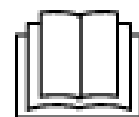


EXPERT

EXAL18V-160



Powered by



安全注意事項



請詳讀所有安全注意事項和指示。如未遵守安全注意事項與指示，可能導致火災、人員遭受電擊及／或重傷。

妥善保存本使用說明書。

在完全了解機器的所有功能，以及能夠沒有阻礙地執行各功能或取得相關的使用指示之後，才能開始使用本充電器。

- ▶ 此一充電式裝置原本並不是設計提供給兒童以及身體、感官或心智能力有缺陷，或是缺乏相關經驗及知識的人士操作。8 歲以上兒童以及身體、感官或心智能力有缺陷，或是缺乏相關經驗及知識的人士，只要在他人監督下或接受過如何安全處置此充電器的指導，並充份瞭解相關危險，即可使用該充電器。否則可能會造成操作上的錯誤以及受傷危險。
- ▶ 使用、清潔及維修期間，請隨時留意兒童。如此才能確保他們未將本充電器當做玩具任意玩耍。
- ▶ 僅可對容量 1.3 Ah 以上的 Bosch 鋰離子電池或 AMPShare 合作夥伴的充電電池進行充電。充電電池的電壓必須與充電器的充電電壓相符。請勿對非充電型電池進行充電。否則有失火與爆炸之虞。



充電器僅可用於室內並且不得暴露在潮濕環境中。水進入充電器將增加觸電危險。

- ▶ 充電器請保持清潔。髒污亦有造成人員觸電之虞。
- ▶ 每次使用前，請仔細檢查充電器，包括線材及插頭。若有發現任何受損現象，請勿使用充電器。請勿自行拆開充電器並將其交由 Bosch 或授權的客戶服務中心以原廠替換零件進行維修。已受損的充電器、線材和插頭，會提高觸電風險。
- ▶ 使用中的充電器請勿擱置在紙張、布料等易燃材料上或讓它處於易燃環境中。進行充電時充電器會升溫，有導致失火之虞。
- ▶ 請勿遮住充電器的通風口。否則本充電器可能過熱而無法再正常運作。
- ▶ 只用製造商規定的充電器充電。將適用於某種電池盒的充電器用到其他電池盒時會發生著火危險。
- ▶ 如果充電電池損壞了，或者未按照規定使用充電電池，充電電池中會散發出有毒蒸氣。工作場所必須保持空氣流通，如果身體有任何不適必須馬上就醫。充電電池散發的蒸氣會刺激呼吸道。
- ▶ 在濫用條件下，液體會從電池中濺出；避免接觸。如果意外碰到了，用水沖洗。如果液體碰到了眼睛，還要尋求醫療幫助。從電池中濺出的液體會發生腐蝕或燃燒。

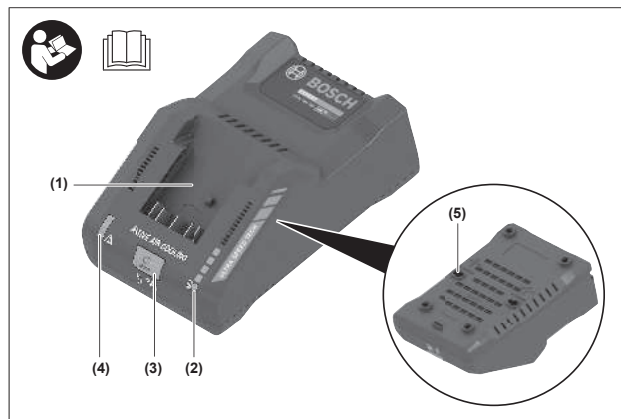
產品和規格

依規定使用機器

本電池充電器專為可充電式 Bosch 或其 AMPShare 合作夥伴的鋰離子充電電池而設計。

插圖上的機件

充電器的編號和儀器圖示上的編號一致。



- (1) 充電槽
- (2) 綠色電量指示器
- (3) 模式按鈕
- (4) 代表溫度監控／錯誤的紅色指示器
- (5) 壁掛架

技術性數據

充電器	EXAL18V-160
絕緣等級	□ / II
充電電流 ^{A)}	16 A
充電電池的充電電壓（自動偵測電壓）	14.4-18 V $\overline{\text{---}}$
重量 ^{B)}	0.95 kg

