

User Guide



DINGOBOX BATTERY SYSTEMS

105AH SLIMLINE LITHIUM BATTERY
(DB-SL105)



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Congratulations!

You have purchased a quality lithium battery and we hope you now enjoy many years of hassle free 12V power.

This User Guide describes how to safely install and operate the Dingobox Slimline Lithium Battery.

When installing your Dingobox, check the environmental conditions that you intend to operate in are suitable for best performance, longevity, and safety.

For further information please contact Dingobox Battery Systems directly via Website, Email, or Social media platforms.

Caution

Please read cautions before use

This device contains Lithium Iron Phosphate (LiFePO₄) battery cells. While LiFePO₄ remains the safest lithium chemistry, the stored energy still represents a risk of fire, burns, or injury if misused. To avoid injury to yourself and others, please act in accordance with the following cautions.

- Ensure the Battery is physically secure.
- Do not penetrate the enclosure.
- Do not modify the enclosure.
- Avoid repeat shock and vibration.
- Avoid exposure to water and salt air.
- Do not short circuit.
- Do not expose to flame.
- Do not operate below 0° or above 65°.
- Do not store below 10° or above 40°.
- MUST use external fuses (Max 120A)

For further detailed cautions please download the User Guide PDF available from www.dingobox.com.au/downloads

Mounting Caution

As with all Battery installations, ensure it is securely strapped down or secured during transport as to not become a projectile in an accident.

DO NOT mount the Battery in the wall-mount position with the Anderson plugs at the bottom (Upside-down).

Although the internal components are safely secured with steel strapping, mounting Prismatic cells upside-down can greatly reduce their lifespan, and as such voids any warranty.

Installation

We recommend installation by a qualified Automotive Electrician.

The Dingobox can be used in any car, 4WD, caravan, RV, or even used as a portable battery pack or power supply for camping, travelling, or home. The primary benefit of a Dingobox Battery is that it can be wall-mount, or hidden behind or under seating in a vehicle.

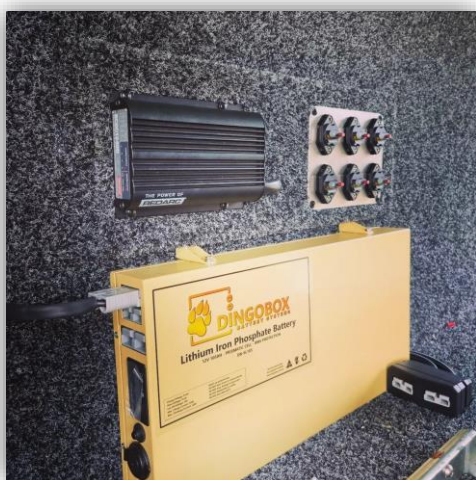
Mounting

The Dingobox Battery can be mounted flat or slightly angled with the label facing upright. Or it can be wall-mount in its upright position, with the Anderson plugs at the top (as pictured on front page).

You must not mount the Battery in the wall-mount position with the Anderson plugs at the bottom (Upside-down).

Although the internal components are safely secured with steel strapping, mounting LiFePO4 cells upside-down can greatly reduce their lifespan, and as such voids any warranty.

Every Dingobox is supplied with steel mounting brackets. These brackets can be fixed to the Battery using the supplied M5*8mm bolts, into the existing threads on the sides of the battery. The brackets are designed to be reversed to suit your mounting requirements. It is important to not use other M5 bolts longer than 8mm, as it may contact internal components.



Canopy Headboard



Nissan Patrol Y62 Boot

Connections

Anderson Plugs

The Dingobox features Anderson plugs that make it easy to connect and disconnect. Creating options beyond a fixed dual battery system. Options include plug'n'play, portable, or traditional hardwired operation. As these Anderson plugs are concealed connections, the risk of accidental short circuit is reduced. For parallel connection use 120A Anderson connector.

The Dingobox Anderson plugs can be used as Input or Output, simultaneously. Ensure the Anderson plugs are correctly wired (positive & negative), and an appropriate crimping tool is used.

