



BOSCH

PRO

GNH18V-64-3 | GNH18V-64-3M

Robert Bosch Power Tools GmbH
70538 Stuttgart
GERMANY

www.bosch-pt.com

1 609 92A E2Z (2025.12) TAG / 21



1 609 92A E2Z

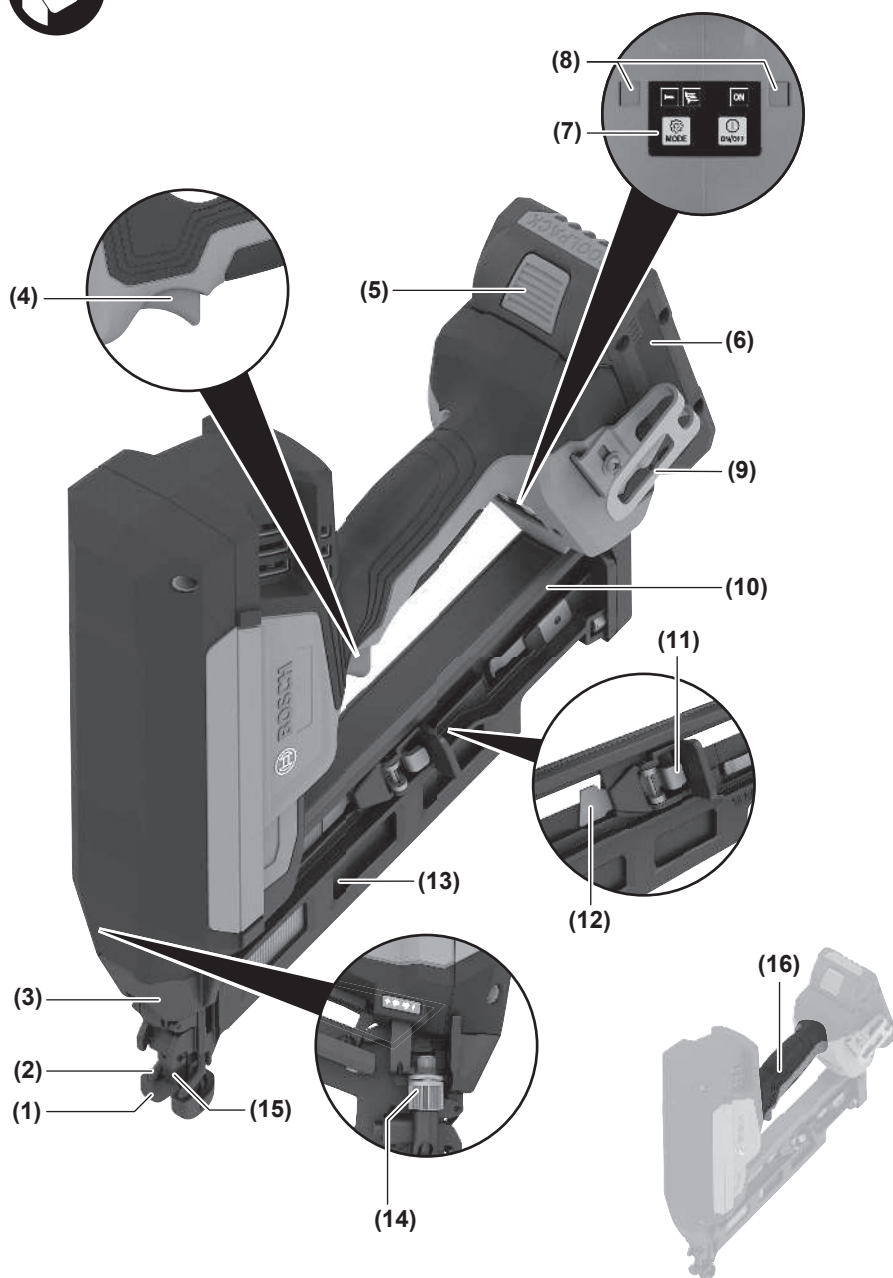


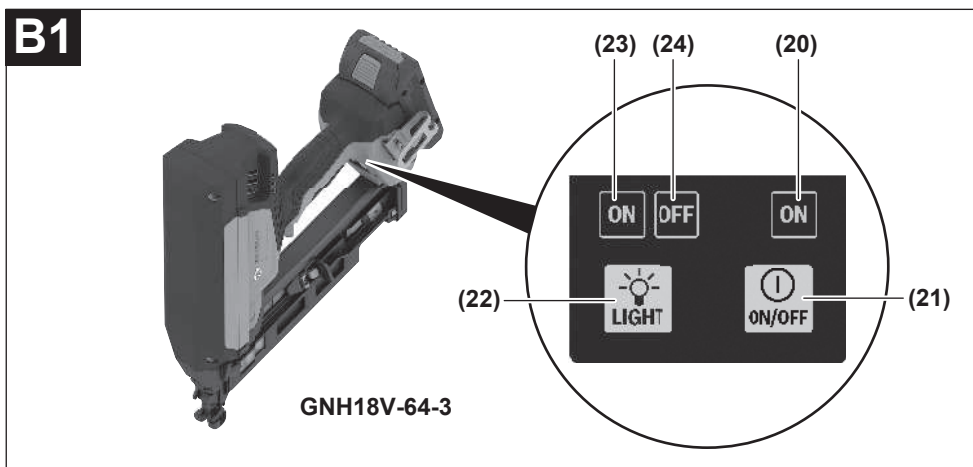
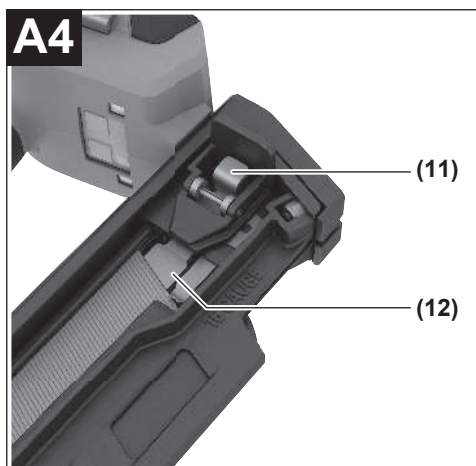
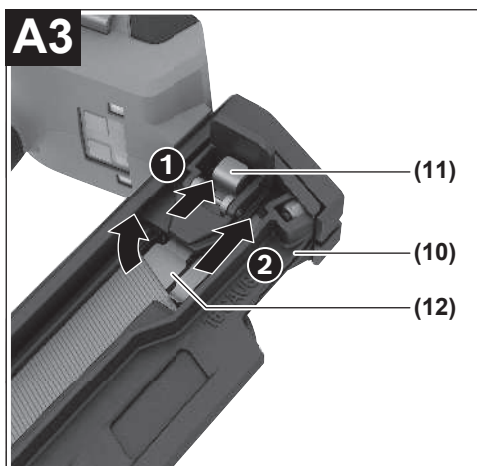
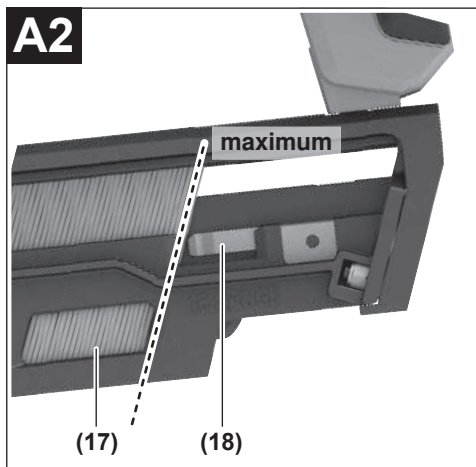
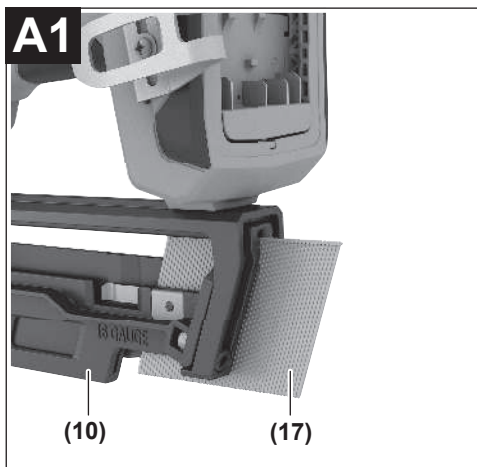
zh 正本使用说明书

