

# KICKASS



**12V WIRELESS CANOPY POWER  
SYSTEM WITH 40A DCDC CHARGER  
+ INTEGRATED BLUETOOTH**

**OWNER'S MANUAL**

KA40A8WSCPSL

V1.0

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# SAFETY INFORMATION

## SAFETY NOTES

- Batteries can produce harmful vapour and explosive gases when being charged. Ensure batteries are mounted and stored in a well-ventilated area.
- Use only suitable gauge wiring for all connections.
- Always replace blown fuses with the same size.
- Ensure the unit is adequately mounted using the provided brackets.
- Ensure the unit is closed and all screws are tight before powering any devices.
- Provide adequate ventilation to prevent heat accumulation.
- Do not expose the unit to excessive moisture or dust.
- Only use the unit within the specified operating temperature range.
- Disconnect the battery before performing maintenance or moving the unit.

## WARNINGS

- This product should not be used for medical purposes, life-sustaining equipment, safety applications, or any application where equipment failure could cause injury, death, fire, or other hazards.
- Never smoke or allow sparks or flames near a battery.
- Do not allow loose objects to fall inside the unit or ports.
- Avoid connecting multiple charging sources simultaneously without checking specifications.
- Using the unit incorrectly may result in damage to the unit, connected devices, or the vehicle.
- Do not attempt to disassemble the unit or modify internal components.
- Only connect compatible KickAss batteries for monitoring and Bluetooth features.

# PRODUCT SPECIFICATIONS

## DCDC CHARGER INFORMATION

<b>DCDC CHARGER MODEL</b>	12V/24V 40A DCDC MPPT Bluetooth Charger
<b>SKU</b>	KADCDCBT40A-AND
<b>OPERATING CONDITIONS</b>	
<b>INPUT VOLTAGE RANGE</b>	12V OR 24V DC
<b>ALTERNATOR INPUT VOLTAGE RANGE</b>	9-32V DC
<b>SOLAR INPUT VOLTAGE RANGE</b>	9-32V
<b>MAX INPUT CURRENT</b>	56A
<b>MAX CONTINUOUS CHARGING CURRENT</b>	40A
<b>MAX OUTPUT POWER</b>	500W
<b>RECOMMENDED OUTPUT FUSE SIZE</b>	50A
<b>STANDBY CURRENT</b>	<10mA
<b>EFFICIENCY</b>	~ 93% at full load
<b>AMBIENT OPERATING TEMPERATURE</b>	20°C to 80°C
<b>IP RATING</b>	IP66
<b>BATTERY CAPACITY GUIDE</b>	Lead Acid (Wet, Gel, AGM, Cal): 200 – 500Ah LiFePO4: 50 – 500Ah
<b>CERTIFICATIONS</b>	AS/NZS 62368 AS/NZS CISPR32 AS/NZS 2772.2:2016 AS/NZS 4268:2017

## BATTERY CHARGING SPECIFICATIONS

NOMINAL VOLTAGE	12V				
BATTERY TYPE	WET	GEL	AGM	CAL	LiFePO <sub>4</sub>
ABSORPTION VOLTAGE (CC)	14.4V	14.1V	14.7V	15.3V	14.5V
FLOAT VOLTAGE (CV)	14.4V	14.1V	14.7V	15.3V	15.5V
FLOAT VOLTAGE (CV)	13.4V	13.5V	13.4V	15.6V	-

## ALTERNATOR CUT-IN/CUT-OUT VOLTAGES

Cut in / Cut out Voltage (Ignition override OFF)	IGN ON CUT-IN = 12.2V	IGN ON CUT-OUT = 10.5V	IGN OFF CUT-IN = 13.2V	IGN OFF CUT-OUT = 12.6V
Cut in / Cut out Voltage (Ignition override ON)	IGN ON CUT-IN = 24.4V	IGN ON CUT-OUT = 21V	IGN OFF CUT-IN = 26.4V	IGN OFF CUT-OUT = 25.2V

NOTE: CC = Constant Current | CV = Constant Voltage

The KickAss DCDC charger range implements an intelligent voltage monitoring system to determine the point at which the charger transitions from Float back to Bulk. This ensures the battery SOC is always maintained in an optimal state, regardless of whether the battery is being actively discharged or in a standby / low discharge state.

DCDC Charger User Manual: [DCDC MPPT CHARGER WITH BLUETOOTH USER MANUAL](#)

## GANG SWITCH INFORMATION

<b>GANG SWITCH MODEL</b>	8-Gang Wireless 12V Switch Panel - MKII
<b>SKU</b>	KAWLSWPANEL-8-MKII
<b>OPERATING CONDITIONS</b>	
<b>INPUT VOLTAGE RANGE</b>	12V OR 24V DC
<b>MAX POWER</b>	720W
<b>MAX CURRENT</b>	60A total
<b>OPERATING TEMPERATURE</b>	-40°C to 85°C
<b>STANDBY CURRENT</b>	< 3mA
<b>CERTIFICATIONS</b>	EN 6100

## FRONT CONNECTIONS

<b>USB PORTS</b>	2 x USB-C 45W 2 x USB-A QC3.0 18W
<b>CIGARETTE SOCKET</b>	1 x 10A max (fused)
<b>ANDERSON (INPUT/OUTPUT)</b>	2 x 50A max (shared fuse)

## REAR CONNECTIONS

<b>ANDERSON (INPUT/OUTPUT)</b>	3 x 50A max (shared fuse)
<b>SOLAR INPUT</b>	1 x 50A Anderson (direct to DCDC charger)
<b>ALTERNATOR INPUT</b>	1 x Three-pin Anderson (direct to DCDC charger)
<b>BATTERY</b>	1 x 175A Anderson

## CANOPY SYSTEM INFORMATION

<b>PRODUCT DIMENSIONS</b>	440 x 160 x 320mm (LWH)
<b>PRODUCT WEIGHT</b>	9.35kg

Gang Switch User Manual: [8-GANG WIRELESS SWITCH PANEL](#)

# INCLUDED COMPONENTS

## CANOPY POWER SYSTEM



## 2AWG/175A 1.6 METER LONG AUXILIARY BATTERY CABLE



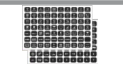



## RJ45 CABLE



## MOUNTING KIT



## SWITCH PANEL COMPONENTS

ACCESSORIES	QUANTITY	DESCRIPTION	ACCESSORIES	QUANTITY	DESCRIPTION
	2	Switch Panel Sticker Sheet		1	Screw Driver
	10	Zipties		1	Allen Key

# PRODUCT FEATURES

## **All-in-One DC Charging and Distribution System**

Simplifies your 12V setup with an integrated system combining DC charging, digital switching, and power distribution in one unit. Designed for easy canopy installations with pre-wired outputs for Anderson, cigarette socket, and USB devices.