Only use genuine Anderson plugs for correct current ratings.



Accessories

- Accessory Socket (cig socket)
- USB-A (Quick Charge QC3.0)
- USB-C (Quick Charge PD)

The Dingobox Accessory Socket (cig socket) is rated to a maximum 15amps, it features internal locking and a protective cover.

The Dingobox USBs feature fast charging to suit the latest Apple and Android devices, and many other electrical devices. It also features an on/off switch and green backlight when on. The Dingobox Accessory socket, USBs, and LCD Display are protected by the Push-To-Reset circuit breaker.

Fuses

External fuses MUST be used on each of the Anderson plug circuits (by installer). The correct fuse rating should reflect the size of the cable and load current, up to a maximum of 120Amps. Please refer to your product manuals for their required cable and fuse ratings. If you are unsure seek professional assistance or contact us.

Do not use Auto Reset Circuit Breakers.

We recommend using fuses that have nut or bolt type connections, such as Midifuse, Megafuse, ANL, or Manual Reset Circuit Breakers for loads or inputs that are 20amps or more.

The Accessory Socket (Cig), USBs, and LCD Display are all protected by a Push-To-Reset circuit breaker on the Dingobox face.

Charging

Each charging source requires a lithium profile (LiFePO4) for optimal and safe charging.

- 240V Battery Charger
- Fixed or Portable Solar (MPPT or PWM Controller)
- In-vehicle DC-DC Charger
-

If a lithium profile is not an option on your existing charging devices, you must change to devices that have a lithium charging profile.

Charging directly from a vehicle alternator (no DCDC charger), with or without an “isolator” is NOT recommended. Although lithium batteries can accept charge from an alternator, limitations exist within the alternator and lithium battery internal BMS. Irreparable damage to the vehicle alternator, system wiring, or lithium battery may occur if conditions are incorrect. A DC-DC Charger with lithium profile must be used.

Refer to the Dingobox Specifications for recommended charging voltages.

Monitoring

LCD Display

We recommend charging the Dingobox battery fully before use.

The Dingobox state of charge can be monitored by reading voltage on the LCD Display. Use the following table as a guide.

BATTERY STATE	VOLTAGE
Full charge (no loads)	13.1 – 13.3
Discharging (with loads)	12.8 – 13.3
Low charge	12.5 – 12.8
Charge immediately	12
Low voltage cut-out	10

The LCD display also offers capacity percentage (%), this should only be used as a guide.

Bluetooth

Your Dingobox is equipped with a Bluetooth receiver.

Download the App from **Apple© App Store** or **Google© Play Store** by searching 'xiaoxiang'. For assistance, contact sales@dingobox.com.au



SCAN ME

Google Play Store



SCAN ME

Apple App Store

Specifications	
Nominal Voltage:	12.8V
Charged Voltage:	13.3V
Nominal Capacity:	105AH
Recommended Charge Current:	20A – 40A
Max. Charge Current:	120A (Genuine Anderson only)
Max. Discharge Current:	120A (Genuine Anderson only)
Max. Inverter Size	1500W
Operating Voltage:	10V – 14.6V
Charging Voltage:	14.2V – 14.4V
Operating Temperature:	Normal use: 0°C – 65°C Storage: 10°C – 35°C
Parallel Connection:	Yes (Via Anderson plugs)
Series Connection:	No
Cycle Life:	3000 at 90% DOD (Depth of Discharge)
Calendar Life:	~10 Years
Dimensions	495x250x65mm
Weight:	13.9KG
Self-Discharge Rate:	~2% at 25°C Per Month
Warranty:	3 Year

Contact Us

For any queries, questions, or technical support in relation to the Lithium Battery or Installation, please contact us for a prompt response.

[Street Address]

[City, ST ZIP Code]

Email: sales@dingobox.com.au

Web: www.dingobox.com.au

Buy: www.dingobox.com.au/products

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