A 視溫度和充電電池型號而定

)

B 不包括電源線和電源插頭的重量

)

數值可能因產品而異，並受使用條件以及環境條件影響。進一步資訊請見 www.bosch-professional.com/wac。

充電

- ▶ **注意電源的電壓** 電源的電壓必須和充電器銘牌上標示的電壓數據一致。



請確保充電槽 (1) 和充電電池觸點未受到粗糙髒污。確定充電電池已完整插入。

只需將充電器的電源插頭插至插座上，並將充電電池裝入充電槽 (1) 內，即可自動開始充電。



充電電池溫度位於許可的充電溫度範圍內，才可進行充電：

– GBA 18V... : 0 °C ... 45 °C

– EXBA18V... : -10 °C ... 55 °C

透過智慧型充電程序，機器能夠自動判斷充電電池的充電狀況。本機器會在考量充電電池溫度與充電電池電壓以及所選充電模式的前提下，以最佳的充電電流進行充電。

充電後如果充電電池的使用時間明顯縮短，代表充電電池已經損壞，必須更換新的充電電池。

在持續或不間斷地先後使用充電器後，可能導致充電器變熱，此乃正常現象，並不表示充電器有技術性瑕疵。

充電時間

請參考下表關於達到所需電量所需的大致時間（以分鐘為單位），具體需視充電電池類型和充電模式而定。充電時間可能會有所不同。您可在 www.bosch-professional.com 找到進一步資訊。

Power Boost 充電模式

充電電池		
EXBA18V-40	≈ 9	≈ 30
EXBA18V-55	≈ 11	≈ 31
EXBA18V-80	≈ 16	≈ 39
EXBA18V-150	≈ 27	≈ 60



對應於 ≈ 50 % 的充電狀態



相當於充滿的電量

標準充電模式

充電電池	
EXBA18V-40	≈ 37
EXBA18V-55	≈ 35
EXBA18V-80	≈ 46
EXBA18V-150	≈ 60



相當於充滿的電量

充電程序

可選擇 3 種不同的充電模式為充電電池充電。按下模式按鈕 (3) 可切換以下充電模式

- 標準充電模式
- Power Boost 充電模式
- Long Life 充電模式

標準充電模式



充電電池已完全充飽。充電器上已預設此充電模式。模式按鈕 (3) 不亮起。使用標準充電模式，可讓充電電池取得平衡，既快速又完整地進行充電。

Power Boost 充電模式

EXBA18V...	-40	-55	-80	-150
Power Boost  ≈ 50%	9 min	11 min	16 min	27 min
Power Boost  ≈ 100%	30 min	31 min	39 min	60 min

在此模式下，充電電池會以最快的充電速度充飽電。有關 Power Boost 的充電時間，請參閱表格：(參見「充電時間」，頁 3)



快速充電時，模式按鈕 (3) 將亮紅燈。

Long Life 充電模式



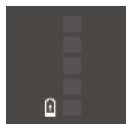
充電電池已完全充飽。然後充電電池便會進入保護狀態，但充電程序仍在緩慢進行中。這樣的設計可明顯延長充電電池的使用壽命。

