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› **MtiolHig /**

› Cordless Rotary Hammer Drill for Dewalt 20V MAX Battery, Brushless SDS-Plus Hammer Drill with Safety Clutch for Concrete/Masonry, 1500 RPM, 4 Modes with 360°Auxiliary Handle, Including 4 Drill Bits

MtiolHig Mtiolhig-1

MtiolHig Cordless Rotary Hammer Drill

INSTRUCTION MANUAL

1. Product Overview

The MtiolHig Cordless Rotary Hammer Drill is a versatile and powerful tool designed for various drilling and chiseling tasks in materials such as concrete, masonry, wood, and metal. It features a brushless motor, four adjustable work modes, and an SDS-Plus chuck system for efficient and precise operation. This tool is compatible with Dewalt 20V MAX batteries (battery not included).

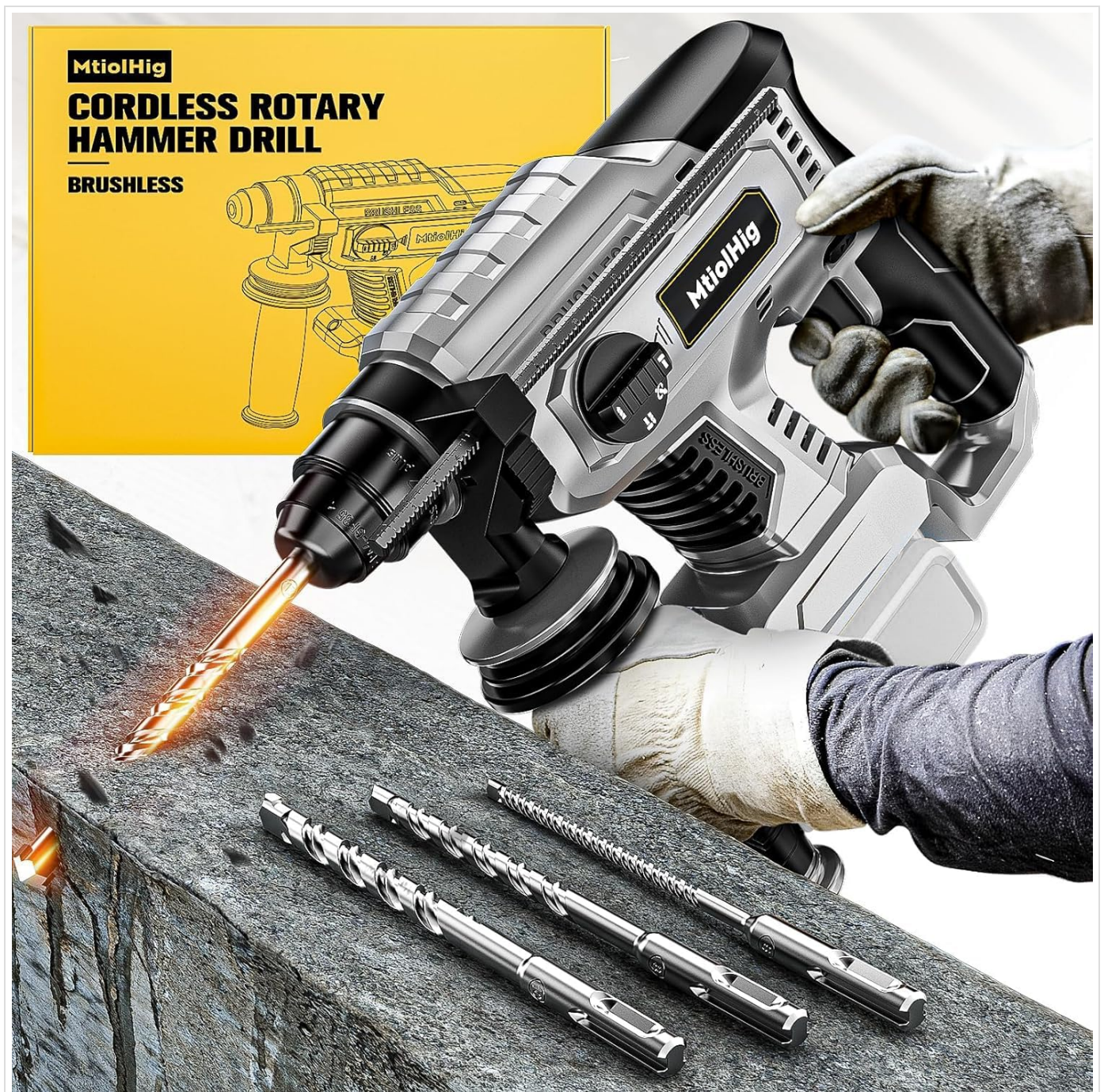


Figure 1.1: MtiolHig Cordless Rotary Hammer Drill and accessories.

2. Safety Information

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.

- Always wear appropriate personal protective equipment, including eye protection, hearing protection, and gloves, when operating the drill.
- Ensure the work area is well-lit and clear of obstructions.
- Keep hands and body parts away from moving parts.
- The drill features a built-in overload clutch protector. If the drill bit gets stuck, the clutch system will activate to safeguard your wrist and prolong motor life.
- An automatic overheat shutdown feature is integrated to prevent damage to the motor during prolonged use. Allow the tool to cool down if this feature activates.
- Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.

3. Product Components



Figure 3.1: Key components of the Rotary Hammer Drill.

- **SDS-Plus Drill Chuck:** For quick and tool-free bit changes.
- **Chuck Sleeve:** Used to secure and release drill bits.
- **Depth Gauge Release Button:** Allows adjustment of the depth gauge.
- **Depth Gauge:** For precise control over drilling depth.