## **Wireless Digital Switching Panel**

Control up to 8 devices from the detachable wireless switch panel. The panel can be detached and carried around your setup, and docks magnetically to recharge automatically.

## **Integrated 40A DCDC Charger with Bluetooth**

Charges your battery quickly from alternator or solar inputs using Anderson connectors. Pair with the supporting app to monitor charging status and performance in real time.

## **Integrated MPPT Solar Charge Controller**

Supports efficient solar charging with maximum power point tracking, ensuring your auxiliary battery is charged optimally from solar panels.

## **Fast USB-C and USB-A Charging Ports**

Two USB-C 45W ports and two QC3.0 USB-A ports for fast charging DC laptops, tablets, phones, and other devices.

Five Anderson Input/Output Ports Easily configure the five Anderson ports as inputs or outputs to suit your setup.

## **KickAss Battery Integration**

Seamless integration with KickAss Smart Series and Ultra-X Lithium batteries. Monitor State of Charge, voltage, current, time to empty, and time to full directly from the canopy system.

## **Integrated Safety Protection**

Internal auto-resettable circuit breakers and individual fuses protect connected devices from overloads and short circuits.

## **Built for Harsh Environments**

Powder-coated steel construction with honeycomb design reduces weight while maintaining strength. Designed for off-road, worksite, or remote camping use.

## **Optional AC Charger Integration**

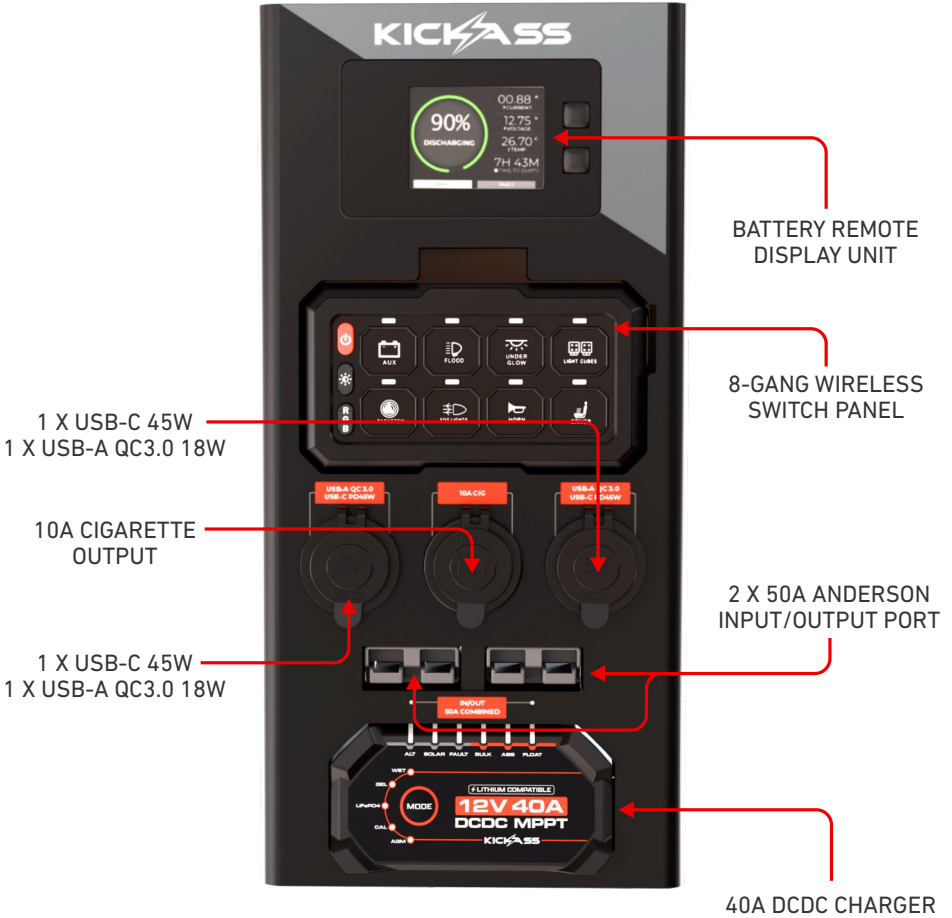
Mounting provisions included for the KickAss 32A AC charger to allow direct plug-and-play AC charging when shore power is available.

## **Flexible Mounting Options**

Designed primarily for passenger-side installation but includes brackets so this can be switched to driver-side installation if desired. Multiple mounting hole patterns allow easy fitment in any canopy setup.