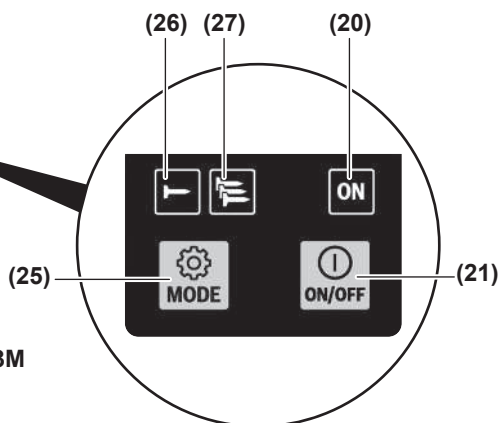
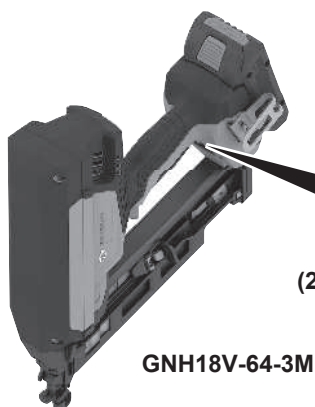
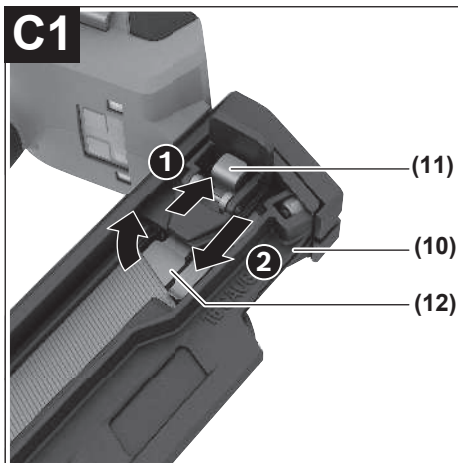
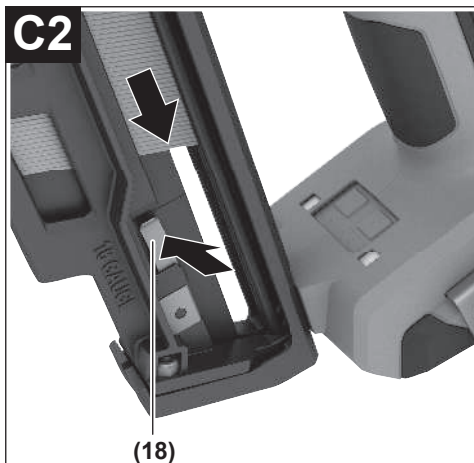
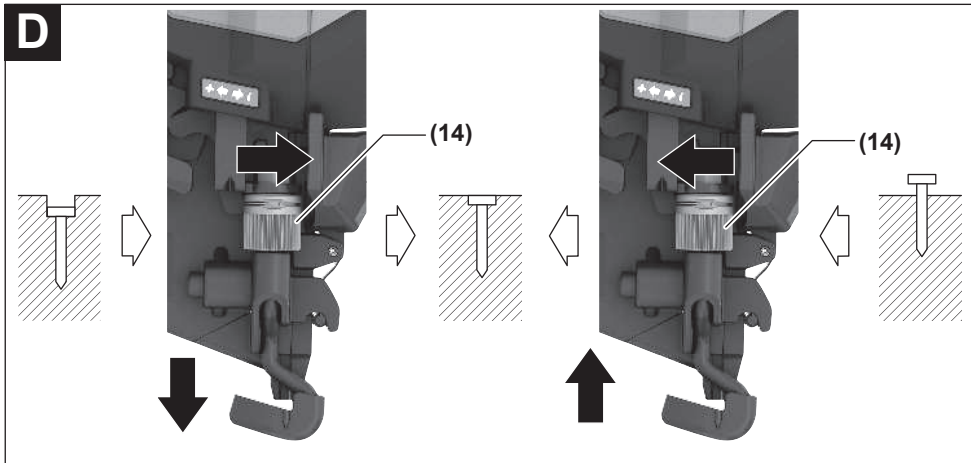


