



makita DTM41 Cordless Multi Tool Instruction Manual

[Home](#) » [Makita](#) » makita DTM41 Cordless Multi Tool Instruction Manual 

Contents

- 1 makita DTM41 Cordless Multi Tool Instruction Manual
- 2 SPECIFICATION
- 3 Applicable battery cartridge and charger
 - 3.1 SAVE THESE INSTRUCTIONS.
 - 3.2 Important safety instructions for battery cartridge
 - 3.3 SAVE THESE INSTRUCTIONS.
 - 3.4 Tips for maintaining maximum battery life
- 4 FUNCTIONAL DESCRIPTION
 - 4.1 Installing or removing battery cartridge
 - 4.2 Battery protection system (Lithium-ion battery with star marking)
- 5 Overheat protection
 - 5.1 Indicating the remaining battery capacity
 - 5.2 Switch action
 - 5.3 Adjusting the orbital stroke rate
- 6 Indication lamp
- 7 OPERATION
 - 7.1 Cutting, sawing and scraping
 - 7.2 Sanding
- 8 Dust extraction attachment (optional accessory)
 - 8.1 MAINTENANCE
- 9 OPTIONAL ACCESSORIES
- 10 Documents / Resources
 - 10.1 References
- 11 Related Posts





SPECIFICATION

Model	DTM41	DTM51
Oscillation per minute	6,000 – 20,000 (min ⁻¹)	
Oscillation angle, left/right	1.6 ° (3.2 ° total)	
Overall length	326 – 340 mm	
Net weight	1.9 – 2.3 kg	2.0 – 2.4 kg
Rated voltage	D.C. 14.4 V	D.C. 18 V

- Due to our continuing program of research and development, the specifications herein are subject to change without notice.
- Specifications may differ from country to country.
- The weight may differ depending on the attachment(s), including the battery cartridge. The lightest and heaviest combination, according to EPTA-Procedure 01/2014, are shown in the table.

Applicable battery cartridge and charger

Battery cartridge	D.C.14.4 V Model	BL1415N / BL1430 / BL1430B / BL1440 / BL1450 / BL1460B
	D.C.18 V Model	BL1815N / BL1820 / BL1820B / BL1830 / BL1830B / BL1840 / BL1840B / BL1850 / BL1850B / BL1860B
Charger		DC18RC / DC18RD / DC18RE / DC18SD / DC18SE / DC18SF

Some of the battery cartridges and chargers listed above may not be available depending on your region of residence.

WARNING: Only use the battery cartridges and chargers listed above. Use of any other battery cartridges and chargers may cause injury and/or fire.

Intended use

The tool is intended for sawing and cutting wood, plastic, gypsum, non-ferrous metals, and fastening elements (e.g. unhardened nails and staples). It is also intended for working soft wall tiles, as well as dry sand-ing and scraping of small surfaces. It is especially for working close to edge and flush cutting.

Noise

The typical A-weighted noise level determined according to EN62841:

Work mode: Sanding

Model DTM41

Sound pressure level (LpA) : 76 dB (A) Uncertainty (K) : 3 dB (A)

The noise level under working may exceed 80 dB (A).

Model DTM51

Sound pressure level (LpA) : 77 dB (A) Uncertainty (K) : 3 dB (A)

The noise level under working may exceed 80 dB (A).

Work mode: Cutting with plunge cut saw blade

Model DTM41

Sound pressure level (LpA) : 80 dB (A) Sound power level (LWA) : 91 dB (A) Uncertainty (K) : 3 dB (A)

Model DTM51

Sound pressure level (LpA) : 81 dB (A) Sound power level (LWA) : 92 dB (A) Uncertainty (K) : 3 dB (A)

Work mode: Cutting with segmental saw blade

Model DTM41

Sound pressure level (LpA) : 77 dB (A)

Uncertainty (K) : 3 dB (A)

The noise level under working may exceed 80 dB (A).

Model DTM51

Sound pressure level (LpA) : 76 dB (A)

Uncertainty (K) : 3 dB (A)

The noise level under working may exceed 80 dB (A).

Work mode: Scraping

Model DTM41

Sound pressure level (LpA) : 78 dB (A)

Uncertainty (K) : 3 dB (A)

The noise level under working may exceed 80 dB (A).

Model DTM51

Sound pressure level (LpA) : 80 dB (A)

Sound power level (LWA) : 91 dB (A)
Uncertainty (K) : 3 dB (A)

NOTE: The declared noise emission value(s) has been measured in accordance with a standard test method and may be used for comparing one tool with another.