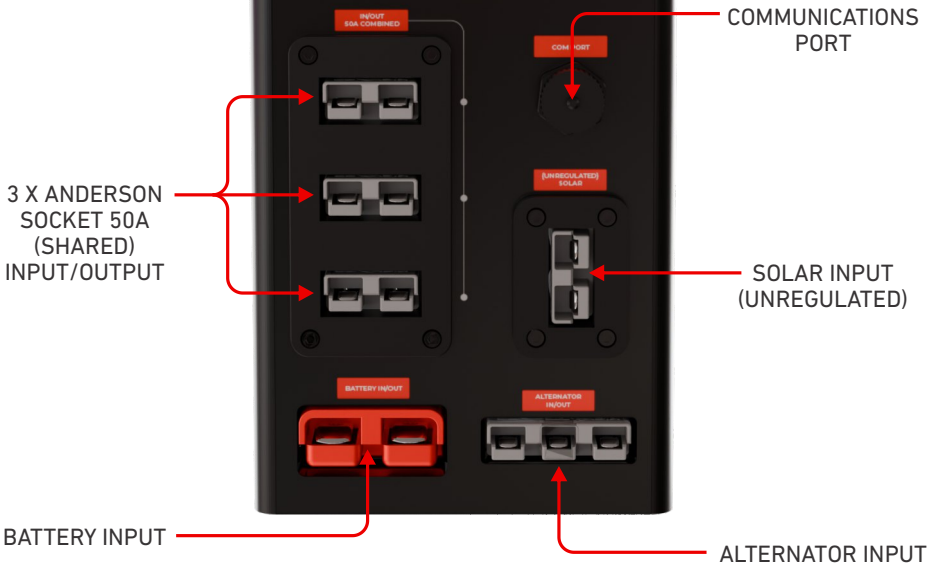
# PRODUCT OVERVIEW

## CANOPY



### WARNING:

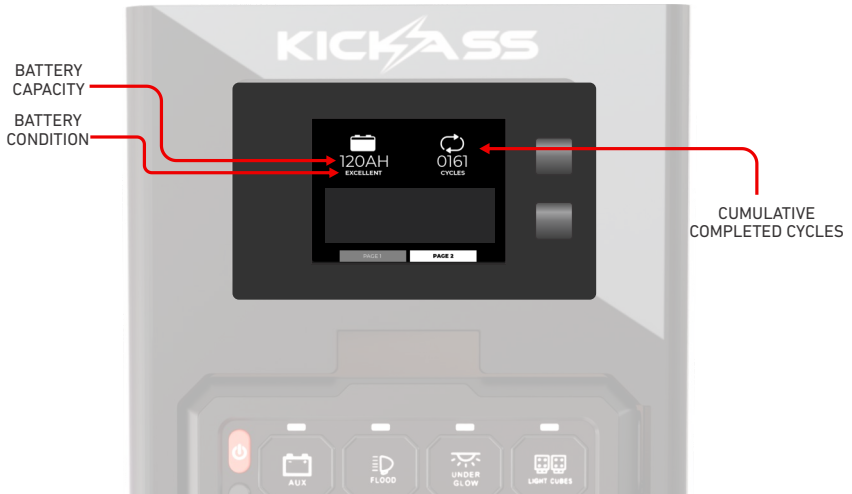
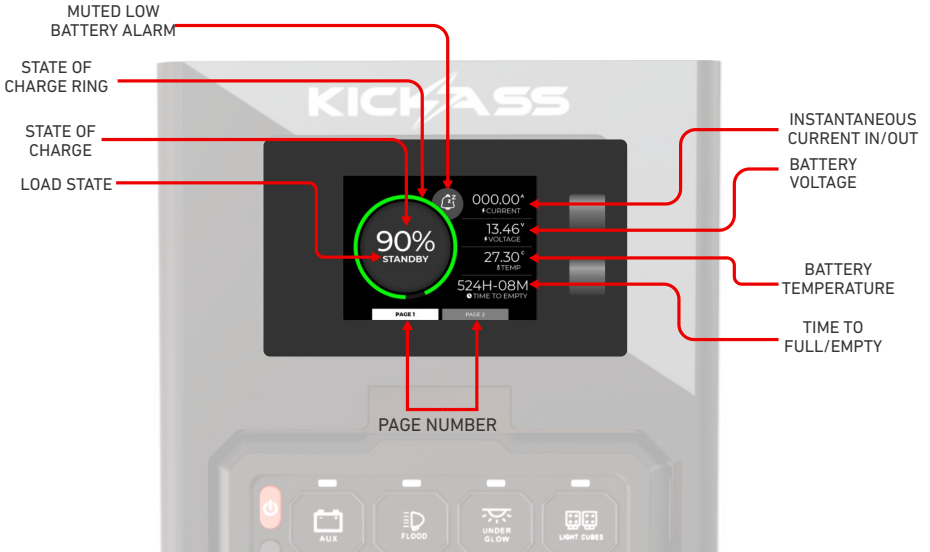
- Exceeding the 10A load for the cigarette socket will blow the fuse.
- The two Anderson sockets share one 50A fuse. Exceeding 50A load for both will trip the breaker.



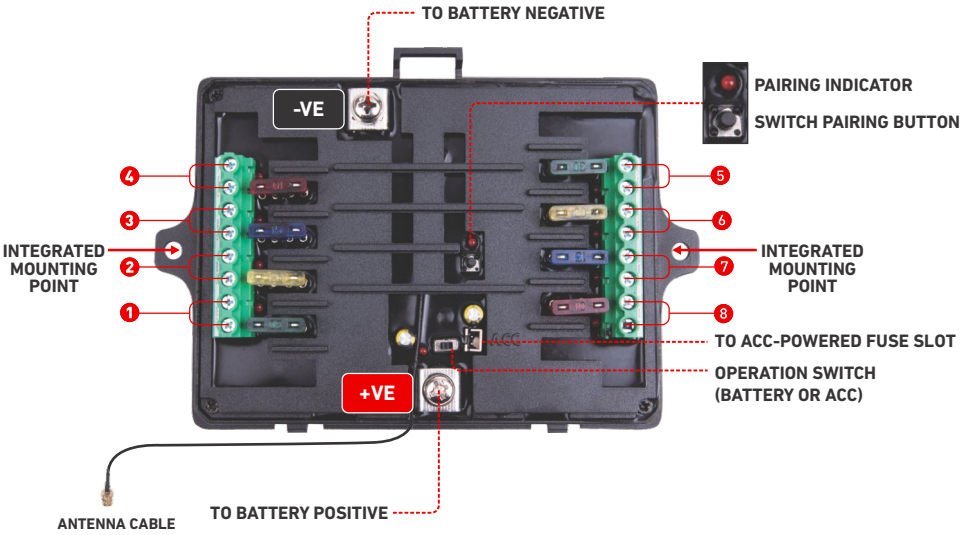
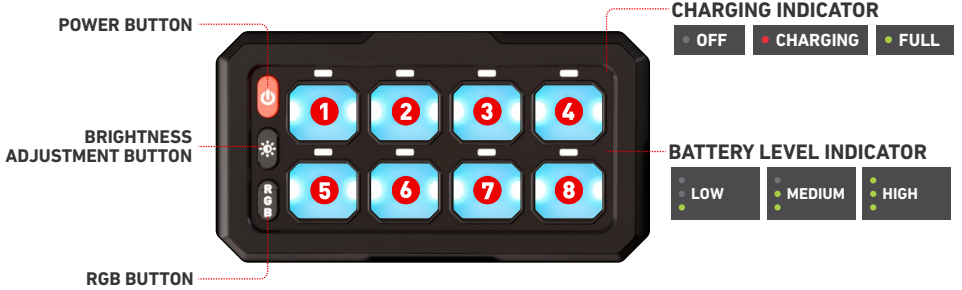
**WARNING:**

1. Please check product specifications if connecting multiple charging sources.
2. Do not use an external charger while the DC-DC Charger is operating.
3. Exceeding 50A combined current rating on one Anderson bank will blow the fuse.