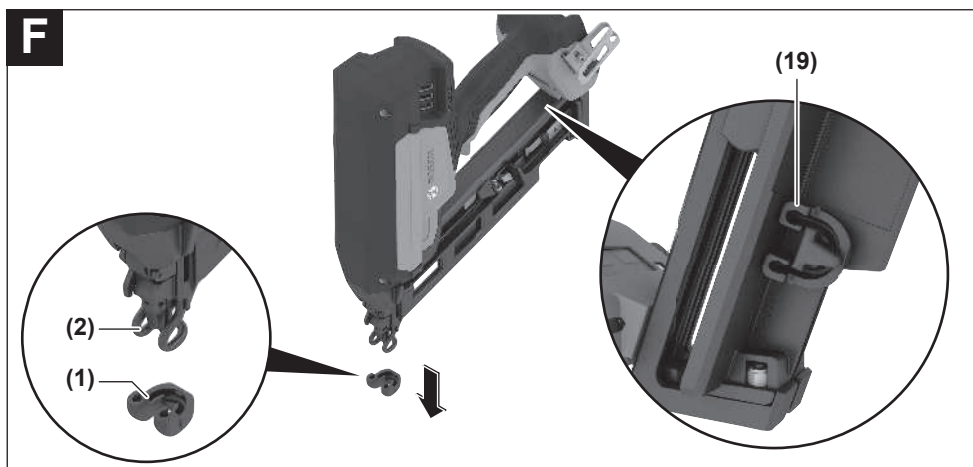
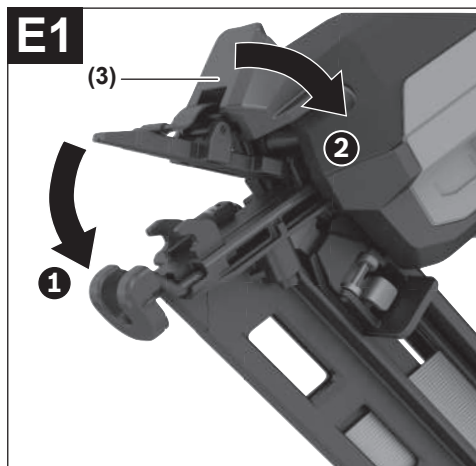
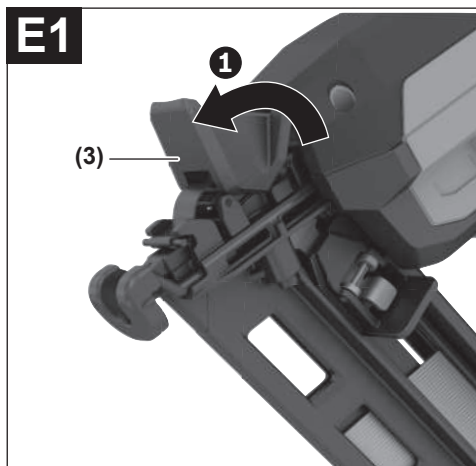
中文	页 7
----------	-----







B2**C1****C2****D**



中文

安全规章

电动工具通用安全警告

警告！ 阅读所有警告和所有说明！不遵照以下警告和说明会导致电击、着火和 / 或严重伤害。

保存所有警告和说明书以备查阅。

在所有下列的警告中术语“电动工具”指市电驱动（有线）电动工具或电池驱动（无线）电动工具。

工作场地的安全

- ▶ 保持工作场地清洁和明亮。混乱和黑暗的场地会引发事故。
- ▶ 不要在易爆环境，如有易燃液体、气体或粉尘的环境下操作电动工具。电动工具产生的火花会点燃粉尘或气体。
- ▶ 让儿童和旁观者离开后操作电动工具。注意力不集中会使操作者失去对工具的控制。

电气安全

- ▶ 电动工具插头必须与插座相配。绝不能以任何方式改装插头。需接地的电动工具不能使用任何转换插头。未经改装的插头和相配的插座将减少电击危险。
- ▶ 避免人体接触接地表面，如管道、散热片和冰箱。如果你身体接地会增加电击危险。
- ▶ 不得将电动工具暴露在雨中或潮湿环境中。水进入电动工具将增加电击危险。
- ▶ 不得滥用电线。绝不能用电线搬运、拉动电动工具或拔出其插头。使电线远离热源、油、锐边或运动部件。受损或缠绕的软线会增加电击危险。
- ▶ 当在户外使用电动工具时，使用适合户外使用的外接软线。适合户外使用的软线将减少电击危险。
- ▶ 如果在潮湿环境下操作电动工具是不可避免的，应使用剩余电流动作保护器（RCD）。使用RCD可减少电击危险。

人身安全

- ▶ 保持警觉，当操作电动工具时关注所从事的操作并保持清醒。当你感到疲倦，或在有药物、酒精或治疗反应时，不要操作电动工具。在操作电动工具时瞬间的疏忽会导致严重人身伤害。
- ▶ 使用个人防护装置。始终佩戴护目镜。安全装置，诸如适当条件下使用防尘面具、防滑安全鞋、安全帽、听力防护等装置能减少人身伤害。
- ▶ 防止意外起动。确保开关在连接电源和/或电池盒、拿起或搬运工具时处于关断位置。手指放在已接通电源的开关上或开关处于接通时插入插头可能会导致危险。
- ▶ 在电动工具接通之前，拿掉所有调节钥匙或扳手。遗留在电动工具旋转零件上的扳手或钥匙会导致人身伤害。

- ▶ 手不要伸展得太长。时刻注意立足点和身体平衡。这样在意外情况下能很好地控制电动工具。
- ▶ 着装适当。不要穿宽松衣服或佩戴饰品。让衣服、手套和头发远离运动部件。宽松衣服、佩戴或长发可能会卷入运动部件中。
- ▶ 如果提供了与排屑、集尘设备连接用的装置，要确保他们连接完好且使用得当。使用这些装置可减少尘屑引起的危险。

电动工具使用和注意事项

- ▶ 不要滥用电动工具，根据用途使用适当的电动工具。选用适当设计的电动工具会使你工作更有效、更安全。
- ▶ 如果开关不能接通或关断工具电源，则不能使用该电动工具。不能用开关来控制的电动工具是危险的且必须进行修理。
- ▶ 在进行任何调节、更换附件或贮存电动工具之前，必须从电源上拔掉插头和/或使电池盒与工具脱离。这种防护性措施将减少工具意外起动的危险。
- ▶ 将闲置不用的电动工具贮存在儿童所及范围之外，并且不要让不熟悉电动工具或对这些说明不了解的人操作电动工具。电动工具在未经培训的用户手中是危险的。
- ▶ 保养电动工具。检查运动件是否调整到位或卡住，检查零件破损情况和影响电动工具运行的其他状况。如有损坏，电动工具应在使用前修理好。许多事故由维护不良的电动工具引发。
- ▶ 保持切削刀具锋利和清洁。保养良好的有锋利切削刃的刀具不易卡住而且容易控制。
- ▶ 按照使用说明书，考虑作业条件和进行的作业来使用电动工具、附件和工具的刀头等。将电动工具用于那些与其用途不符的操作可能会导致危险。

