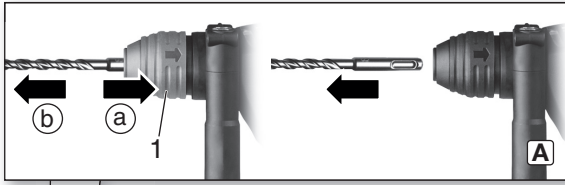



KH 18 LTX 24




CHI 使用説明 4

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		KH 18 LTX 24 *1) Serial Number: 01712..
		SDS-plus
U	V	18
n₁	/min	0 - 1400
n₂	/min	1100
s_{max}	/min bpm	5200
W (EPTA 05/2009)	J	2,1
D₁	mm (in)	24 (1)
D₂	mm (in)	68 (2 ¹¹ / ₁₆)
D₃	mm (in)	68 (2 ¹¹ / ₁₆)
D₄	mm (in)	13 (¹ / ₂)
D₅	mm (in)	30 (1 ³ / ₁₆)
m	kg (lbs)	2,6 (5,73)
D	mm (in)	43 (1 ¹¹ / ₁₆)
a_{h,HD}/K_{h,HD}	m/s ²	10,2 / 1,5
a_{h,Cheq}/K_{h,Cheq}	m/s ²	8,3 / 1,5
L_{pA}/K_{pA}	dB (A)	87 / 3
L_{WA}/K_{WA}	dB (A)	98 / 3


 *2) 2014/30/EU, 2006/42/EC, 2011/65/EU
 *3) EN 60745-1:2009+A11:2010, EN 60745-2-6:2010, EN IEC 63000:2018

2021-05-03, Bernd Fleischmann
 Direktor Produktentstehung & Qualität (Vice President Product Engineering & Quality)

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ppa. 

Original instructions

1. Declaration of Conformity

We, being solely responsible: Hereby declare that these cordless hammers, identified by type and serial number *1), meet all relevant requirements of directives *2) and standards *3). Technical documents for *4) - see page 3.

For UK only:

UK We as manufacturer and authorized person to **CA** compile the technical file, see *4) on page 3, hereby declare under sole responsibility that these drilling and chisel hammer, identified by type and serial number *1) on page 3, fulfill all relevant provisions of following UK Regulations *2) S.I. 2016/1091, S.I. 2008/1597, S.I. 2012/3032 and Designated Standards EN 60745-1:2009+A11:2010, EN 60745-2-6:2010, EN IEC 63000:2018.

2. Specified Conditions of Use

The cordless hammers are suited, with appropriate accessories, for working with hammer drill bits and chisels in concrete, stone and similar materials and with core bits in tiles and similar, as well as drilling without impact in metal, wood, etc and for nscrewdriving.

The user bears sole responsibility for any damage caused by inappropriate use.

Generally accepted accident prevention regulations and the enclosed safety information must be observed.

3. General Safety Information



For your own protection and for the protection of your power tool, pay attention to all parts of the text that are marked with this symbol!



WARNING – Read the operating instructions to reduce the risk of injury.



WARNING Read all safety warnings and instructions. Failure to follow all safety warnings and instructions may result in electric shock, fire and/or serious injury.

Keep all safety instructions and information for future reference.

Always include these documents when passing on your power tool.

4. Special Safety Instructions

Wear ear protectors. Exposure to noise can cause hearing loss.

Use auxiliary handle supplied with the tool. Loss of control can cause personal injury.

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.

Always work with the additional handle correctly installed.

Always hold the machine with both hands at the intended handles, take a secure stance and concentrate on the work.

Always wear protective goggles, gloves, and sturdy shoes when working with this tool.

Ensure that the spot where you wish to work is free of **power cables, gas lines or water pipes** (e.g. using a metal detector).

Do not touch the rotating tool!

Secure the workpiece to prevent slipping or rotation (e.g. by securing with screw clamps).

Remove chips and similar material only with the machine at a standstill.

Caution must be exercised when driving screws into hard materials (driving screws with metric or imperial threads into steel)! The screw head may break or a high reverse torque may build up on the handle.

S-automatic safety clutch: If the tool jams or catches, the power supply to the motor is restricted. Due to the strong force which can arise, always hold the machine with both hands using the handles provided, stand securely and concentrate.