# LCD SCREEN



# WIRELESS SWITCH PANEL



# DCDC CHARGER



## 1. Status Indicators

- ALT - Alternator Indicator
- SOLAR - Solar Panel Indicator
- FAULT - Fault Indicator
- BULK - Bulk Stage Indicator
- ABS - Absorption Stage Indicator
- FLOAT - Float Stage Indicator

## 2. Battery Mode Indicator

## 3. Mode Button

# PRODUCT INSTALLATION

## MOUNTING

The canopy system can be mounted on the left side, right side, or in an upright orientation, giving you flexibility to suit different vehicle, canopy, or workspace layouts. This allows you to choose the most practical mounting position based on available space and access requirements.

Choose a suitable mounting position for your canopy system, ensuring the cable lengths are sufficient to reach the auxiliary battery, starter battery, and solar panel.

### FOR UPRIGHT MOUNTING

Remove the side cover, locate the dedicated holes, and bolt the screws directly to the surface below.



### FOR LEFT SIDE MOUNTING

Remove the side cover, locate the dedicated holes, and bolt the screws.



Using a screwdriver, remove the cover of the Switch Panel Control Box:

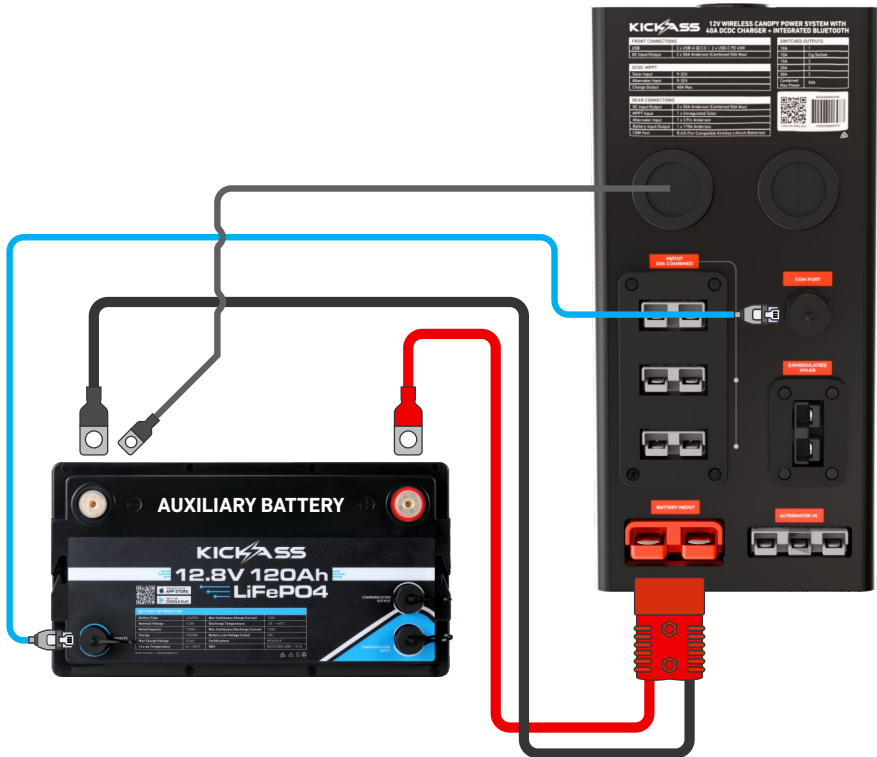
### For right side mounting

To install the system on the right side, use the provided brackets. Fit four into the dedicated holes and secure using the provided screws.



## WIRING

For auxiliary battery terminals to battery input, auxiliary battery data cable to communication port, and temperature sensor to negative (-) battery terminal



## CONNECTING DC LOADS TO SWITCH PANEL CONTROL BOX

Using a screwdriver, remove the control box cover:



Using a screwdriver, remove the cover of the Switch Panel Control Box:

