

DEWALT 20V MAX* Lithium-Ion Battery

Instruction Manual

Product Series: 20V MAX* XR® Series (Including PowerStack™ pouch cell technology and Powerpack™ tabless cell technology)

Application Scope: All DEWALT 20V MAX* cordless power tools (Not compatible with 12V series tools or chargers)

I. Product Overview

The DEWALT 20V MAX* Lithium-Ion Battery is a high-performance power solution designed specifically for professional working conditions. Adopting advanced lithium-ion cell technology, it offers **50% higher power output, longer cycle life**, and a **more compact design** compared to traditional batteries. Equipped with a built-in intelligent electronic protection system, the battery effectively prevents overload, overheating, and deep discharge, ensuring operational safety and battery durability. This series of batteries is compatible with all DEWALT 20V MAX* platform tools and dedicated chargers, enabling cross-model versatility to meet the diverse operational needs of professional users.

Important Note: The "20V MAX*" marked on the battery refers to the maximum initial voltage under no-load conditions, with a nominal working voltage of 18V, which complies with industry standard specifications.

II. Core Technical Specifications

| Item | Details |
|-------------------------|---|
| Battery Type | Lithium-Ion (Li-ion), No memory effect |
| Rated Voltage | 20V MAX* (Maximum initial voltage), Nominal voltage 18V |
| Capacity Options | 1.5Ah/2.0Ah/3.0Ah/3.5Ah/5.0Ah/8.0Ah (Subject to specific product model) |
| Compatible Technologies | |

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| | XR PowerStack™ pouch cell technology / XR Powerpack™ tabless cell technology |
| Charging Temperature Range | 50°F - 86°F (10°C - 30°C) |
| Storage Temperature Range | -4°F - 122°F (-20°C - 50°C) |
| Protection Functions | Overload protection, Overheat protection , Deep discharge protection, Short circuit protection |
| Status Indication | 3-LED battery level indicator (Instantly displays remaining power) |
| Product Model Examples | DCBP034 (3.5Ah), DCB205 (5Ah), DCB2108 (8 Ah), DCBP320 (3.5Ah) |

III. Usage Guide

1. Battery Installation

- Align the battery with the guide rails of the tool's battery interface, push the battery firmly until a "click" sound is heard to confirm full locking
- To remove, press the release button on the side of the battery and pull it outwards simultaneously ; do not pull forcefully
- Ensure the tool switch is in the OFF position before installation/removal to prevent accidental startup

2. Power Level Check

- Press the power check button on the top of the battery; the LED indicators will show the remaining power:
 - 3 lights on: 80%-100% power remaining
 - 2 lights on: 40%-79% power remaining
 - 1 light on: 10%-39% power remaining
 - 1 light flashing: Less than 10% power remaining, charge immediately

3. Operational Precautions

- Only use with DEWALT 20V MAX* series dedicated tools; do not use with other brands or devices with mismatched voltages
- Avoid severe impact, extrusion, or puncture of the battery during operation to prevent cell damage
- Immediately stop use and disconnect the battery if cracks, deformation, leakage, or abnormal heating of the battery case is detected
- Always remove the battery before replacing tool accessories or adjusting equipment to avoid accidental triggering

IV. Charging Instructions

1. Charging Preparation

- Only use DEWALT officially specified chargers (e.g., DCB107/DCB112/DCB118, etc.); do not use 12V chargers or third-party chargers
- Ensure the interfaces of the charger and battery are clean, dry, and free of debris before charging
- Fully charge the battery before first use to activate cell performance and extend service life

2. Charging Steps

1. Connect the charger to a power outlet that meets the voltage requirements
2. Insert the battery into the charger slot, ensuring a secure fit; the charging indicator will start flashing (indicating charging initiation)
3. Once charging is complete, the indicator will turn solid; the battery can be removed for use at this time. It can also remain connected, as the charger will automatically switch to maintenance mode to avoid overcharging damage
4. Some chargers require pressing the release button to remove the battery; refer to the charger's instruction manual for details

3. Indicator Meanings

| Indicator Status | Description |
|------------------|-------------|
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|-----------------------------|---|
| Red flashing continuously | Charging in progress |
| Red solid | Charging complete |
| Red flashing + Yellow solid | Battery temperature too high/low, entering delayed charging mode; charging will restart automatically when temperature returns to normal (for specific chargers only) |
| No indicator light | Battery malfunction or incompatible charger ; send to an authorized service center for inspection |

4. Charging Time Reference (At room temperature)

| Battery Capacity | Standard Charger (2A) | Fast Charger (8A) |
|------------------|-----------------------|-------------------|
| 2.0Ah | 60 minutes | 30 minutes |
| 5.0Ah | 120 minutes | 60 minutes |
| 8.0Ah | 180 minutes | 45 minutes |

V. Safety Specifications

1. Prohibited Behaviors

- Do not short-circuit the positive and negative terminals of the battery (avoid contact with metal objects such as coins and keys), as this may cause fire or burns
- Do not throw the battery into fire or expose it to temperatures above 265°F (130°C), as this may cause explosion
- Do not disassemble, modify, or puncture the battery case; the liquid inside the cells may cause irritation or burns if it comes into contact with the skin
- Do not mix DEWALT batteries of different capacities or models, or use them with batteries from other brands

2. Handling Special Situations

- Battery leakage: Immediately rinse the affected area with clean water. If it accidentally gets into the eyes, rinse continuously and seek medical attention promptly
- Battery overheating/swelling: Immediately stop use, keep away from flammable materials, and contact a DEWALT authorized service center
- Abnormal odor or smoke during charging: Immediately disconnect the power supply, unplug the charger and battery, and hand them over to professional personnel for handling

VI. Maintenance and Care

1. When not in use for a long period, charge the battery to 40%-60% power before storage; avoid storing it fully charged or completely discharged
2. Store in a cool, dry environment (recommended temperature: 10°C-25°C), away from direct sunlight and heat sources
3. Regularly clean the metal contacts of the battery interface with a dry soft cloth to avoid dust or oil affecting contact
4. Avoid prolonged deep discharge of the battery; charge it promptly after the tool shuts down automatically to extend cycle life
5. Keep the charger's air vents unobstructed; do not block them. Do not use the charger if the fan malfunctions

VII. Troubleshooting

| Symptom | Possible Causes | Solutions |
|--------------------------|---|--|
| Battery fails to charge | Incompatible charger/ Contaminated interface/ Battery malfunction | Replace with a DEWALT 20 V dedicated charger; Clean the interface; Send for inspection |
| Abnormally slow charging | Battery temperature too high/low/Insufficient charger power | Charge after the battery returns to room temperature ; Replace with a fast charger |
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| Significantly reduced battery life | Cell aging/Deep discharge/Improper storage | Maintain charging according to specifications; Replace with a new battery if no improvement |
| Tool shuts down automatically | Electronic protection system activated (overload/overheat) | Stop operation to cool the equipment; Retry with reduced load |
| No indicator light display | Poor contact of battery contacts/Completely discharged | Reinstall the battery; Charge with a compatible charger for 10 minutes and check |

VIII. Warranty Information

- This product comes with a DEWALT official 3-year limited warranty, 1-year free repair service, and 90-day satisfaction guarantee
- The warranty does not cover damage caused by human error, improper use, unauthorized repair, or modification
- To claim the warranty, provide the product serial number, proof of purchase, and a description of the fault. Contact a DEWALT authorized service center for assistance

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Technical Support: For further inquiries, visit the DEWALT official website or contact your local authorized service center.

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