NOTE: The declared noise emission value(s) may also be used in a preliminary assessment of exposure.

WARNING: Wear ear protection.

WARNING: The noise emission during actual use of the power tool can differ from the declared value(s) depending on the ways in which the tool is used especially what kind of workpiece is processed.

WARNING: Be sure 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).

Vibration

The vibration total value (tri-axial vector sum) determined according to EN62841:

Model DTM41

Work mode : sanding

Vibration emission (ah) : 3.0 m/s² Uncertainty (K) : 1.5 m/s²

Model DTM51

Work mode : sanding

Vibration emission (ah) : 3.0 m/s² Uncertainty (K) : 1.5 m/s²

Model DTM41

Work mode : cutting with plunge cut saw blade Vibration emission (ah) : 7.0 m/s² Uncertainty (K) : 1.5 m/s²

Model DTM51

Work mode : cutting with plunge cut saw blade Vibration emission (ah) : 7.0 m/s² Uncertainty (K) : 1.5 m/s²

Model DTM41

Work mode : sanding

Vibration emission (ah) : 3.0 m/s² Uncertainty (K) : 1.5 m/s²

Model DTM51

Work mode : sanding

Vibration emission (ah) : 3.0 m/s² Uncertainty (K) : 1.5 m/s²

Model DTM41

Work mode : cutting with plunge cut saw blade Vibration emission (ah) : 7.0 m/s² Uncertainty (K) : 1.5 m/s²

Model DTM51

Work mode : cutting with plunge cut saw blade Vibration emission (ah) : 7.0 m/s² Uncertainty (K) : 1.5 m/s²

Model DTM41

Work mode : cutting with segment saw blade Vibration emission (ah) : 4.5 m/s² Uncertainty (K) : 1.5 m/s²

Model DTM51

Work mode : cutting with segment saw blade Vibration emission (ah) : 4.5 m/s² Uncertainty (K) : 1.5 m/s²

NOTE: The declared vibration total value(s) has been measured in accordance with a standard test method and may be used for comparing one tool with another.

NOTE: The declared vibration total value(s) may also be used in a preliminary assessment of exposure. Work mode : scraping

Vibration emission (ah) : 5.0 m/s² Uncertainty (K) : 1.5 m/s²

Model DTM51

Work mode : scraping

Vibration emission (ah) : 5.5 m/s² Uncertainty (K) : 1.5 m/s²

Work mode : cutting with segment saw blade Vibration emission (ah) : 4.5 m/s² Uncertainty (K) : 1.5 m/s²

Model DTM51

Work mode : cutting with segment saw blade Vibration emission (ah) : 4.5 m/s² Uncertainty (K) : 1.5 m/s²

Model DTM41

NOTE: The declared vibration total value(s) has been measured in accordance with a standard test method and may be used for comparing one tool with another.

NOTE: The declared vibration total value(s) may also be used in a preliminary assessment of exposure.

WARNING: The vibration emission during actual use of the power tool can differ from the declared value(s) depending on the ways in which the tool is used especially what kind of workpiece is processed.

WARNING: Be sure 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).

1. This power tool is intended to function for sawing, cutting, grinding and sanding. 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.
2. Hold power tool by insulated gripping surfaces, when performing an operation where the cutting accessory may contact hidden wiring. Cutting accessory contacting a "live" wire may make exposed metal parts of the power tool "live" and could give the operator an electric shock.
3. Use clamps or another practical way to secure and support the workpiece to a stable platform. Holding the work by hand or against your body leaves it unstable and may lead to loss of control.
4. Always use safety glasses or goggles. Ordinary eye or sun glasses are NOT safety glasses.
5. Avoid cutting nails. Inspect workpiece for any nails and remove them before operation.
6. Hold the tool firmly.
7. Make sure the application tool is not contacting the workpiece before the switch is turned on.
8. Keep hands away from moving parts.
9. Do not leave the tool running. Operate the tool only when hand-held.
10. Always switch off and wait for the blade to come to a complete stop before removing the blade from the workpiece.
11. Do not touch the application tool or the work-piece immediately after operation; they may be extremely hot and could burn your skin.
12. Do not operate the tool at no-load unnecessarily.
13. Always use the correct dust mask/respirator for the material and application you are working with.
14. Some material contains chemicals which may be toxic. Take caution to prevent dust inhalation and skin contact. Follow material supplier safety data.
15. This tool has not been waterproofed, so do not use water on the workpiece surface.
16. Ventilate your work area adequately when you perform sanding operations.
17. Use of this tool to sand some products, paints and wood could expose user to dust containing hazardous substances. Use appropriate respiratory protection.
18. Be sure that there are no cracks or breakage on the pad before use. Cracks or breakage may cause a personal injury.
19. Do not use accessories which are not specifically designed and recommended by the tool manufacturer. Just because the accessory can be attached to your power tool, it does not assure safe operation.
20. Wear personal protective equipment. Depending on application, use face shield, safety goggles or safety glasses. As appropriate, wear hearing protectors, gloves and workshop apron capable of stopping small abrasive or workpiece fragments. The eye protection must be capable of stopping flying debris generated by various operations. The dust mask or respirator must be capable of filtering particles generated by your operation. Prolonged exposure to high intensity noise may cause hearing loss.
21. Keep bystanders a safe distance away from work area. Anyone entering the work area must wear personal protective equipment. Fragments of workpiece or of a broken accessory may fly away and cause injury beyond