## 8 CIRCUIT FUSE BLOCK

CIRCUIT 1	CIRCUIT 2	CIRCUIT 3	CIRCUIT 4
30A	20A	15A	10A
CIRCUIT 5	CIRCUIT 6	CIRCUIT 7	CIRCUIT 8
30A	20A	15A	10A





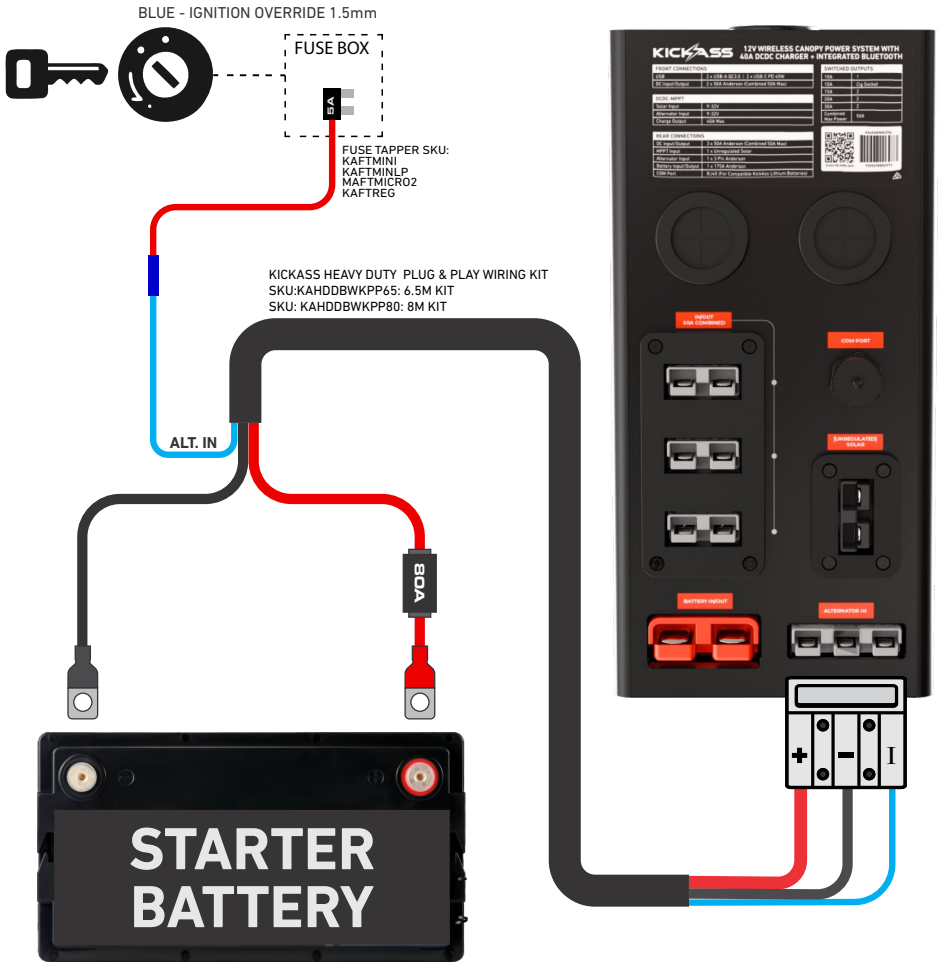
Use the o-ring seal caps on the canopy to route your DC load cables:



Reattach the cover and secure using a screwdriver:

# DCDC CHARGER INPUT CONNECTIONS:

## ALTERNATOR WIRING



### WARNING:

1. Please check product specifications if connecting multiple charging sources.
2. Do not use an external charger while the DC-DC Charger is operating.



# AC CHARGER INSTALLATION (OPTIONAL)

Locate the three mounting holes at the top of canopy. Align your AC charger on the holes and secure using screws.



# PRODUCT CONFIGURATION


## DCDC CHARGER

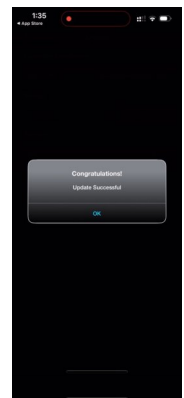
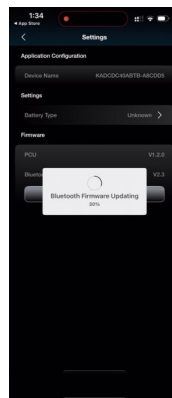
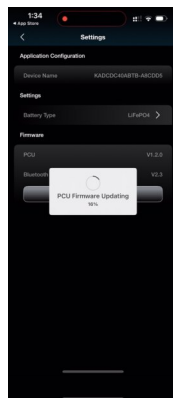
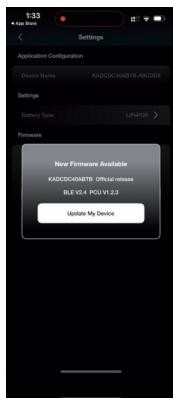
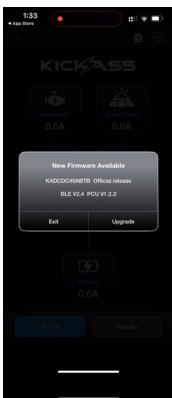
Check whether the DCDC charger's battery type is set to LifePO4. If it is not, please follow these steps:

### Setting the Battery Type – via Mode Switch

1. Press and hold the MODE button for four seconds.
2. The selected mode will flash indicating that the charger has entered battery selection mode.
3. Press the mode button repeatedly to cycle through the available battery types:  
**AGM ▶ Cal (Calcium-based) ▶ LiFePO4 (Lithium) ▶ Gel ▶ Wet**
4. Stop on the desired battery type; it will be saved automatically after a short pause.

### Setting the Battery Type – via Bluetooth App

1. Download the mobile application from the Apple App Store or Google Play Store.
- 
- KA CHARGE** 4.4  
Kickass Products Pvt Ltd  
Designed for iPhone  
Free
2. When the Bluetooth mobile application first connects to the DCDC charger, it will automatically check for any available firmware updates. If an update is available, it must be downloaded and installed before the app can be used.

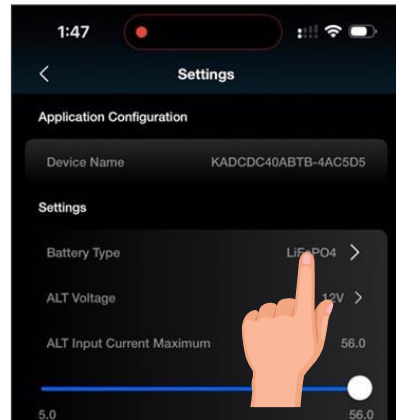
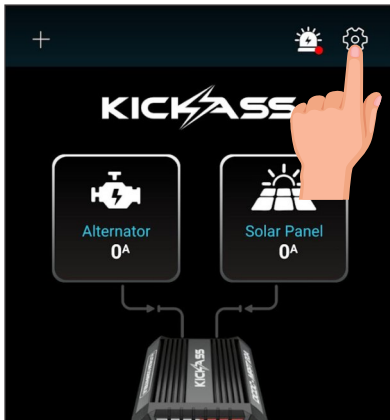


During the Over-The-Air (OTA) update process, all LED status lights on the DCDC charger will flash.



*Important: Do not disconnect power to the DCDC charger or close the app while the OTA update is in progress.*

3. Configure the battery type by tapping the Settings icon on the main page of the app. Select Battery Type and select the battery type you are using.



# WIRELESS SWITCH PANEL

## CHANGING THE POWER MODE FOR EACH BUTTON / DEVICE

Each switch panel button's mode can be configured to operate in one of four power modes: constant, momentary, strobe, or pulse.