电池式工具使用和注意事项

- ▶ 只用制造商规定的充电器充电。将适用于某种电池盒的充电器用到其他电池盒时会发生着火危险。
- ▶ 只有在配有专用电池盒的情况下才使用电动工具。使用其他电池盒会发生损坏和着火危险。
- ▶ 当电池盒不用时，将它远离其他金属物体，例如回形针、硬币、钥匙、钉子、螺钉或其他小金属物体，以防一端与另一端连接。电池端部短路会引起燃烧或火灾。
- ▶ 在滥用条件下，液体会从电池中溅出；避免接触。如果意外碰到了，用水冲洗。如果液体碰到了眼睛，还要寻求医疗帮助。从电池中溅出的液体会发生腐蚀或燃烧。

维修

- ▶ 让专业维修人员使用相同的备件维修电动工具。这将保证所维修的电动工具的安全。

钉枪安全警告

- ▶ 应始终假设钉枪中含有射钉。粗心操作钉枪可能导致射钉意外弹出并造成人身伤害。

- ▶ **装卸射钉、调整或更换附件时，请断开工具电源。** 如果接通电源，工具可能会意外启动，从而造成人身伤害。
- ▶ **操作射钉时请务必小心，尤其在装卸射钉时。** 射钉锋利尖端可能造成人身伤害。
- ▶ **不得将钉枪对准您自己或附近的任何人员。** 意外扣动工具会弹出射钉，造成人身伤害。
- ▶ **不操作工具以及切换操作位置时，手指应远离扳机。** 意外扣动工具会弹出射钉，造成人身伤害。
- ▶ **如果在操作期间，射钉可能接触暗线，要握住钉枪的绝缘握持面。** 射钉一旦接触“带电”导线，可能会使钉枪外露的金属部件“带电”，并使操作员触电。
- ▶ **操作期间请紧握钉枪。** 无法控制钉枪弹回可能导致工具意外启动，从而造成人身伤害。
- ▶ **让身体所有部位，如手和腿等远离钉枪发射方向。** 射钉可能穿透工件以及其后的任何物体，从而造成人身伤害。
- ▶ **使用钉枪时，让身体所有部位，如手和腿等远离将射钉打入工件的区域。** 射钉可能偏转并退出工件，从而造成人身伤害。
- ▶ **在钉枪紧靠工件的情况下才可开动工具。** 如果钉枪未与工件接触，射钉可能会偏离工件，造成人身伤害。
- ▶ **禁止使用钉枪紧固电缆。** 其并非设计用于电缆安装应用，可能会损坏电缆绝缘层，从而导致电击或火灾危险。
- ▶ **如果射钉卡在钉枪中，应切断钉枪电源。** 当清除卡住的射钉时，如果接通电源，钉枪可能会意外启动，从而造成人身伤害。
- ▶ **当移除卡住的射钉时，请务必小心。** 该装置可能处于受压状态，射钉可能被强行弹出，从而导致人身伤害。
- ▶ **使用合适的侦测装置侦察隐藏的电线，或者向当地的相关单位寻求支援。** 接触电线可能引起火灾并让操作者触电。损坏了瓦斯管会引起爆炸。如果水管被刺穿了会导致财物损失。
- ▶ **如果充电电池损坏或者未按规定使用，充电电池中会散发出有毒蒸汽。充电电池可能会燃烧或爆炸。** 工作场所必须保持空气流通，如果身体有任何不适必须马上就医。蒸汽会刺激呼吸道。
- ▶ **切勿改装并打开充电电池。** 可能造成短路。
- ▶ **钉子、螺丝刀等尖锐物品或外力作用可能会损坏充电电池。** 有可能出现内部短路、蓄电池燃烧、发出烟雾、爆炸或过热。
- ▶ **仅在制造商的产品中使用充电电池。** 这样才能确保充电电池不会过载。



保护充电电池免受高温（例如长期阳光照射）、火焰、脏污、水和湿气的侵害。有爆炸和短路的危险。

图标及其含义

以下符号可以帮助您正确地使用本电动工具。请牢记各符号和它们的代表意思。正确了解各符号的代表意思，可以帮助您更有把握更安全地操作本电动工具。

图标及其含义



请佩戴听力防护装置。 工作噪音会损坏听力。



请佩戴护目镜。

产品和性能说明



请阅读所有安全规章和指示。 不遵照以下警告和说明可能导致电击、着火和/或严重伤害。

请注意本使用说明书开头部分的图示。

按照规定使用

本电动工具适用于将钉子钉入木材。只允许使用“技术参数”表中规定的钉入物（钉子、夹子等）。

提示： 本电动工具不适用于将钉子钉入金属或混凝土。

GNH18V-64-3M： 在脚手架、梯子或其他平台上工作期间以及需要改变工作位置时，请不要在带自动返回装置的触点触发模式下使用电动工具。在这种情况下只能使用带保险序列的单次触发模式。

插图上的机件

机件的编号和电动工具详解图上的编号一致。

- (1) 工件防护罩
- (2) 触发保护装置
- (3) 用于打开/关闭弹道的夹紧杆
- (4) 扳机
- (5) 充电电池的解锁按钮
- (6) 充电电池
- (7) 用户界面
- (8) 工作灯
- (9) 腰带夹
- (10) 钉匣
- (11) 钉匣滑块
- (12) 钉子从动件
- (13) 装填指示视窗
- (14) 用于调节限深器的调节轮
- (15) 开口
- (16) 手柄（绝缘握柄）
- (17) 钉带^{a)}
- (18) 钉匣弹簧
- (19) 用于收存工件防护罩的储存处

用户界面

- (20) 开启/关闭指示灯
- (21) 电源键
- GNH18V-64-3:
- (22) 工作灯按钮
- (23) 工作灯开启指示灯

- (24) 工作灯关闭指示灯
- GNH18V-64-3M:
- (25) 模式按钮
- (26) 单次触发指示灯
- (27) 触点触发指示灯
- a) 该附件并不包含在基本的供货范围中。