immediate area of operation.

22. Never lay the power tool down until the accessory has come to a complete stop. The spinning accessory may grab the surface and pull the power tool out of your control.
23. Do not run the power tool while carrying it at your side. Accidental contact with the accessory could snag your clothing, pulling the accessory into your body.
24. Do not operate the power tool near flammable materials. Sparks could ignite these materials.
25. Do not use accessories that require liquid coolants. Using water or other liquid coolants may result in electrocution or shock.
26. Always be sure that the tool is switched off and unplugged or that the battery cartridge is removed before carrying out any work on the tool.
27. Always be sure you have a firm footing. Be sure no one is below when using the tool in high locations.

SAVE THESE INSTRUCTIONS.

WARNING: DO NOT let comfort or familiarity with product (gained from repeated use) replace strict adherence to safety rules for the subject product. MISUSE or failure to follow the safety rules stated in this instruction manual may cause serious personal injury.

Important safety instructions for battery cartridge

1. Before using battery cartridge, read all instructions and cautionary markings on (1) battery charger, (2) battery, and (3) product using battery.
2. Do not disassemble battery cartridge.
3. If operating time has become excessively shorter, stop operating immediately. It may result in a risk of overheating, possible burns and even an explosion.
4. If electrolyte gets into your eyes, rinse them out with clear water and seek medical attention right away. It may result in loss of your eyesight.
5. Do not short the battery cartridge:
 1. Do not touch the terminals with any conductive material.
 2. Avoid storing battery cartridge in a container with other metal objects such as nails, coins, etc.
 3. Do not expose battery cartridge to water or rain.

A battery short can cause a large current flow, overheating, possible burns and even a breakdown.
6. Do not store the tool and battery cartridge in locations where the temperature may reach or exceed 50 °C (122 °F).
7. Do not incinerate the battery cartridge even if it is severely damaged or is completely worn out. The battery cartridge can explode in a fire.
8. Be careful not to drop or strike battery.
9. Do not use a damaged battery.
10. The contained lithium-ion batteries are subject to the Dangerous Goods Legislation requirements. For commercial transports e.g. by third parties, forwarding agents, special requirement on packaging and labeling must be observed.

For preparation of the item being shipped, consulting an expert for hazardous material is required. Please also observe possibly more detailed national regulations.

Tape or mask off open contacts and pack up the battery in such a manner that it cannot move around in the packaging.

11. Follow your local regulations relating to disposal of battery.
12. Use the batteries only with the products specified by Makita. Installing the batteries to non-compliant products may result in a fire, excessive heat, explosion, or leak of electrolyte.

SAVE THESE INSTRUCTIONS.

CAUTION: Only use genuine Makita batteries. Use of non-genuine Makita batteries, or batteries that have been altered, may result in the battery bursting causing fires, personal injury and damage. It will also void the Makita warranty for the Makita tool and charger.

Tips for maintaining maximum battery life

1. Charge the battery cartridge before completely discharged. Always stop tool operation and charge the battery cartridge when you notice less tool power.
2. Never recharge a fully charged battery cartridge. Overcharging shortens the battery service life.
3. Charge the battery cartridge with room temperature at 10 °C – 40 °C (50 °F – 104 °F). Let a hot battery cartridge cool down before charging it.
4. Charge the battery cartridge if you do not use it for a long period (more than six months).

FUNCTIONAL DESCRIPTION

WARNING: Always be sure that the tool is switched off and battery cartridge is removed before adjusting or checking function on the tool. Failure to switch off and remove the battery cartridge may result in serious personal injury from accidental start-up.