**Constant (red):** Press the button to turn the selected device on, and press again to turn it off. This is the default mode and requires no setup.



**Momentary (blue):** The selected device turns on only while the button is pressed and turns off immediately when the button is released.



**Pulse (green):** Pressing the button causes the selected device to cycle on and off rapidly (less than a second per cycle). Press the button again to stop.



**Strobe (blue):** Pressing the button causes the selected device to flash repeatedly in a rapid on-off pattern. Press the button again to turn it off.

## CONFIGURE THE SWITCH MODE FOR EACH BUTTON:

1. Press and hold the BRIGHTNESS ADJUSTMENT button until the button indicators start flashing.
2. All buttons will illuminate red (constant), which is the default mode.
3. Press the button you want to configure. Each press cycles through the modes in the following order:  
**RED (CONSTANT) ▶ BLUE (MOMENTARY) ▶ GREEN (PULSE) ▶ BLUE (STROBE) ▶ RED (CONSTANT)**
4. Continue pressing each device button until your preferred modes are selected.
5. Save the configuration using one of the following methods:
  - a. Press and hold the BRIGHTNESS ADJUSTMENT button until the indicators turn off.
  - b. Wait at least 8 seconds for the indicators to turn off automatically.

## ADJUSTING THE BACKLIGHT BRIGHTNESS

- The backlight has five brightness levels, ranging from 0% to 100%.
- Single pressing the BRIGHTNESS ADJUSTMENT button will cycle through the levels in the following order:

**0% ▶ 20% ▶ 40% ▶ 60% ▶ 80% ▶ 100% ▶ 0%**

## CHANGING THE COLOUR OF THE BUTTON BACKLIGHT

The switch panel supports eight solid colours and two special lighting patterns.

- Press the RGB button to cycle through the available colours in this order:  
**RED ▶ YELLOW ▶ LIGHT GREEN ▶ GREEN ▶ CYAN ▶ BLUE ▶ PURPLE ▶ WHITE ▶ BREATHING (CYCLES THROUGH ALL COLOURS) ▶ JUMPING (CYCLES THROUGH ALL COLOURS) ▶ RED**

## USING THE REMOTE DISPLAY UNIT

### Turning the screen on/off

The screen can be turned on/off by clicking Button B. To save power, the screen will turn off automatically after prolonged inactivity. To set the duration of the screen "On" time before turning off, hold Button B for five seconds until the Screen time menu appears. Navigate through the menu using the buttons. To confirm selection, wait 5 seconds for the home screen to return.

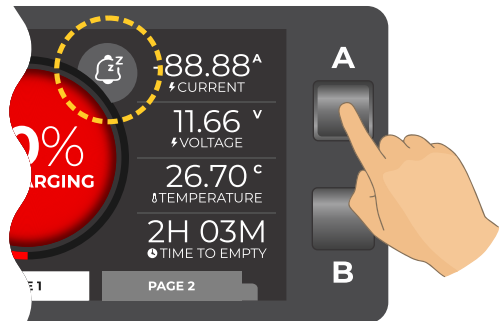
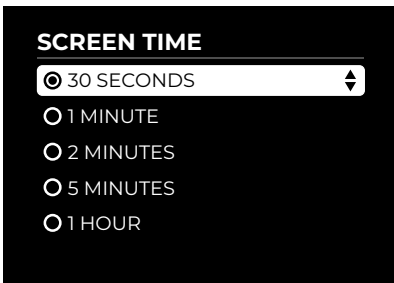
### Switching between Displays

The display can be switched between Page 1 and Page 2 by clicking Button A.

### Low Battery Alarm & Muting Feature

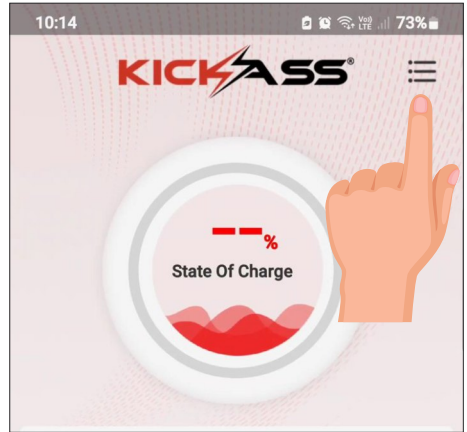
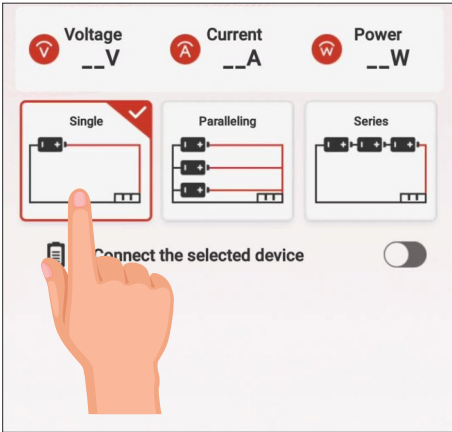
A low battery alarm will sound when the battery's state of charge falls below 10%. To mute the alarm, press and hold button A for 5 seconds or until the muted symbol displays on page 1 of the display. The alarm will stay muted for 8hrs or until the battery is charged sufficiently.

PRESS AND HOLD  
FOR 5 SECONDS

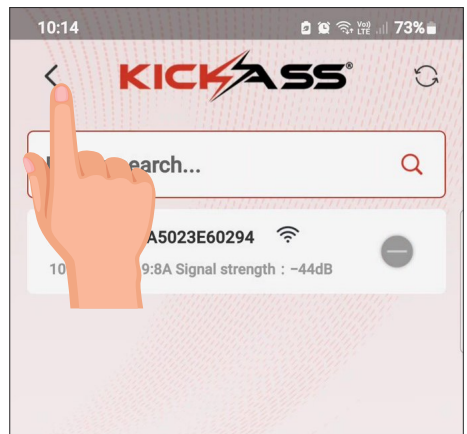
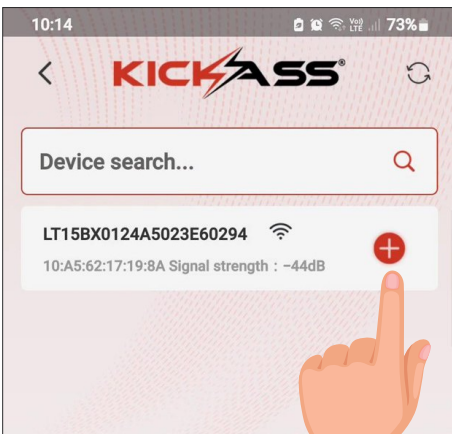