技术数据

充电式射钉枪		GNH18V-64-3	GNH18V-64-3M
物品代码		3 601 D82 9..	3 601 D82 A..
额定电压	伏特=	18	18
触发系统			
– 带保险序列的单次触发		●	●
– 带自动返回装置的触点触发装置		-	●
钉入物			
– 型号		镙头钉	镙头钉
– 长度	毫米	32-64	32-64
– 直径	毫米	1.6	1.6
	ga	16	16
– 角度		20度	20度
钉匣最大容量		105	105
尺寸（不带充电电池）			
– 高度	毫米	283	283
– 宽度	毫米	96	96
– 带工件防护罩的长度	毫米	336	336
重量 ^{A)}	公斤	2.6	2.6
充电时建议的环境温度	摄氏度	0至+35	0至+35
工作时和存放时允许的环境温度 ^{B)}	摄氏度	-20至+50	-20至+50
兼容的充电电池		GBA18V... GBA 18V... ProCORE18V... EXPERT18V... EXBA18V... CORE18V...	GBA18V... GBA 18V... ProCORE18V... EXPERT18V... EXBA18V... CORE18V...
推荐的确全功率的充电电池		ProCORE18V... ≥ 4.0安培小时 EXPERT18V...	ProCORE18V... ≥ 4.0安培小时 EXPERT18V...
推荐的充电器		GAL18... GAL 18... GAL 36... GAL12V/18.. GAL 12V/18.. GAX 18... EXAL18...	GAL18... GAL 18... GAL 36... GAL12V/18.. GAL 12V/18.. GAX 18... EXAL18...

A) 不含充电电池（充电电池重量请查看www.bosch-professional.com）
B) 温度<0摄氏度时功率受限
数值可能因不同产品而异，并且受到应用和环境条件影响。更多信息请参见www.bosch-professional.com/wac。

充电电池

- ▶ **对电动工具执行任何操作（比如保养、更换刀具等）前需将充电电池从电动工具中取出。**意外操作起停开关可能会造成伤害。

Bosch也销售不带充电电池的充电式电动工具。您可以在包装上查看电动工具的供货范围内是否包含充电电池。

为充电电池充电

- ▶ **请只使用在技术参数中列出的充电器。**只有这些充电器才适用于本电动工具上的锂离子电池。

提示：鉴于国际运输规定，锂离子充电电池在交货时只完成部分充电。首度使用电动工具之前，必须先充足充电电池的电量以确保充电电池的功率。

安装充电电池

将充好电的充电电池推入电池座，直到嵌入。

取出充电电池

如需取下充电电池，则请按压解锁按钮，然后拔出充电电池。**在此过程中请勿过度用力。**

充电电池具备双重锁定功能，即使不小心触动了充电电池的解锁按钮，充电电池也不会从机器中掉落下来。只要充电电池安装在电动工具中，就会被弹簧固定在其位置上。

充电电池电量指示灯

提示：并非每种充电电池型号均具备电量指示灯。充电电池电量指示灯的绿色LED灯显示充电电池的电量。基于安全原因，只能在电动工具静止时检查充电电池的电量。

按压充电电量指示灯按键或，来显示充电电量。也可以在充电电池取下时操作。

如果按压充电电量指示灯按键后没有LED灯亮起，则说明充电电池损坏，必须进行更换。

充电电池型号GBA 18V... | GBA18V...



LED	电量
3个绿灯长亮	60–100 %
2个绿灯长亮	30–60 %
1个绿灯长亮	5–30 %
1个绿灯闪烁	0–5 %

充电电池类型 ProCORE18V... | EXPERT18V... | EXBA18V... | CORE18V...



LED	电量
5个绿灯长亮	80–100 %
4个绿灯长亮	60–80 %

LED	电量
3个绿灯长亮	40–60 %
2个绿灯长亮	20–40 %
1个绿灯长亮	5–20 %
1个绿灯闪烁	0–5 %

充电电池损坏风险识别

EXPERT18V... | EXBA18V...

充电电池电量指示灯的LED除了可以显示充电电池电量之外，还可以显示充电电池损坏的风险。

如需激活该功能，按住电量指示灯按钮3秒钟。充电电池的分析通过充电电池电量指示灯顺序发光来显示。结果以充电电池电量指示灯显示。

 **1个LED：**充电电池的损坏风险较高。功率和运行时间可能已经降低。建议更换充电电池。

 **5个LED：**充电电池处于良好状态，损坏风险较低。

请注意：充电电池损坏风险评估功能分两档运行，提供简单的状态评价。充电电池要么被评价为状态良好，要么就是具有较高的损坏风险。不显示电池状态的百分比。

如何正确地使用充电电池

保护充电电池，避免湿气和水分渗入。

充电电池必须储存在–20 °C至50 °C的环境中。夏天不得将充电电池搁置在汽车中。

不定时地使用柔软，清洁而且干燥的毛刷清洁充电电池的通气孔。

充电后如果充电电池的使用时间明显缩短，代表充电电池已经损坏，必须更换新的充电电池。

请注意有关作废处理的规定。

安装

- ▶ **对电动工具执行任何操作（比如保养、更换刀具等）前需将充电电池从电动工具中取出。**意外操作起停开关可能会造成伤害。

- ▶ **请始终将电动工具侧面放置，不要将其放到充电电池上。**视所使用的工具刀头和充电电池而定，可以翻倒电动工具。

为钉匣装载（参见插图A1–A4）

- ▶ **调整设备设置、更换附件或贮存本电动工具前，要移除充电电池。**这个防范措施可以避免不小心开动电动工具。

请只使用Bosch原厂附件。电动工具的精密部件，如钉匣、开口和弹道等，与**Bosch的夹子、钉子和销钉**相匹配。其他制造商使用不同的钢材质量和尺寸。

提示：仅使用“技术参数”表中所明确规定的钉入物。

使用不允许的钉入物会损坏电动工具并导致人员受伤。

为钉匣装载期间时，请正确握持电动工具，确保开口(15)既不指向您自己的身体，也不指向其他人。

- 必要时，清洁钉匣滑块(11)，并确保钉匣(10)未脏污。
- 将匹配的钉带(17)推入钉匣(10)末端的T形槽内。
- 将钉带在钉匣中向前推，直至最后一个钉子位于钉带止挡前。

提示：锁定钉匣滑块可防止电动工具在钉匣为空时运行。由此无法按压触发保护装置，并且可以避免空射。

- 将已预紧的钉子从动件(12)按压到钉匣滑块(11)，同时将钉匣滑块完全拉到钉匣(10)末端。

提示：钉匣滑块必须能够轻松向后推回，仅用手指的力量即可，无需花费很大力气。钉匣滑块卡住会产生以下后果：钉子无法射出，钉子会卡在弹道中（参见“卡住”说明），或者钉子会以错误的角度射出。

- 小心地将钉匣滑块(11)及已按压的钉子从动件(12)沿钉带(17)方向引导，直至钉子从动件(12)推到最后一个钉子上方，然后将钉带(17)在钉匣中向前推到底。

