

## Ferm CDM1159

# Ferm CDM1159 20V Cordless Drill User Manual

## 1. INTRODUCTION AND SAFETY INFORMATION

This manual provides essential instructions for the safe operation, maintenance, and troubleshooting of your Ferm CDM1159 20V Cordless Drill. Please read this manual thoroughly before using the tool to ensure proper function and to prevent injury.

### General Safety Warnings

- Always wear appropriate personal protective equipment, including eye protection, when operating the drill.
- Keep the 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.
- Keep children and bystanders away while operating a power tool. Distractions can cause you to lose control.
- Ensure the battery is fully charged before use and always use the charger provided by Ferm.
- Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.

## 2. PRODUCT OVERVIEW

The Ferm CDM1159 is a versatile 20V cordless drill designed for various drilling and screwdriving tasks. It features a powerful motor, variable speed control, and multiple torque settings for optimal performance.



Figure 2.1: FERM CDM1159 20V Cordless Drill in its retail packaging, showing the drill, battery, charger, and screwdriver bit.



**Figure 2.2:** Detailed view of the Ferm CDM1159 20V Cordless Drill, highlighting key components such as the single sleeve chuck (0.8-10mm), LED light, charger (2.0Ah, 1.5 hour), Li-ion battery (20V 2.0Ah), soft grip, 17+1 torque settings, 25 Nm torque, 2 speeds (N1 0-350/min, N2 0-1300/min), and screwdriver bit.

### Included Components:

- 1 x Ferm CDM1159 Cordless Drill
- 1 x 20V 2.0Ah Li-ion Battery
- 1 x Battery Charger
- 1 x Screwdriver Bit

## 3. SETUP

### 3.1 Charging the Battery

1. Connect the charger to a standard power outlet (100-240V~, 50/60Hz).
2. Insert the 20V 2.0Ah Li-ion battery into the charger. Ensure it clicks into place.
3. The charging indicator light on the charger will illuminate, typically red for charging and green for fully charged.
4. A full charge takes approximately 1.5 hours. Do not overcharge the battery.
5. Once charged, disconnect the charger from the power outlet and remove the battery.

### 3.2 Installing the Battery

1. Align the charged battery with the battery slot at the base of the drill handle.
2. Slide the battery into the slot until it locks securely into place with an audible click.

3. To remove the battery, press the release button (usually located on the side of the battery) and slide the battery out.

### 3.3 Inserting and Removing Drill Bits/Screwdriver Bits

1. Ensure the drill is switched off and the battery is removed for safety.
2. Grip the rear part of the single sleeve chuck firmly with one hand.
3. Rotate the front part of the chuck counter-clockwise to open the jaws.
4. Insert the desired drill bit or screwdriver bit into the chuck, ensuring it is centered.
5. Rotate the front part of the chuck clockwise to tighten the jaws securely around the bit. Hand-tighten only.
6. To remove the bit, reverse the process: grip the rear, rotate the front counter-clockwise, and pull the bit out.

## 4. OPERATING INSTRUCTIONS

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### 4.1 Powering On/Off and Variable Speed Control

- The drill is powered on by pressing the trigger switch.
- The speed is variable; the harder you press the trigger, the faster the drill rotates.
- Release the trigger to turn the drill off.

### 4.2 Forward/Reverse Rotation

- A forward/reverse selector switch is located above the trigger.
- Push the switch to the left for forward rotation (for drilling and tightening screws).
- Push the switch to the right for reverse rotation (for loosening screws).
- When the switch is in the center position, the trigger is locked, preventing accidental startup. Always engage the lock when not in use or when changing bits.

### 4.3 Adjusting Torque Settings

- The torque adjustment ring is located behind the chuck.
- Rotate the ring to select one of the 17+1 torque settings.
- Lower settings (1-5) are for driving small screws or working with soft materials.
- Higher settings (6-17) are for driving larger screws or working with harder materials.
- The drill symbol setting (the '+1' setting) is for drilling applications, providing maximum torque without clutch engagement.

### 4.4 Selecting Speed Gear

- A two-speed gear selector switch is located on top of the drill.
- Position '1' (N1: 0-350/min) provides lower speed and higher torque, ideal for screwdriving and drilling larger holes.
- Position '2' (N2: 0-1300/min) provides higher speed and lower torque, suitable for fast drilling of smaller holes.

### 4.5 Using the LED Light

- The integrated LED light illuminates the work area when the trigger is pressed, improving visibility in dimly lit conditions.

## 5. MAINTENANCE

### 5.1 Cleaning

- Always disconnect the battery before cleaning.
- Keep the ventilation openings of the drill clean to prevent overheating. Use a soft brush or compressed air.
- Wipe the tool housing with a soft, damp cloth. Do not use harsh chemicals or abrasive cleaners.

### 5.2 Battery Care and Storage

- Store the battery in a cool, dry place, away from direct sunlight and extreme temperatures.
- For long-term storage, charge the battery to approximately 50% capacity.
- Do not store the battery fully discharged or fully charged for extended periods.
- Periodically check the battery for any signs of damage or leakage.

### 5.3 General Maintenance

- Regularly inspect the chuck for wear and ensure it tightens bits securely.
- Check the power cord of the charger for any damage.
- Do not attempt to open or repair the drill or battery yourself. Refer to qualified service personnel.

## 6. TROUBLESHOOTING

Problem	Possible Cause	Solution
Drill does not start	Battery not charged or improperly installed. Forward/reverse switch in center (locked) position.	Charge battery and ensure it is securely installed. Move forward/reverse switch to forward or reverse position.
Loss of power during operation	Battery is low on charge.	Recharge the battery.
Bit slips in chuck	Chuck not tightened sufficiently. Bit shank is dirty or damaged.	Ensure chuck is hand-tightened securely. Clean or replace the bit.
Overheating	Blocked ventilation slots. Prolonged heavy use.	Clean ventilation slots. Allow the tool to cool down. Reduce load or take breaks during extended use.

## 7. SPECIFICATIONS

Feature	Specification
Model Number	CDM1159
Brand	Ferm

Feature	Specification
Voltage	20 Volt
Battery Type	Lithium-ion
Battery Capacity	2 Ampere-hour (2.0 Ah)
Charger Input	100-240V~, 50/60Hz
Chuck Type	Single Sleeve
Chuck Capacity	0.8 - 10 mm
Torque Settings	17 + 1 (Drill Mode)
Maximum Torque	25 Nm
No-Load Speed (Gear 1)	0 - 350 rpm
No-Load Speed (Gear 2)	0 - 1300 rpm
Special Features	Variable Speed, Reverse Rotation, Lock Button, LED Light, Soft Grip
Material	Metal, Plastic
Weight (approx.)	1.5 kg (package dimensions: 25 x 20 x 8 cm)

## 8. WARRANTY AND SUPPORT

Ferm products are manufactured to high-quality standards. In the unlikely event of a defect, please refer to the warranty terms provided with your purchase documentation. For technical support, spare parts, or service inquiries, please contact your retailer or the official Ferm customer service in your region. Keep your proof of purchase for warranty claims.

Please visit the official Ferm website for the most up-to-date support information and contact details.