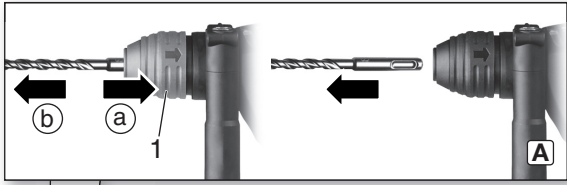



KH 18 LTX 24




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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
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)

ppa. B.F.


*4) Metabowerke GmbH - Metabo-Allee 1 - 72622 Nuertingen, Germany

使用說明

1. 符合性聲明

做為唯一責任人，我們特此聲明：按類型和型號 *1) 識別的這些無線電鑽符合指令 *2) 和標準 *3) 的所有相關要求。*4) 的技術文件 - 見第 3 頁。

僅針對英國：

UK 作為製造商和編撰技術檔案的獲授權人 (參閱 **CA** 第 3 頁的 *4))，我們特此聲明，依第 3 頁的型號和序號 *1) 識別的這些鑽孔和鑿錘符合下列英國法規 *2) S.I. 2016/1091、S.I. 2008/1597、S.I. 2012/3032 和指定標準 EN 60745- 1:2009+A11:2010、EN 60745-2-6:2010、EN IEC 63000:2018 的所有相關規定。

2. 規定的使用條件

搭配適當的配件，無線電鑽適合搭配錘鑽鑽頭和鑿子鑿入混凝土、石材和類似材質，並適合搭配巖心鑽頭鑿入瓷磚和類似材質，也適用於在金屬、木材等材質上非擊式鑽孔，以及旋入螺絲。

使用者必須承擔不當使用造成任何損壞的完全責任。請瞭解並遵守一般事故防範條例，以及隨附的安全資訊。

3. 一般安全資訊



為了您的安全與保護您的電動工具，請特別注意有此警示標誌的地方！



警告 – 閱讀使用說明將能降低受傷的風險。



警告 – 請閱讀所有安全警告與說明。如未遵守所有安全警告與說明，可能導致觸電、起火和/或嚴重受傷。

請妥善保存所有安全說明與資訊，以供將來參考。轉交電動工具時，務必一併轉交這些文件。

4. 特殊安全說明

請佩戴防護耳罩。暴露於噪音之下可能造成聽力喪失。

使用工具所附的輔助手柄。失去控制可能造成人員受傷。

如果工作時使用的切割配件有可能接觸隱藏電線，一定要握著絕緣手柄操作工具。切割配件若接觸到

「帶電」的電線時，可能導致電動工具的金屬部位也「帶電」，造成操作者因此觸電。

務必正確安裝附加手柄後進行作業。

一定要用雙手握住預定的手柄，站穩腳步，並專注於工作。

在使用工具作業時，一定要使用護目鏡、手套與堅固的鞋子。

請先確認：施工的位置沒有埋設電線、瓦斯管線或水管 (可使用如金屬探測器的設備偵測)。

請勿接觸轉動的工具！

固定工件，以免滑動或轉動 (例如，使用螺絲鉗固定)。

除非工具已經靜止不動，否則不宜移除碎屑和類似廢棄物。

在將螺絲鎖入堅硬材料時 (例如將公制或英制螺絲鎖入鋼鐵) 必須小心！螺絲頭可能會斷裂或高反向扭力可能累積於手柄上。

S-自動安全離合器：如果工具夾住或卡住，進入馬達的電源供應受到限制。由於可能產生強大的力量，一定要用所提供的手柄雙手握住機器、站穩腳步並專心。

必須要更換受損或龜裂的附加手柄。絕對不可以用損壞的附加手柄操作。

LED 燈 (11)：不可通過光學儀器直視 LED 光線。

進行任何調整、更換工具、維護或清潔之前，請取出工具的電池組。



電池組不可沾水與受潮！



不要使電池組接近火源！

不要使用有故障或變形的電池組！

不要拆開電池組！

不可觸碰觸點或使電池組短路！



損壞的鋰電池組可能會洩漏弱酸性可燃液體！



如果電池洩漏出的液體接觸到皮膚，請立即用大量清水沖洗。如果電池滲漏出的液體接觸到眼睛，請用清水沖洗並立即就醫！


如果電動工具損壞，請取出其中的電池組。

鋰電池組的運輸：

鋰電池組的運輸必須遵守危險品運輸的相關法律 (UN 3480 與 UN 3481)。運輸鋰電池組時，請瞭解現行的有效規範。必要時，請洽詢貨運商。麥太保提供通過認證的包材。