提示：切勿让钉匣滑块不受控地回弹。钉匣滑块可能损坏，并且有夹住手指的危险。

运行

- ▶ **请始终将电动工具侧面放置，不要将其放到充电电池上。**视所使用的工具刀头和充电电池而定，可以翻倒电动工具。

触发系统

带保险序列的单次触发

对于这种触发系统，必须首先将触发保护装置(2)牢固地抵在工件上。只有在按下扳机(4)时，才会射出钉入物。

在此之后，只有当扳机和触发保护装置先被恢复到初始位置，才能够触发进一步的钉入操作。

带自动返回装置的触点触发装置 (GNH18V-64-3M)

在此触发系统中，必须先按下扳机(4)并保持在当前位置。之后，必须将触发保护装置牢固抵在工件上，以便射出钉入物。只要扳机(4)被按下，就可以通过重新放置到其他位置来触发下一次射钉操作。在触点触发模式下也可以通过单次触发打入钉子。

投入使用

接通/关闭

- 如要**接通**电动工具，请长按电源键(21)至少1秒钟。
开启/关闭指示灯(20)亮起。
GNH18V-64-3M：单次触发已激活，指示灯(26)亮起。
- 如要**关闭**电动工具，请长按电源键(21)至少1秒钟。

射出钉子 – 单次触发

- 将开口(15)或必要时将带橡胶的工件防护罩(1)牢固地抵在工件上，直到触发保护装置(2)完全被按下。
工作灯(8)自行接通。
- 接着短按扳机(4)，然后再次将其松开。
此时将射出一个钉子。
- 要进行下一次钉入操作时，将电动工具完全从工件上抬起，然后在接下来所需的位置再次将其牢固地抵在工件上。
或者，您也可以按住触发保护装置(2)，然后操作扳机(4)，以便射出下一个钉子。

射出钉子 – 触点触发 (GNH18V-64-3M)

- 您可以短促按压模式按钮(25)，以激活触点触发。
触点触发指示灯(27)亮起。
- 按住扳机(4)。
工作灯自行接通。
- 将开口(15)或必要时将带橡胶的工件防护罩(1)牢固地抵在工件上，直到触发保护装置(2)完全被按下。
此时将射出一个钉子。
- 要进行下一次钉入操作时，继续按住扳机(4)，然后将电动工具从工件上完全抬起。将电动工具在下一个所需的位置上再次牢固抵住工件。
- 重新按压模式按钮(25)后可切换至单次触发。
单次触发指示灯(26)亮起。

工作提示

每次作业开始前，请检查安全和触发保护装置是否功能正常，以及所有螺栓和螺母是否牢固固定。

如果电动工具损坏或无法正常工作，立即将其断电，并联系授权的博世客户服务中心。

请勿对电动工具进行任何不符合规定的操作。请勿拆卸或堵塞电动工具的任何部件，例如触发保护装置。

请勿使用不合适的工具和手段进行“应急修理”。电动工具需要定期且正确地进行维护保养。

请避免对电动工具造成任何形式的损坏或使其性能减弱，例如通过以下方式：

- 敲击或刻划，
- 进行制造商未允许的改装操作，
- 在由硬质材料（如钢材）制成的模板上使用，
- 让其掉落或在地面上拖拽，
- 当作锤子来使用，
- 任何形式的暴力使用。

请确认您的工件下方或后方有什么东西。如果墙壁、天花板或地板后面有人，请勿向这些地方打入钉子。钉子可能会穿透工件并伤到他人。

请勿将钉子钉在已经打入的钉子上。在这种情况下，钉子可能会变形，钉子可能会卡住，或者电动工具可能会不受控制地移动。

如果电动工具在寒冷的环境下使用，最初几个钉子的打入速度会比平时慢。如果电动工具在工作过程中升温了，就又可以恢复正常的工作速度。请避免空射，以减少冲头的磨损。在较长时间的工作间歇期间或工作结束时，请关闭电动工具，取出充电电池，并尽可能清空钉匣。

清空钉匣（参见插图C1-C2）

- 关闭电动工具并取出充电电池(6)。
- 将钉匣滑块(11)及已按压的钉子从动件(12)从钉带(17)上拉下，直至钉子从动件(12)释放最后一个钉子，然后小心地将钉匣滑块(11)向前引导直至钉匣(10)限位。

提示：切勿让钉匣滑块不受控地回弹。钉匣滑块可能损坏，并且有夹住手指的危险。

- 旋转电动工具，使钉匣中的钉带(17)向后滑动至钉匣弹簧(18)。
- 按需将钉带(17)向下推动，以便将其从钉匣(10)中取出。

调整限深器（参见插图D）

- 钉子的打入深度可以通过调节轮(14)来进行设置。
- **钉子打入过深：**如需缩短打入深度，将调节轮(14)朝方向“-”旋转。
 - **钉子打入深度不足：**如需增大打入深度，将调节轮(14)朝方向“+”旋转。
 - 在测试工件上试验新的打入深度。
 - 必要时，重复相应工作步骤。

解除卡住情况（参见插图E1-E2）

单个钉子可能在弹道中卡住。如果这种情况频繁发生，请联系授权的博世客户服务中心。

提示：如果解除卡住情况后冲头不再返回，请联系授权的博世客户服务中心。

- 松开扳机(4)。
- 关闭电动工具并取出充电电池(6)。
- 清空钉匣(10)。
- 向上按压夹紧杆(3)，直至可以打开弹道。
- 清除卡住的钉子。必要时使用夹钳。
- 关闭弹道，将夹紧杆(3)的夹箍挂入弹道的钩子中，然后再次向下按压夹紧杆。
- 再次为钉匣装载。

更换工件防护罩（参见插图F）

触发保护装置(2)尾端的工件防护罩(1)会保护工件，直到电动工具为进行打入操作而正确放置。可以移除和更换工件防护罩

- 松开扳机(4)。
- 关闭电动工具并取出充电电池(6)。
- 清空钉匣(10)。
- 将工件防护罩从触发保护装置上拔下。

- 将新工件防护罩的敞开末端推到触发保护装置上。

提示：备用工件防护罩可以存放在钉匣(10)侧面。为此将工件防护罩推入储存处(19)。

运输和存放

运输时关闭电动工具，尤其是当您使用梯子或者以不寻常的身体姿势移动时。在工作场所搬运电动工具时，只能握住手柄(16)，并且不要按下扳机(4)。始终将电动工具与充电电池分开存放，并放置在干燥、温暖的地方。