充電時模式按鈕 (3) 將亮綠燈。

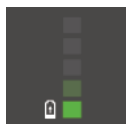
指示燈號的代表含義

綠色電量指示器

電量指示器 (2) 若處於閃爍狀態，表示正在充電。



0–20 %



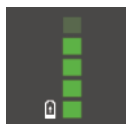
21–40 %



41–60 %



61–80 %



81–99 %



充滿電

溫度監控紅色指示器持續亮起



紅色指示器 (4) 持續亮起時，代表充電電池溫度已超出許可充電溫度範圍 (參見「充電」，頁 2)。待回到容許溫度範圍後，將立即開始充電。

錯誤紅色指示器閃爍



紅色指示器 (4) 閃爍時，代表充電電池或充電器故障。

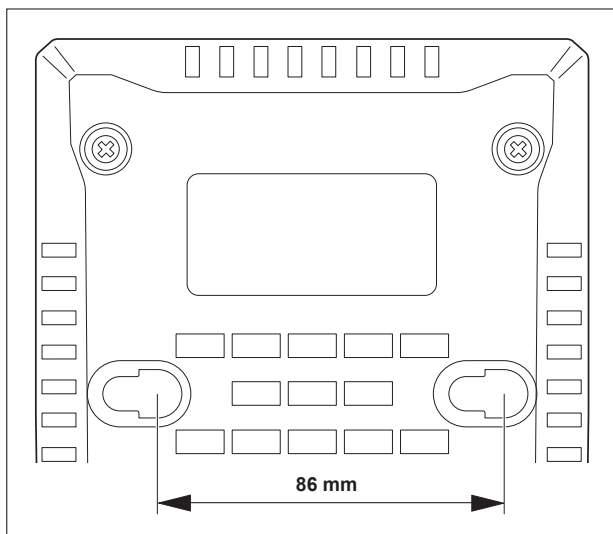
Active Air Cooling (充電電池冷卻)