A damaged or cracked additional handle must be replaced. Never operate a machine with a defective additional handle.

LED light (11): do not observe the LED radiation directly with optical instruments.

Remove the battery pack from the machine before making any adjustments, changing tools, maintaining or cleaning.



Protect battery packs from water and moisture!



Do not expose battery packs to fire!

Do not use faulty or deformed battery packs!
Do not open battery packs!
Do not touch or short circuit battery pack contacts!



A slightly acidic, flammable fluid may leak from defective Li-Ion battery packs!



If battery fluid leaks out and comes into contact with your skin, rinse immediately with plenty of water. If battery fluid leaks out and comes into contact with your eyes, wash them with clean water and seek medical attention immediately!


If the machine is defective, remove the battery pack from the machine.

Transport of Li-Ion battery packs:

The shipping of Li-Ion battery packs is subject to laws related to the carriage of hazardous goods (UN 3480 and UN 3481). Inform yourself of the currently valid specifications when shipping Li-Ion battery packs. If necessary, consult your freight forwarder. Certified packaging is available from Metabo.

Only send the battery pack if the housing is intact and no fluid is leaking. Remove the battery pack from the machine for sending. Prevent the contacts from short-circuiting (e.g. by protecting them with adhesive tape).

Reducing dust exposure:

 **WARNING** - Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known 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 those dust masks that are specially designed to filter out microscopic particles.

This also applies to dust from other materials, such as some timber types (like oak or beech dust), metals, asbestos. Other known diseases are e.g. allergic reactions, respiratory diseases. Do not let dust enter the body.

Observe the relevant guidelines and national regulations for your material, staff, application and place of application (e.g. occupational health and safety regulations, disposal).

Collect the particles generated at the source, avoid deposits in the surrounding area.

Use suitable accessories for special work. In this way, fewer particles enter the environment in an uncontrolled manner.

Use a suitable extraction unit.

- Reduce dust exposure with the following measures:
- do not direct the escaping particles and the exhaust air stream towards yourself or nearby persons or towards dust deposits, - use an extraction unit and/or an air purifier,
 - ensure good ventilation of the workplace and keep it clean using a vacuum cleaner. Sweeping or blowing stirs up dust.
 - Vacuum or wash protective clothing. Do not blow, beat or brush protective gear.

5. Overview

See page 2.


- 1 Tool lock
- 2 SDS chuck
- 3 Additional handle
- 4 Depth stop

- 5 Lock
- 6 Switch button (for changing the operating mode)
- 7 Rotation selector switch
- 8 Trigger switch
- 9 Handle
- 10 Battery pack release button
- 11 LED light to illuminate the workplace
- 12 Capacity indicator button *
- 13 Capacity and signal indicator *
- 14 Battery pack *

* depending on equipment/model/not included in scope of delivery

6. Initial Operation

6.1 Assembly of the additional handle

 For safety reasons, always use the additional handle supplied.

Open the clamping ring by turning the side handle (4) anti-clockwise. Push the additional handle onto the collar of the machine. Insert the depth stop (4). Securely tighten the additional handle at the angle required for the application.

6.2 Battery pack

Charge the battery pack (14) before use.

Recharge the battery pack if performance diminishes.

The ideal storage temperature is between 10°C and 30°C.

In case of Li-Ion battery packs with capacity and signal display (13) (equipment-specific):

- Press the button (12); the LEDs indicate the charge (13) level.
- The battery pack is almost empty and must be recharged if one LED is flashing.

6.3 Removing and inserting the battery pack

Removing:

Press the battery pack release (10) button and remove the battery pack (14).

Inserting:

Slide in the battery pack (14) until it engages.

7. Use

7.1 Depth Stop Setting

Loosen the additional handle (3). Set the depth stop (4) to the desired drilling depth and retighten additional handle (3).

7.2 Switching On and Off

Press the trigger switch (8) to switch on the machine.

The speed can be changed using the trigger switch. To switch off release the trigger switch (8).

7.3 Operating mode selection

Press the lock (5) and turn the thumbwheel (6).



Hammer drilling



Chiselling




Setting chisel position

Turn the chisel in the desired position. Then select "Chiselling" to secure the chisel and prevent it from twisting.