用户界面（参见插图B1-B2）

GNH18V-64-3： 用户界面(7)用于开启和关闭工作灯以及显示电动工具的状态。

GNH18V-64-3M： 用户界面(7)用于选择工作模式以及显示电动工具的状态。

GNH18V-64-3：

用户界面	描述
	开启/关闭按钮(21)开启和关闭设备。
	工作灯按钮(22)开启和关闭工作灯。
	设备开启后，开启/关闭指示灯(20)亮起。
	工作灯开启后，工作灯开启指示灯(23)亮起。
	工作灯关闭后，工作灯关闭指示灯(24)亮起。

GNH18V-64-3M：

用户界面	描述
	开启/关闭按钮(21)开启和关闭设备。
	模式按钮(25)在单次触发和触点触发之间切换。
	设备开启后，开启/关闭指示灯(20)亮起。
	单次触发激活后，单次触发指示灯(26)亮起。
	触点触发激活后，触点触发指示灯(27)亮起。

状态指示灯

开启/关闭指示灯(20)还会如下所述显示电动工具的状态：

电动工具状态指示灯

颜色	含义	解决方案
绿色	电动工具已开启并已准备就绪。	—

电动工具状态指示灯

颜色	含义	解决方案
黄色	以下事件需引起您的注意：临界温度、充电电池几乎耗尽或临近保养。	– 让电动工具冷却。 – 更换充电电池或为其充电。 – 让人执行保养。
红色	电动工具未准备就绪。 原因：电动工具过热、充电电池耗尽或存在机械故障。	– 让电动工具冷却。 – 更换充电电池或为其充电。 – 让人执行保养。
以红光闪烁	– 过早按下了第二个开关。 – 未在5秒内按下第二个开关，设备自动关闭。 – 按错误的顺序操作了开关（例如扳机在设备转换为触点触发模式前已操作）	– 短暂等待，直至状态指示灯亮起绿色。 – 电动工具再次准备就绪。 – 重新执行钉入操作，同时注意正确的操作顺序或通过用户界面更改触发系统。

接通/关闭工作灯（GNH18V-64-3）

按压工作灯按钮(22)，以接通或关闭工作灯。

接通/关闭工作灯（GNH18V-64-3M）

工作灯在钉入操作前自动接通，在钉入操作后自动关闭。

维修和服务

维护和清洁

- ▶ 对电动工具执行任何操作（比如保养、更换刀具等）前需将充电电池从电动工具中取出。意外操作起停开关可能会造成伤害。
- ▶ 电动工具和通气孔必须随时保持清洁，以确保工作效率和工作安全。

维护计划

清洁钉匣(10)。清除在工作过程中可能积聚在钉匣内的塑料碎屑或木屑。定期使用压缩空气清洁该电动工具。

措施	原因	执行
清洁钉匣(10)和钉匣滑块 (11)。	这样可以避免钉子卡住。	– 每天用压缩空气吹净钉匣/钉匣滑块的机械机构。
确保触发保护装置(2)的功能正常。	这有助于提高您的工作安全性，并使电动工具得到高效使用。	– 每天用压缩空气吹净触发保护装置的机械机构。

排除故障

问题	原因	解决措施
电动工具未运行就绪。	充电电池未充电或充电电池损坏。	– 将充电电池充满电或更换充电电池。
	充电电池未正确装入。	– 确保已将充电电池卡入手柄。
	充电电池温度过高或过低。	– 请等待，直到充电电池（再次）达到理想的工作温度。
	充电电池触点、电机或起重磁铁脏污或损坏。	– 请联系授权的博世客户服务中心。在那里让人更换部件。
	钉匣(10)为空。	– 再次为钉匣装载。（参见“为钉匣装载（参见插图A1–A4）”，页 10）
	触发保护装置(2)弯曲。	– 请联系授权的博世客户服务中心。在那里让人更换部件。
	电子装置损坏。	– 请联系授权的博世客户服务中心。
	用户界面(7)损坏。	– 请联系授权的博世客户服务中心。

问题	原因	解决措施
电动工具已运行就绪，但不射出钉子。	以下部件可能损坏： – 扳机 (4) – 冲头 – 电机或传动皮带 – 电子装置 – 橡皮带	– 请联系授权的博世客户服务中心。在那里让人更换部件。
	弹道机械机构中积存了异物。	– 请联系授权的博世客户服务中心。在那里让人更换部件。
	开口 (15) 或钉匣 (10) 中积存了异物。	– 清洁开口 (15) 或钉匣 (10) 。
	一个钉子在弹道中卡住。	– 解除卡住情况。(参见“解除卡住情况(参见插图E1-E2)”，页 12)
	钉匣滑块 (11) 损坏。	– 必要时，清洁钉匣滑块 (11) ，并确保钉匣 (10) 未脏污。
	钉匣滑块弹簧太弱或损坏。	– 请联系授权的博世客户服务中心。在那里让人更换部件。
	使用了不允许的钉入物。	– 请只使用原厂附件。只允许使用“技术参数”表中规定的钉入物(钉子、夹子等)。
	钉匣 (10) 为空。	– 再次为钉匣装载。(参见“为钉匣装载(参见插图A1-A4)”，页 10)
钉子打入过深。	操作错误的射出顺序。	– 再次执行钉入操作，同时注意正确的操作顺序。 – GNH18V-64-3M : 通过用户界面更改触发系统。
	限深器设置得过低。	– 将限深器调整到所需深度。(参见“调整限深器(参见插图D)”，页 12)
钉子打入深度不足。	缓冲区已磨损。	– 请联系授权的博世客户服务中心。在那里让人更换部件。
	充电电池未充电或充电电池损坏。	– 将充电电池充满电或更换充电电池。
	钉入物过长。	– 请只使用原厂附件。只允许使用“技术参数”表中规定的钉入物(钉子、夹子等)。
	限深器设置得过高。	– 将限深器调整到所需深度。(参见“调整限深器(参见插图D)”，页 12)
电动工具跳过钉子或间断式进给过大。	使用了不允许的钉入物。	– 请只使用原厂附件。只允许使用“技术参数”表中规定的钉入物(钉子、夹子等)。
	钉匣滑块弹簧太弱或损坏。	– 请联系授权的博世客户服务中心。在那里让人更换部件。
钉子在弹道中频繁卡住。	使用了不允许的钉入物。	– 请只使用原厂附件。只允许使用“技术参数”表中规定的钉入物(钉子、夹子等)。
	钉子已经老化，钉子之间的胶水不再有粘合力了。	– 使用新钉带