送交運送的電池組必須外表無損，而且無漏液。送交運送工具時，請取出電池組。避免觸點短路 (例如，用膠帶保護)。

減少灰塵暴露：

 **警告** - 強力打磨、鋸切、研磨、鑽孔與其他作業活動產生的一些粉塵含有已知會導致癌症、先天缺陷或其他生殖損害的化學物質。這些化學物質的其中一些範例如下：

- 含鉛油漆中的鉛、
- 磚、水泥與其他磚石產品中的結晶二氧化矽；
- 以及

- 經過化學處理的木材中的砷與鎘。

這些暴露的風險依您進行此類作業的頻率而定。為降低對這些化學物質的曝露程度：在通風良好的區域作業，並穿戴經認證的防護裝備，例如專為過濾微小顆粒所設計的防塵面罩等。

這同樣適用於來自其他材料的粉塵，例如某些木材 (例如橡木或山毛櫸粉塵)、金屬、石棉。其他已知疾病包括過敏反應、呼吸系統疾病等等。不要讓粉塵進入人體。

遵守材料、人員、應用和應用地點的相關準則和國家法規 (例如，職業健康和規定、處置)。

收集從源頭產生的粒子，並避免在周圍區域堆積。

使用特殊工作適用的配件。如此可減少粒子恣意進入環境。

使用適當的除塵裝置。

利用下列措施減少灰塵暴露：

- 不可將四散的粒子與排氣氣流導向您自己或附近的人，也不可導向堆積的灰塵。
- 使用除塵裝置和/或空氣淨化器。
- 確保工作場所通風良好，並使用吸塵器保持清潔。掃除或吹揚灰塵。
- 以吸塵器抽吸或清洗防護衣。不可對保護齒輪吹氣、拍打或刷除。

5. 概觀

見第 2 頁。


- 1 工具鎖
- 2 SDS 鑽頭
- 3 附加手柄
- 4 深度擋片

- 5 鎖
- 6 開關按鈕 (用於更換操作模式)
- 7 旋轉選擇器開關
- 8 觸發開關
- 9 手柄
- 10 電池組釋放按鈕
- 11 工作場所照明的 LED 燈
- 12 電量指示燈按鈕 *
- 13 電量和訊號指示燈 *
- 14 電池組 *