- **Forward/Reverse Button:** Controls the direction of rotation.
- **On/Off Switch:** Activates and deactivates the tool.
- **LED Work Light:** Illuminates the work area.
- **360° Rotating Handle:** Provides enhanced control and reduces fatigue.
- **Battery Docking Port:** For inserting compatible Dewalt 20V MAX batteries.
- **Mode Selector Switch:** Allows selection between four work modes.

4. Setup

4.1 Battery Installation

This tool is designed to be powered by Dewalt 20V MAX batteries (4Ah or higher recommended for optimal performance). The battery is not included with the drill.

1. Ensure the drill is turned off.
2. Align the battery with the battery docking port on the base of the drill.
3. Slide the battery into the port until it clicks securely into place.
4. To remove, press the battery release button (if present on your battery) and slide the battery out.

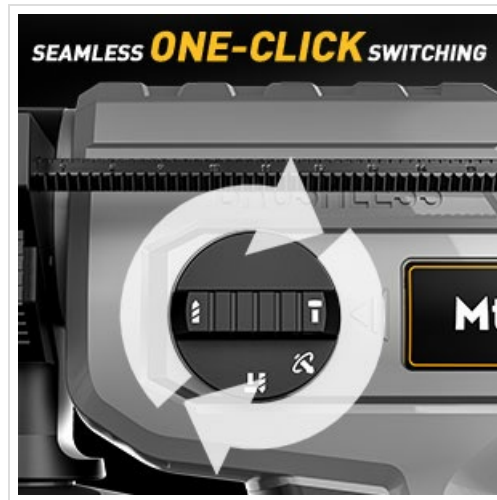


Figure 4.1: Battery insertion into the drill.

4.2 Auxiliary Handle Attachment

The 360° auxiliary handle provides additional stability and control.

1. Loosen the auxiliary handle by rotating it counter-clockwise.
2. Slide the handle onto the front of the drill body.
3. Adjust the handle to your desired position for comfort and control.
4. Tighten the handle by rotating it clockwise until it is secure.

4.3 Drill Bit Installation (SDS-Plus Chuck)

The SDS-Plus chuck system allows for quick and secure bit changes without additional tools.

1. Pull back the chuck sleeve towards the drill body.
2. Insert the SDS-Plus drill bit into the chuck, pushing it firmly until it clicks into place.
3. Release the chuck sleeve.
4. Pull on the drill bit to ensure it is securely locked. It should have a slight amount of play, which is normal for SDS-Plus systems.
5. To remove the bit, pull back the chuck sleeve and pull the bit out.



Figure 4.2: SDS-Plus Keyless Chuck operation.