Installing or removing battery cartridge

- Fig.1: 1. Button 2. Red indicator 3. Battery cartridge

CAUTION Always switch off the tool before installing or removing of the battery cartridge.

Hold the tool and the battery cartridge firmly when installing or removing battery cartridge. Failure to hold the tool and the battery cartridge firmly may cause them to slip off your hands and result in damage to the tool and battery cartridge and a personal injury.

To remove the battery cartridge, slide it from the tool while sliding the button on the front of the cartridge. To install the battery cartridge, align the tongue on the battery cartridge with the groove in the housing and slip it into place. Insert it all the way until it locks in place with a little click. If you can see the red indicator on the upper side of the button, it is not locked completely.

CAUTION Always install the battery cartridge fully until the red indicator cannot be seen. If not, it may accidentally fall out of the tool, causing injury to you or someone around you.

Do not install the battery cartridge forcibly. If the cartridge does not slide in easily, it is not being inserted correctly.

Battery protection system (Lithium-ion battery with star marking)

- Fig.2: 1. Star marking

Lithium-ion batteries with a star marking are equipped with a protection system. This system automatically cuts off power to the tool to extend battery life.

The tool will automatically stop during operation if the tool and/or battery are placed under one of the following

conditions:

OVERHEAD

The tool is operated in a manner that causes it to draw an abnormally high current.

In this situation, slide the slide switch on the tool toward the “O (OFF)” position and stop the application that caused the tool to become overloaded. Then slide the slide switch toward the “I (ON)” position again to restart. If the tool does not start, the battery is overheated. In this situation, let the battery cool before sliding the slide switch toward the “I (ON)” position again.

Low battery voltage:

The remaining battery capacity is too low and the tool will not operate. In this situation, remove and recharge the battery.

Overheat protection

When the tool is overloaded and the tool temperature reaches a certain level, the tool automatically stops. In this situation, let the tool cool before turning on the tool again.

Indicating the remaining battery capacity

Only for battery cartridges with the indicator

- Fig.3: 1. Indicator lamps 2. Check button

Press the check button on the battery cartridge to indicate the remaining battery capacity. The indicator lamps light up for a few seconds.

Indicator lamps					Remainin g capa city
Light ed	Off			Blink ing	
					75% to 10 0%
					50% to 75 %
					25% to 50 %
					0% t o 25 %
					Char ge th e batte ry.
					The batte ry m ay have mal fu nctio ned.

NOTE: Depending on the conditions of use and the ambient temperature, the indication may differ slightly from the actual capacity.

Switch action

- Fig.4: 1. Slide switch
- **caution** Before installing the battery cartridge into the tool, always check to see that the tool is switched off.

To start the tool, slide the slide switch toward the “I (ON)” position.
To stop the tool, slide the slide switch toward the “O (OFF)” position.

Adjusting the orbital stroke rate

- Fig.5: 1. Dial

The orbital stroke rate is adjustable. To change the orbital stroke rate, turn the dial between 1 and 6. The higher the number is, the higher the orbital stroke rate is. Preset the dial to the number suitable for your workpiece.

note

The dial cannot be turned directly from 1 to 6 or from 6 to 1. Forcing the dial may damage the tool. When changing the dial direction, always turn the dial moving it through each intermediate number.

Indication lamp

- Fig.6: 1. Indication lamp
- When the remaining battery capacity gets low, the indication lamp blinks.
- When the remaining battery capacity gets much lower, the tool stops during operation and the indication lamp lights up about 10 seconds.

At this time, remove the battery cartridge from the tool and charge it.

ASSEMBLY

caution

- Always be sure that the tool is switched off and the battery cartridge is removed before carrying out any work on the tool.

warranty

- Do not install application tool upside down. Installing application tool upside down may damage the tool and cause serious personal injury.

Install attachment tool in the correct direction according to your work. Application tool can be installed at an angle of every 30 degree.

CAUTION:

Be careful when closing the lock lever. The lock lever may close suddenly and pinch your finger. Clean up dust and perform lubrication on the moving part of the lock lever from time to time. Otherwise dust may accumulate in the moving part of the lock lever and hinder its smooth movement. Do not start the tool while the lever opens. The tool may be damaged.

1. Open the lock lever fully. And remove the holder

Fig.7: 1. Holder bolt 2. Lock lever

2. Put an application tool (optional accessory) on the tool flange so that the protrusions of the tool flange fit in the holes in the application tool.