# BLUETOOTH APP CONNECTION AND OPERATION

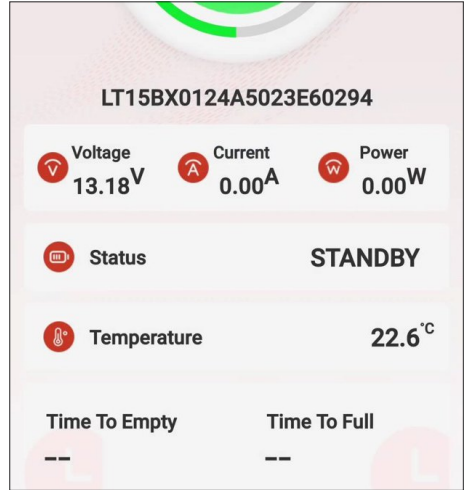
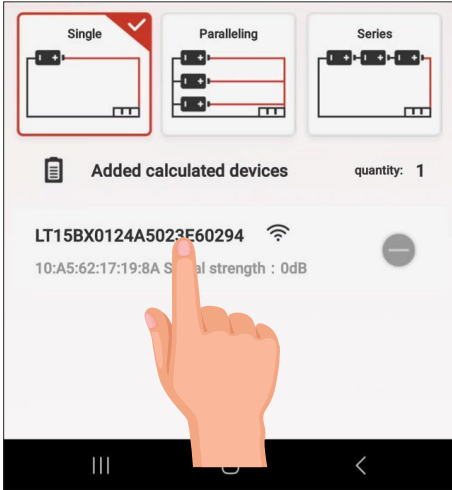
1. When the app is first launched, select your battery configuration (single or parallel). To scan for a new battery, select the scan option at the top of the screen.



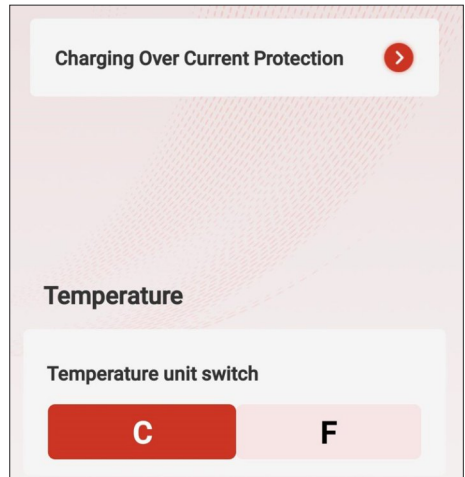
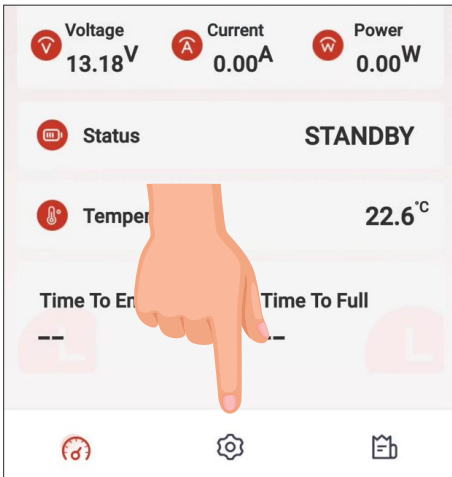
2. To select your battery, click the red icon next to the battery serial number. You can find the serial number printed on the back of your battery. Once the battery has been selected, the red icon will turn grey. Select the back button at the top of the page to return to the main battery summary page.



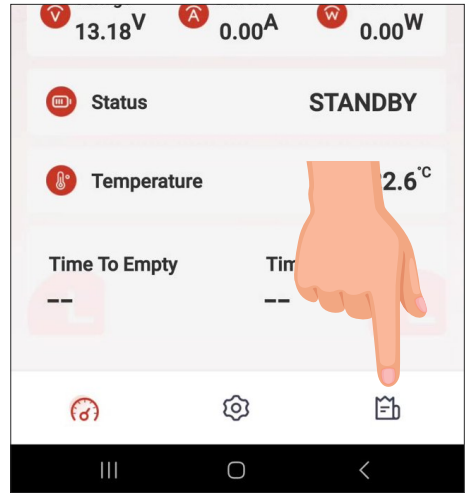
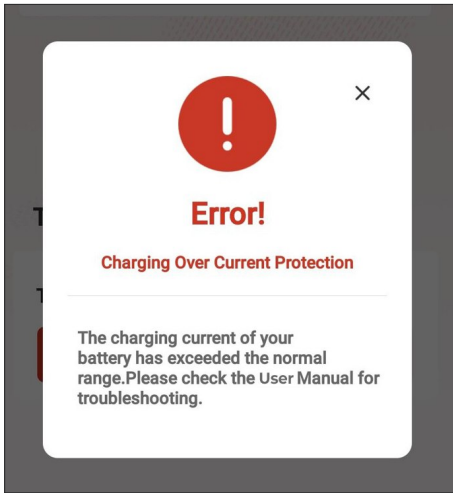
3. The state of charge (SOC), battery voltage, current and average power are shown on the main battery summary page. For detailed information about the battery, click on the battery serial number. The detailed battery information page shows state of charge (SOC), battery voltage, current, average power, status (standby, discharging, charging), battery temperature, time to full and time to empty.