5. Operating Instructions

5.1 Mode Selection

The drill features a mode selector switch to choose between four distinct operating modes:



Figure 5.1: Four operating modes of the rotary hammer drill.

- **Drilling Mode:** For drilling in wood, metal, and plastic. No hammer action.
- **Hammer Drilling Mode:** Combines rotation with hammer action for efficient drilling in brick, concrete, and masonry.
- **Chiselling Mode:** Provides hammer action without rotation for chiseling in brick, concrete, and masonry.
- **Chisel Angle Adjust Mode:** Allows adjustment of the chisel head angle. This mode is not for active drilling or chiseling; it is solely for positioning the chisel.

To select a mode, rotate the mode selector switch to the desired icon.

5.2 Powering On/Off and Speed Control

- To turn the drill on, press the On/Off switch (trigger).
- The drill features variable speed control; the more you press the trigger, the faster the drill operates, up to 1500 RPM.
- To turn the drill off, release the trigger.

5.3 Forward/Reverse Operation

The forward/reverse button is located near the trigger. Push it to the left for forward rotation (drilling/chiseling) and to the right for reverse rotation (e.g., for backing out a stuck bit).

5.4 Using the Depth Gauge

The depth gauge allows you to drill holes to a consistent, predetermined depth.

1. Insert the depth gauge into its designated hole on the drill.
2. Press the depth gauge release button to adjust its position.
3. Set the desired drilling depth by extending the gauge so that the distance from the tip of the drill bit to the end of the gauge is the required depth.
4. Release the button to lock the gauge in place.

6. Maintenance

6.1 Cleaning

- Regularly clean the ventilation openings of the drill to prevent overheating.
- Use a soft, damp cloth to wipe down the exterior of the tool. Do not use harsh chemicals or abrasive cleaners.
- Keep the chuck clean and free of debris to ensure proper bit seating.

6.2 Storage

- Store the drill in a dry, secure location, out of reach of children.
- Remove the battery from the tool before storing for extended periods.

6.3 Brushless Motor

This drill is equipped with a brushless motor, which generally requires less maintenance compared to brushed motors as there are no carbon brushes to replace. This contributes to enhanced durability and smooth operation.



Figure 6.1: Internal view of the brushless motor.

7. Troubleshooting

Problem	Possible Cause	Solution
Drill does not start.	Battery not inserted correctly or discharged.	Ensure battery is fully seated. Charge or replace battery.
Drill bit gets stuck in material.	Overload clutch activated.	Release trigger, remove drill from material, and re-engage. Reduce pressure or use a larger drill bit if necessary.
Tool stops during operation.	Overheat shutdown activated.	Allow the tool to cool down for several minutes before resuming operation. Reduce continuous heavy load.
Reduced performance/power.	Low battery charge; incorrect mode selected for material.	Charge battery. Verify correct mode (e.g., Hammer Drilling for concrete).
Drill bit falls out of chuck.	Bit not properly inserted into SDS-Plus chuck.	Ensure chuck sleeve is pulled back fully, insert bit firmly until it clicks, then release sleeve and pull to confirm lock.

