays of the sun.

### ACCESSORIES

**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.

Recommended accessories for use with your tool are available at extra cost from your local service centre.

**IMPORTANT:** To assure product SAFETY and RELIABILITY, repairs, maintenance and adjustments should be performed by certified service centres or other qualified service organizations, always using identical replacement parts.

### PROTECTING THE ENVIRONMENT

Before disposing of damaged, check with your state Environmental Protection Agency to find out about special restrictions on the disposal of tool, charger and battery or return them to a certified service center for recycling.