充電器中內建的風扇控制功能負責監控正在充電的電池溫度。一旦電池溫度高於大約 0 °C，風扇就會啟動。風扇啟動時，會聽見一些風扇噪音。

如果風扇沒有轉動，有可能是風扇故障，或者充電電池的溫度低於 < 0 °C。充電電池因溫度仍在容許範圍內而得以更長時間進行充電。

安裝於牆面上

- ▶ 對充電器進行任何作業之前，務必將插頭從插座上拔出。



使用本電池充電器時，可將它放置於桌面上或懸掛在牆面上。

若要固定在牆面上：在 86 mm 距離處鑽 2 個孔。請用直徑 5 mm 至最大 6.5 mm 的圓頭螺栓進行固定。

故障排除

充電電池不在充電



充電電池不在充電且溫度監控／錯誤紅色指示器 (4) 閃爍紅色。

原因：電池充電器偵測到內部錯誤。

排除方式：請確定充電電池是否完全插入。拔起電源插頭，然後再插入。若錯誤再次出現，請讓電池充電器送交授權的 **Bosch** 電動工具客戶服務中心進行檢查。

原因：充電電池未正確插入

排除方式：將充電電池正確地插入電池充電器內。

原因：充電電池和充電觸點受污

排除方式：拔起電源插頭，清潔充電電池和充電觸點（乾燥）。

原因：充電電池損壞

排除方式：請更換充電電池。



充電電池不充電，且指示器 (4) 亮起紅色。

原因：充電電池溫度超出許可充電溫度範圍

排除方式：等待直到充電電池溫度重新回到許可充電溫度範圍 (參見「充電」，頁 2) 內。

指示器不亮

無指示器亮起，充電電池不充電。

原因：插座、電線或電池充電器損壞

排除方式：請確認充電器已連接到適當且正常運作的插座上。若錯誤再次出現，必要時請讓電池充電器送交授權的客戶服務中心進行檢查。

原因：電池充電器的電源插頭未（正確）插入。

排除方式：將插頭（完全）插入插座。

FAQ



哪個電池充電器適用於我的充電電池？

所有 18-V 充電電池皆與所有 Bosch Professional 18-V 電池充電器和所有 AMPShare 合作夥伴的 18-V 電池充電器相容。

我們建議專業使用者將電池充電器與充電時間少於 1 小時的充電電池搭配使用。

在線上操作說明書或 Bosch Professional 網站上可找到所有充電時間。



充電電池的充電時間要多久？

充電電池的充電時間取決於 2 個因素：

- 充電電池的類型和容量
- 充電速度

在線上操作說明書 ((參見「充電時間」, 頁 3)) 或 Bosch Professional 網站上可找到所有充電時間。



我可以調整充電器的充電速度嗎？

您可在 **EXAL18V-160** 上該據您的需求調整充電速度。**EXAL18V-160** 具備 3 個充電模式，可完美搭配充電電池的多樣化應用：

- 採用標準充電速度的標準充電模式：此為原廠預設模式 (參見「標準充電模式」, 頁 3)。
- Power Boost 充電模式：按下充電器上的按鈕模式可啟用 Power Boost 充電模式。
- Long Life 充電模式：按下充電器上的按鈕模式可啟用使用壽命充電模式 (參見「Long Life 充電模式」, 頁 3)。主要在使用壽命充電模式下充電會延長電池壽命。



完全充滿電後，充電電池仍能留在電池充電器內嗎？

當充電電池完全充滿、且電池充電器也如此顯示時，即完成充電過程。

充電電池可留在電池充電器內，但不建議將充電電池儲放在電池充電器內較長時間。



充電電池在何種溫度下可進行充電、使用 and 儲放？

- 使用和儲放的許和環境溫度為 -20°C 至 50°C 。
- 充電期間的建議環境溫度為 0°C 至 35°C 。
- 為使充電電池達到最佳的使用壽命，建議將充電電池儲放在溫度 0°C 至 20°C 。



何種充電電池電量可達到較長的儲放時間？

對於較長時間儲存，理想的電量為 30–50 %。



Bosch Professional 充電電池是否與其他品牌相容？

所有 18 V Bosch Professional 充電電池可相容於以下產品：

- 所有 Bosch Professional 18-V 系統
- 所有 AMPShare 合作夥伴產品



何種充電電池電量可達到較長的使用壽命？

為達較長使用壽命，理想的電量為 80%。

維修和服務

維修和清潔

如果必須更換連接線，請務必交由 **Bosch** 或者經授權的 **Bosch** 電動工具顧客服務執行，以避免危害機器的安全性能。

顧客服務處和顧客諮詢中心



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

台灣羅伯特博世股份有限公司

電話: (02) 7734 2588

製造商地址:

Robert Bosch Power Tools GmbH
羅伯特·博世電動工具有限公司
70538 Stuttgart / GERMANY
70538 斯圖加特/ 德國

當您需要諮詢或訂購備用零件時，請務必提供本產品型號銘牌上 10 位數的產品機號。

廢棄物處理

必須以符合環保的方式，回收再利用損壞的充電器、配件和廢棄的包裝材料。



不可以把充電器丟入一般的家庭垃圾中！

製造商保固



<https://www.bosch-pt.com/guarantee/202601>

設備名稱：電池充電器，型號（型式）：EXAL18V-160

限用物質及其化學符號

單元	鉛 (Pb)	汞 (Hg)	鎘 (Cd)	六價鉻 (Cr ⁺⁶)	多溴聯苯 (PBB)	多溴二苯醚 (PBDE)
電容器	○	○	○	○	○	○
電源線	-	○	○	○	○	○
外殼(塑料)	○	○	○	○	○	○
電路板	-	○	○	○	○	○

備考 1. "超出 0.1 wt %" 及 "超出 0.01 wt %" 係指限用物質之百分比含量超出百分比含量基準值。

備考 2. "○" 係指該項限用物質之百分比含量未超出百分比含量基準值。

備考 3. "-" 係指該項限用物質為排除項目。

Legal Information and Licenses

1. Open Source Components

1.1 Name: **ARM_CMSIS_5**

Version: **5.7.0**

License: **Apache-2.0**

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1.2 Name: **STM32G0_HAL**

Version: **1.3.0**

License: **BSD-3-Clause**

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1.3 Name: **cmsis_device_g0**

Version: **1.4.2**

License: **Apache-2.0**

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Apache License

Version 2.0, January 2004

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