8. Specifications

PRODUCT DIMENSION

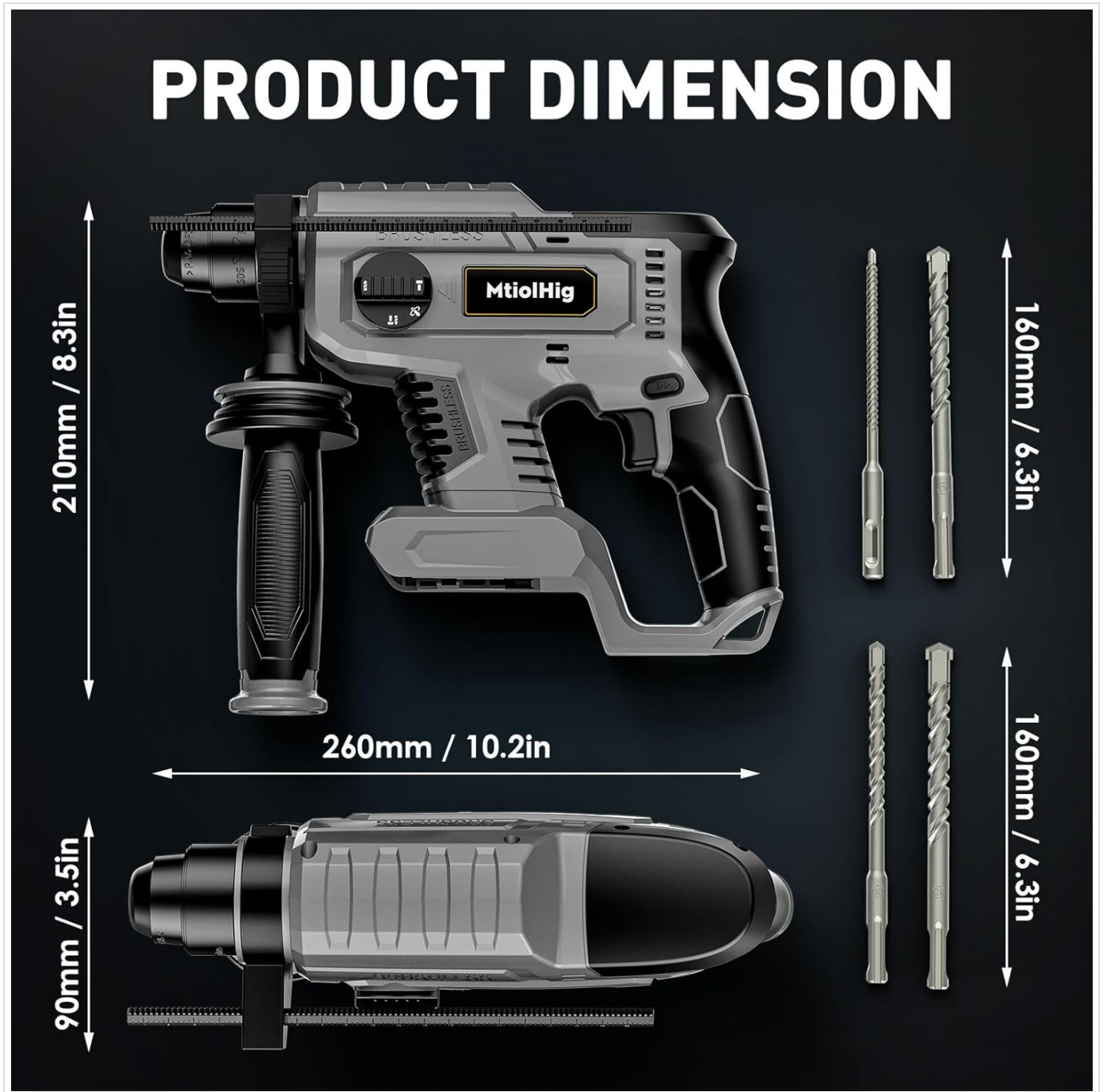


Figure 8.1: Product dimensions.

Specification	Value
Model Number	Mtiolhig-1
Brand	MtiolHig
Power Source	Battery Powered (Dewalt 20V MAX compatible)
Maximum Rotational Speed	1500 RPM
Impact Energy	2.5 Joules
Impact Frequency	4700 BPM
Voltage	20 Volts (DC)
Amperage	4 Amps
Maximum Chuck Size	0.98 Inches (SDS-Plus)
Drilling Capacity (Concrete)	7/8 inch
Drilling Capacity (Wood)	1.1 inch
Product Dimensions (L x W x H)	10.2" x 8.3" x 3.5"
Item Weight	6 Pounds
Material	Reinforced Nylon
Included Components	Hammer Drill (tool only), 360° Adjustable Auxiliary Handle, Depth Gauge, 4 Drill Bits, User Manual

9. Warranty and Support

9.1 Warranty Information

This MtiolHig Cordless Rotary Hammer Drill comes with a **6-month warranty** from the date of purchase. This warranty covers defects in materials and workmanship under normal use. Please retain your proof of purchase for warranty claims.

9.2 Customer Support

For any questions, technical assistance, or warranty claims, please refer to the contact information provided with your purchase documentation or visit the official MtiolHig brand store online. When contacting support, please have your product model number (Mtiolhig-1) and purchase details ready.