Fig.8: 1. Holder bolt 2. Holes in the application tool

3. Protrusions of the tool flange
4. Insert the holder bolt till it stops. And then, return the lock lever to its original position.

When using sanding application tool, mount the application tool on the sanding pad so that it matches the

sanding pad direction.

The sanding pad has a hook and loop type fitting system which allows easy and rapid fitting of a sanding paper. As sanding papers have holes for dust extraction, mount a sanding paper so that the holes in a sanding paper match those in the sanding pad.

To remove a sanding paper, raise its end and peel it off.

To remove the holder bolt, follow the installation procedures in reverse.

- Fig.10: 1. Adapter

When using application tools with a different type of installation section, use a correct adapter (optional accessory).

OPERATION

warranty

Before starting the tool and during operation, keep your hand and face away from the application tool.

caution

Do not apply excessive load to the tool which may cause a motor lock and stop the tool.

Cutting, sawing and scraping

caution

Do not move on the tool forcibly in the direction (eg. towards either side) of tool application with no cutting edge. It may damage the tool.

- Fig.11

Put the application tool on the workpiece.

And then move the tool forward so that the application tool movement does not slow down.

NOTE:

- Forcing or excessive pressure on the tool may reduce efficiency.
Before cutting operation, it is recommended to preset the orbital stroke rate 4 – 6.
- Remove sawdust by drawing the tool adequately. It increases work efficiency.
The round saw is recommended for cutting long straight line.

Sanding

- Do not reuse a sanding paper used for sanding metal to sand wood.
- Do not use a worn sanding paper or sanding paper without grit.
- Fig.12
Apply a sanding paper on the workpiece.

caution

- Using a test material sample to try is recommended to determine a correct orbital stroke rate suitable for your work.

Use a sanding paper with the same grit until sanding the whole workpiece is completed. Replacing a sanding paper with different grit sanding paper may not get a fine finish.

Dust extraction attachment (optional accessory)

- Fig.13: 1. Nozzle band 2. Dust nozzle 3. Dust attachment 4. Felt ring (ø 37 mm) 5. Pad (with OIS marking) 6. Holder bolt 7. Holes in the tool 8. Protrusions on the nozzle band 9. Spacer 10. Felt ring (ø 47 mm) 11. Pad (with STARLOCK marking)
- Install dust nozzles and dust attachment.
- Install the nozzle band on the tool so that its protrusions fit in the holes in the tool to secure it.
- Put the felt ring and the sanding pad on the dust attachment and then secure them with the application tool installation bolt.
- Fig.14

When you wish to perform cleaner operation, connect a vacuum cleaner to your tool. Connect a hose of vacuum cleaner to the dust extraction attachment (optional accessory).

MAINTENANCE

- Always be sure that the tool is switched off and the battery cartridge is removed before attempting to perform inspection or maintenance.
- Never use gasoline, benzine, thinner, alcohol or the like. Discoloration, deformation or cracks may result.

To maintain product SAFETY and RELIABILITY, repairs, carbon brush inspection and replacement, any other maintenance or adjustment should be performed by Makita Authorized Service Centers, always using Makita replacement parts.

OPTIONAL ACCESSORIES

caution

These accessories or attachments are recommended for use with your Makita tool specified in this manual. The use of any other accessories or attachments might present a risk of injury to persons. Only use accessory or attachment for its stated purpose.

If you need any assistance for more details regarding these accessories, ask your local Makita Service Center.

- Segment saw blade
- Round saw blade

Plunge cut saw blade
Scraper (rigid)

- Scraper (flexible)

- Serrated seg blade
- General joint cutter
- HM remover
- HM seg saw blade
- HM sanding plate
- Diamond seg sawblade


Sanding pad

- Adapter
- Abrasive paper delta (red / white / black)
- Fleece delta (medium / coarse / without grit)
- Polishing felt delta
- Hex wrench
- Dust extraction attachment
- Makita genuine battery and charger

NOTE

Some items in the list may be included in the tool package as standard accessories. They may differ from country to country.

Documents / Resources

 <p>The image shows the cover of the Makita DTM41 Cordless Multi Tool instruction manual. It features the Makita logo at the top, followed by the text 'DTM41 DTM51' and a small illustration of the tool.</p>	<p>makita DTM41 Cordless Multi Tool [pdf] Instruction Manual DTM41, DTM51, Cordless Multi Tool</p>
---	--

References

- [MAKITA Industrial Power Tools - The Leader In Cordless with 18V LXT Lithium-Ion](#)