Drilling



When a chisel is fitted, only operate the machine in the chiselling operating mode .



Avoid levering with the machine when a chisel is fitted.

7.4 Selection of direction of rotation



Only activate the rotation selector switch (7) when the motor has completely stopped.

Select direction of rotation:

R = clockwise rotation (for drilling, hammer drilling, chiselling, drive in screws)

L = anti-clockwise rotation (for the removal of screws)

0 = Centre position: with the transporting safety device engaged (switch-on lock)

7.5 Tool change with SDS chuck



Before fitting, clean tool shank and apply special grease (accessories order no. 6.31800)! Use only SDS-Plus tools.

Inserting tools:

- Turn tool and insert until it engages. The tool is automatically locked.

Remove the tool:

See page 2, fig. A.

- Pull tool lock (1) backwards in direction indicated by arrow (a) and remove tool (b).

8. Maintenance and Cleaning

Vent slots:

The vent slots of the machine should be cleaned periodically.

Remove the **battery pack** periodically and wipe the contact area of the battery pack and machine with a dry cloth and remove drilling dust.

9. Accessories

Only use original Metabo battery packs and Metabo accessories.

Use only accessories that fulfil the requirements and specifications listed in these operating instructions.

Fit accessories securely. If the machine is operated in a holder: secure the machine well. Loss of control can cause personal injury.

Chargers: ASC 145, etc.

Battery packs with different capacities. Buy battery packs only with voltage suitable for your power tool.

5.5 Ah (LiHD), order no.: 625368000 etc.

5.2 Ah (Li-Ion), order no.: 625028000 etc.

For a complete range of accessories, see www.metabo.com or the catalogue.

10. Repairs



Repairs to electrical tools must **ONLY** be carried out by qualified electricians!

Contact your local Metabo representative if you have Metabo power tools requiring repairs. For addresses see www.metabo.com.

You can download a list of spare parts from www.metabo.com.

11. Environmental Protection

Observe national regulations on environmentally compatible disposal and on the recycling of disused machines, packaging and accessories.

Battery packs may not be disposed of with regular waste. Return faulty or used battery packs to your Metabo dealer!

Do not allow battery packs to come into contact with water!



Only for EU countries: never dispose of power tools in your household waste! According to European Directive 2012/19/EU on Waste from Electric and Electronic Equipment and implementation in national law, used power tools must be collected separately and recycled in an environmentally-friendly manner.

Discharge the battery pack in the power tool before disposal. Prevent the contacts from short-circuiting (e.g. by protecting them with adhesive tape).

12. Technical Data

Explanatory notes on the specifications on page 3.

Subject to change in accordance with technical progress.

U = Voltage of battery pack

n_1 = no-load speed

n_2 = on-load speed

s_{max} = max. impact rate

W = max. single impact force

D_1 = drill-Ø concrete with hammer drill bits

D_2 = drill-Ø masonry with core bits

D_3 = drill-Ø concrete with core bits

D_4 = drill-Ø steel

D_5 = drill-Ø soft wood

m = Weight with smallest battery pack

D = Collar diameter

Measured values determined in conformity with EN 60745.

=== direct current

The technical specifications quoted are subject to tolerances (in compliance with relevant valid standards).



Emission values

These values make it possible to assess the emissions from the power tool and to compare different power tools. The actual load may be higher or lower depending on operating conditions, the condition of the power tool or the accessories used. Please allow for breaks and periods when the load is lower for assessment purposes. Arrange protective measures for the user, such as organisational measures based on the adjusted estimates.

Total vibration value (vector sum of three directions) determined in accordance with EN 60745:

$a_{h, HD}$ = Vibration emission value (hammer drilling into concrete)

$a_{h, Cheq}$ = Vibration emission value (chiselling)

$K_{h, HD/Cheq}$ = Uncertainty (vibration)

Typical A-effective perceived sound levels:

L_{pA} = sound-pressure level

L_{WA} = Acoustic power level

$K_{pA, KWA}$ = Uncertainty

During operation the noise level can exceed 80 dB(A).



Wear ear protectors!

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metabo[®]
PROFESSIONAL POWER TOOL SOLUTIONS