问题	原因	解决措施
打入的钉子弯曲。	冲头损坏。	– 请联系授权的博世客户服务中心。在那里让人更换部件。
	在不允许的材料（例如混凝土、石头）上使用射钉枪。	– 请只在允许的材料上使用射钉枪。

客户服务和应用咨询

中国大陆

电话： 400 826 8484-3-2

制造商地址：

Robert Bosch Power Tools GmbH

罗伯特·博世电动工具有限公司

70538 Stuttgart / GERMANY

70538 斯图加特 / 德国

询问和订购备件时，务必提供机器铭牌上标示的10位数物品代码。

处理废弃物

必须以符合环保的方式，回收再利用损坏的电动工具、充电电池、附件和废弃的包装材料。

不可以把电动工具和充电电池/蓄电池丢入一般的家庭垃圾中！



Legal Information and Licenses

GCE-Math, commit:

8422f5307b0498d09cf626f38acb03fe9f1efd94

License ID: Apache-2.0

Copyright: Copyright 2016-2023 Keith O'Hara

License Header: Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License.

You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.

See the License for the specific language governing permissions and limitations under the License.

License Text Reference: LICENSE_REF_1

CMSIS_5, v5.9.0

License ID: Apache-2.0

Copyright: Copyright 2009-2020 Arm Limited. All rights reserved.

License Header: Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License.

You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.

See the License for the specific language governing permissions and limitations under the License.

License Text Reference: LICENSE_REF_1

Infineon TLE987x DFP, v1.4.6

License ID: BSD-3-Clause

Copyright: Copyright (c) 2015-2017, Infineon Technologies AG. All rights reserved.

License Text Reference: LICENSE_REF_2

libfixmath, commit:

24488b16cc0359daada0682a9bd3a11a801d0a01

License ID: MIT

Copyright: Copyright (c) 2011-2021 Flatmush

<Flatmush@gmail.com>, Petteri Aimonen

<Petteri.Aimonen@gmail.com>, & libfixmath AUTHORS

License Text Reference: LICENSE_REF_3

MFxFixedPoint, v8.0.2

License ID: MIT

Copyright: Copyright 2018 Geoffrey Hunter

License Text Reference: LICENSE_REF_3

tiny-AES-c, commit:

f06ac37fc31dfdac2e0d9bec83f90d5663c319b

License ID: Unlicense

Copyright: Copyright 2021 kokke

License Text Reference: LICENSE_REF_4

picolibc, v1.8.8

License Name: picolibc software licenses

License Text Reference: LICENSE_REF_5

LICENSE TEXTS

LICENSE_REF_1: Apache License

Version 2.0, January 2004

<http://www.apache.org/licenses/>

TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION

1. Definitions.

"License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document.

"Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License.

"Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.

"You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License.

"Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation source, and configuration files.

"Object" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types.

"Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work (an example is provided in the Appendix below).

"Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes of this License, Derivative Works shall not include works that remain separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof.

"Contribution" shall mean any work of authorship, including the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition, "submitted" means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as "Not a Contribution."

"Contributor" shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work.

2. Grant of Copyright License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the Work and such Derivative Works in Source or Object form.

3. Grant of Patent License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s)

was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.

4. Redistribution. You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions:

(a) You must give any other recipients of the Work or Derivative Works a copy of this License; and (b) You must cause any modified files to carry prominent notices stating that You changed the files; and (c) You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and (d) If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License.

You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License.

5. Submission of Contributions. Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or conditions. Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions.

6. Trademarks. This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file.

7. Disclaimer of Warranty. Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.

8. Limitation of Liability. In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages.

9. Accepting Warranty or Additional Liability. While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability.

END OF TERMS AND CONDITIONS

LICENSE_REF_2:

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- Neither the name of the copyright holders nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

LICENSE_REF_3:

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice (including the next paragraph) shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

LICENSE_REF_4:

This is free and unencumbered software released into the public domain.

Anyone is free to copy, modify, publish, use, compile, sell, or distribute this software, either in source code form or as a compiled binary, for any purpose, commercial or non-commercial, and by any means.

In jurisdictions that recognize copyright laws, the author or authors of this software dedicate any and all copyright interest in the software to the public domain. We make this dedication for the benefit of the public at large and to the detriment of our heirs and successors. We intend this

dedication to be an overt act of relinquishment in perpetuity of all present and future rights to this software under copyright law. THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

For more information, please refer to <<http://unlicense.org/>>

LICENSE_REF_5:

Contains code from projects picolibc under the following licenses:

(1) Copyright (c) 2001 Mike Barcroft <mike@FreeBSD.org> All rights reserved.

(2) Copyright 2002 Jeff Johnston <cjohnstn@redhat.com>

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

THIS SOFTWARE IS PROVIDED BY THE AUTHOR AND CONTRIBUTORS ``AS IS'' AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

(3) Copyright 2019, 2020, 2021, 2024 Keith Packard Stephen Street

(4) Copyright 1997 Nick Clifton, Cygnus Solutions

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. Neither the name of the copyright holder nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

(5) Copyright 2024, Synopsys, Inc.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- 1) Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- 2) Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- 3) Neither the name of the Synopsys, Inc., nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

(6) Copyright (c) 1983, 1993 The Regents of the University of California. All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. Neither the name of the University nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE REGENTS AND CONTRIBUTORS ``AS IS'' AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE REGENTS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

(7) Copyright 2009-2015 ARM Ltd

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. The name of the company may not be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY ARM LTD ``AS IS'' AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS

FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL ARM LTD BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

(8) Copyright 2009-2015 Linaro Limited

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution. Neither the name of Linaro Limited nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS AS IS AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

(9) Copyright 1994 Cygnus Support

Redistribution and use in source and binary forms are permitted provided that the above copyright notice and this paragraph are duplicated in all such forms and that any documentation, and/or other materials related to such distribution and use acknowledge that the software was developed at Cygnus Support, Inc. Cygnus Support, Inc. may not be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED "AS IS" AND WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

WARRANTY DISCLAIMER

This product contains Open Source Software components which underlie Open Source Software Licenses. Please note that Open Source Licenses contain disclaimer clauses. The text of the Open Source Licenses that apply are included in this manual under "Legal Information and Licenses".

Servicekontakte
Service Contacts
Contacts de Service
Contactos de Servicio



<https://www.bosch-pt.com/serviceaddresses>

Garantiebedingungen
Guarantee Conditions
Conditions de Garantie
Condiciones de Garantía



<https://www.bosch-pt.com/guarantee/202507>