* 端視設備/機型而定/不在交貨範圍內

6. 初始操作

6.1 附加手柄的組裝

 基於安全理由，一定要使用所附的附加手柄。

以逆時鐘方向轉動側向手柄 (3) 打開鉗定環。將附加手柄推向工具的軸環。插入深度擋片 (4)。以應用所需的角度的旋緊附加手柄。

6.2 電池組

使用前將電池組 (14) 充電。

如果性能降低，請將電池組重新充電。

理想的存放溫度介於 10°C 與 30°C 之間。

對於帶有電量和訊號指示燈 (13) (設備特定) 的鋰電池組：

- 按下按鈕 (12)；LED 指示電量 (13)。
- 如果一個 LED 閃爍，則表示電池組電量幾乎耗盡，必須重新充電。

6.3 取出和裝入電池組

取出：

按下電池組釋放 (10) 按鈕，並取出電池 (14)。

裝入：

滑入電池組 (14)，直到卡入為止。

7. 使用方式

7.1 深度擋片設定

鬆開附加手柄 (3)。將深度擋片 (4) 設定到預定的鑽孔深度並重新旋緊附加手柄 (3)。

7.2 開機與關機

按下觸發開關 (8) 啟動工具。

按壓觸發開關可變換速度。若要關閉，請放開觸發開關 (8)。

7.3 操作模式選擇

壓下鎖 (5) 並轉動指輪 (6)。



錘鑽鑽孔



雕鑿



設定鑿子位置

將鑿子轉到預定位置。然後，選擇「雕鑿」固定鑿子，防止扭轉。



鑽孔



安裝鑿子時，只能在雕鑿作業模式操作工具了。



安裝鑿子時，避免以工具撬開。

7.4 選擇旋轉方向



只有在馬達完全停止時才能啟動旋轉選擇開關 (7)。

選擇旋轉方向：

R = 順時鐘旋轉（適用於鑽孔、錘鑽鑽孔、雕鑿、旋入螺絲）

L = 逆時鐘旋轉（適用於移除螺絲）

0 = 中央位置：啟動搬運安全裝置（開啟鎖）

7.5 以 SDS 鑽頭更換工具



在安裝之前，清潔工具輪軸並塗抹專用油脂（配件訂單號碼 6.31800）！僅使用 SDS-Plus 工具。

插入工具：

- 轉動工具並插入，直到卡住為止。工具自動鎖定。

移除工具：

見第 2 頁圖 A。

- 依箭頭 (a) 方向將工具鎖 (1) 往後拉，並移除工具 (b)。

8. 維護和清潔

通風孔：

工具通風孔應該定期清潔。

定期取出電池組，並以乾布擦拭電池組與工具的接觸表面，去除鑽孔塵。

9. 配件

務必使用原廠麥太保電池組和麥太保配件。

務必僅使用符合這些使用說明中所列需求和參數的配件。

牢穩地固定配件。如果工具裝在固定座上運轉：確實固定工具。失去控制可能造成人員受傷。

充電器：ASC 145 等

不同容量的電池組。務必購買電壓與電動工具相符的電池組。

5.5 Ah (LiHD)，訂單編號：625368000 等

5.2 Ah (鋰離子)，訂單編號：625028000 等等

關於完整的配件清單，請參閱 www.metabo.com 或產品目錄。

10. 維修



只有合格的電工可以修理電動工具！

如果您的麥太保電動工具需要維修，請聯絡附近的麥太保業務代表。如需地址，請參閱 www.metabo.com。

您可以從 www.metabo.com 下載備品清單。

11. 環保

請依照所在國家的法規，以符合環保的方式處置及回收廢棄的工具、包材及配件。

不可將電池組視為一般廢棄物進行處理。故障或用過的電池交由麥太保經銷商處理！

不可使電池組沾水！



針對歐盟國家：請勿將電動工具當做家庭廢棄物處置！根據電氣與電子設備廢棄物的歐盟指令 2012/19/EU 以及施行的國家法律，廢棄的電動工具必須個別收集並以環保的方式回收。在丟棄前，將電動工具的電池組放電。避免觸點短路（例如，用膠帶保護）。

12. 技術資料

有關規格的解釋說明，請見第 3 頁。可能由於技術進展而隨時變更。

U = 電池組電壓

n_1 = 無負載速度

n_2 = 帶負載速度

S_{max} = 最大撞擊率

W = 最大單次撞擊力

D_1 = 用錘鑽鑽頭在混凝土上鑽孔的 \emptyset

D_2 = 用巖心鑽頭在磚石上鑽孔的 \emptyset

D_3 = 用巖心鑽頭在混凝土上鑽孔的 \emptyset

D_4 = 在鋼鐵上鑽孔的 \emptyset

D_5 = 在軟質木材上鑽孔的 \emptyset

m = 含最小電池組的重量

D = 軸環直徑

測量依據 EN 60745 標準確認。

== 直流電

上述技術規格皆含有公差在內 (符合相關的有效標準)。



排放值

這些值可用來評估電動工具的排放量，以及比較不同的電動工具。實際負載可能更高或更低，端視操作條件、電動工具或所用配件的情況而定。當負載較低無法評估時，請允許休息並停止一下。根據調整後的估計值，為使用者安排保護措施，例如組織措施。

總振動值 (三個方向的矢量和) 依據 EN 60745 確定：

$a_{h, HD}$ = 震動散發值 (在混凝土錘鑽鑽孔)

$a_{h, Cheq}$ = 震動散發值 (雕鑿)

$K_{h, HD/Cheq}$ = 不確定性 (震動)

一般的 A 實際感知音量：

L_{pA} = 聲音壓力等級

L_{WA} = 聲音功率等級

$K_{pA, KWA}$ = 不確定性

操作時噪音等級可能超過 80 dB(A)。



請佩戴防護耳罩！

台灣華嶠貿易股份有限公司

聯絡電話：02-28124901

聯絡地址：台北市士林區重慶北路四段 103 號

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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