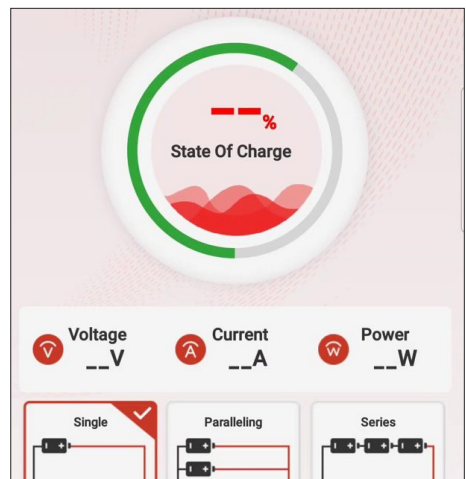
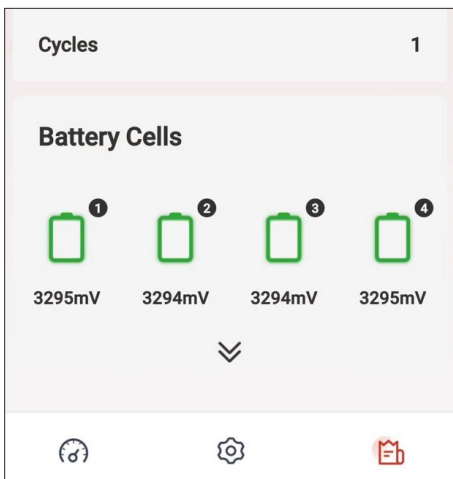
4. For system warning information and to change the temperature units, press the settings icon. Active system warnings will be shown on this page. Select the red arrow for further information. Select the preferred temperature units for display.



5. Example of further information of a system warning. Select the configuration button battery performance information.



6. The battery performance page shows the battery health, the serial number / name, rated capacity, cycle count and cell voltage information. After disconnecting from the battery, the battery can be reselected from the quick start list on the main page of the app. To reconnect to the battery, press the red plus symbol.



# USING TWO SWITCH PANELS

For added convenience and extra control, you can purchase an additional switch panel. The panel includes a charging cradle and mounting bracket kit.



**KAWLSWPANEL-8-KMII-CP** (for 8-gang)

To pair the additional switch panel:

- Fully charge the switch panel before first use.
- Pair the additional switch panel:
  - On the control box, press and hold the PAIRING button (located in the middle). The indicator light above it will start flashing red, indicating it is in pairing mode. Release the button.
  - On the switch panel, press and hold the RGB button until it turns red.
  - Check the indicator light of the control box. If it is solid on, the pairing is successful. If not, repeat first step.
- Once both switch panels are successfully paired to the control box, they can be used together seamlessly.
  - When both controllers are switched on, all functions selected on one controller will automatically sync with the other: power on/off, light modes, accessory on/off etc.
  - Or you can use just one controller while the other is switched off.

# TROUBLESHOOTING

<p>Anderson socket and/or cigarette sockets suddenly stopped working</p>	<ul style="list-style-type: none"><li>• Check that the combined load for the front Anderson sockets (two) or the rear Anderson socket (three) do not exceed 50A, or the cigarette sockets at 10A. Reduce the load connected if necessary.</li><li>• The sockets will reset automatically once the excess current is removed.</li><li>• Inspect the connected devices and cables for faults or excessive current draw.</li><li>• Ensure connectors are fully seated and free of debris.</li></ul>
<p>My device or accessory is not responding to the control from the switch panel</p>	<ul style="list-style-type: none"><li>• Open the control box cover and check the operation switch (located above the +VE terminal). Set the switch to Battery (left) for constant operation from the switch panel. Set it to ACC (right) if you want the unit to operate only when the vehicle is in accessory mode or the engine is running.</li><li>• Check for blown fuses in the control box. Replace if needed.</li><li>• Check wiring connections at the control box for loose, damaged, or corroded terminals. Re-tighten or replace if necessary.</li><li>• Confirm the total current draw of your load does not exceed the circuit's rating.</li></ul>
<p>The fuse for a particular circuit keeps blowing</p>	<ul style="list-style-type: none"><li>• Ensure the correct fuse rating is being used for the connected appliance. A fuse that is too small for the load's current draw, or for short power spikes during start-up, will blow repeatedly. Replace with the appropriate fuse as specified for that circuit.</li></ul>

# WARRANTY & SUPPORT INFORMATION

## KICKASS LIMITED WARRANTY

Your KickAss product is backed by our limited warranty against defects in materials and workmanship for the applicable warranty period. Warranty periods vary by product - please check the product page or the KickAss Warranty Index for details.

If a fault covered by warranty occurs, KickAss will, at its discretion:

- Repair the product, or
- Replace the product with the same or equivalent model, or
- Provide another suitable remedy in line with Australian Consumer Law (ACL).

Warranty claims may be declined if the issue is caused by:

- Normal wear and tear.
- Improper use, faulty installation, or lack of maintenance.
- Modifications, tampering, or unauthorised repairs.
- Accidents, damage in transit (customer organised), or environmental causes.
- Consumable items, unless defective in materials or workmanship.
- Damage caused by external events such as severe weather (including storms, lightning, hail, or flooding), fire, impact, explosions, vandalism, or theft.

## MAKING A WARRANTY CLAIM

1. Visit our Support Portal: [supportportal.kickassproducts.com.au](https://supportportal.kickassproducts.com.au)
2. Locate your product via the Products & Troubleshooting section.
3. Submit a claim through the product form and follow the guidance from our Customer Service Team.

All warranty claims must include a completed product form, proof of purchase, and clear evidence of the defect or fault. Incomplete submissions or missing information may cause delays in processing and could result in your claim being declined.

Costs from third-party inspections or repairs are not covered unless approved in writing by KickAss.

## YOUR RIGHTS UNDER ACL

This warranty is provided in addition to your rights under the Australian Consumer Law. You may be entitled to a replacement or refund for major failures, and to compensation for other reasonably foreseeable loss or damage.

### Need Help?

**Product Support:** [support@kickassproducts.com.au](mailto:support@kickassproducts.com.au)

**Warranty Claims:** [warranty@kickassproducts.com.au](mailto:warranty@kickassproducts.com.au)

**Customer Support Portal:** [supportportal.kickassproducts.com.au](https://supportportal.kickassproducts.com.au)

# KICKASS

KickAss is a registered trademark of  
KickAss Products Pty Ltd.

Designed & imported by  
KickAss Products Pty Ltd  
39 Iris Place, Acacia Ridge, QLD 4110  
Australia

Made in China

