



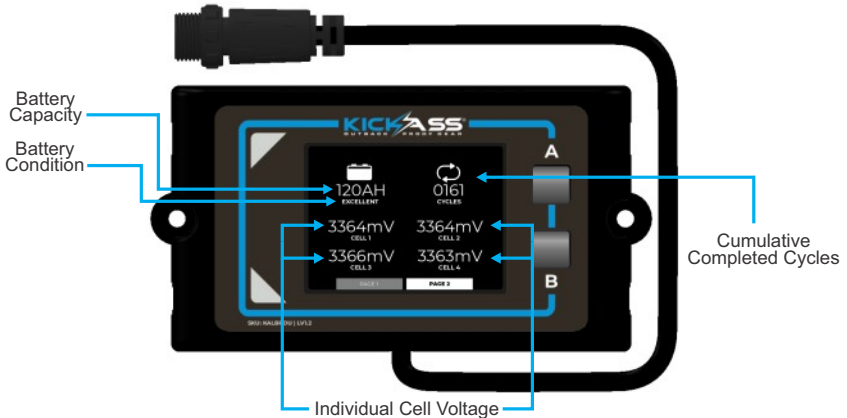
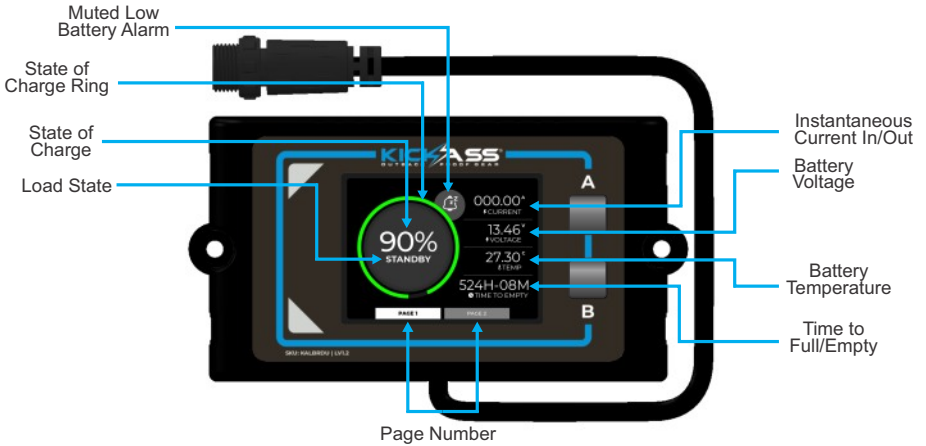
# LITHIUM BATTERY REMOTE DISPLAY UNIT MANUAL



# INTRODUCTION

Thank you for purchasing the KickAss Lithium Battery remote display unit (RDU). The rdu has been specifically designed to pair seamlessly with the KickAss Lithium Battery range. The rdu allows you to monitor the state and condition of the battery from up to 10m away. The unit features the following:

- Battery state of charge (SOC %).
- Instantaneous current flow, positive when charging, negative when discharging
- Battery pack voltage and individual cell voltages
- Battery temperature
- Remaining time to full/empty at the current rate of charge/discharge
- Total capacity of battery
- Number of full cycles the battery has completed. A full cycle is defined by 100% discharge and re-charge of a battery. Depleting a battery to 50% and recharging it twice will result in 1 cycle.
- Mutable low battery charge alarm
- Battery capacity condition state (excellent, good, fair, bad)
- Battery protection alarms
- Versatile cable mounting positions



Right cable arrangement

Left cable arrangement



Center cable arrangement

## WHATS INCLUDED



1 x RDU unit



2 x 4M Screws



## OPTIONAL ACCESSORIES

Up to two additional RDU Extension Cables  
SKU: KARDUEXT5M



5m extension cable

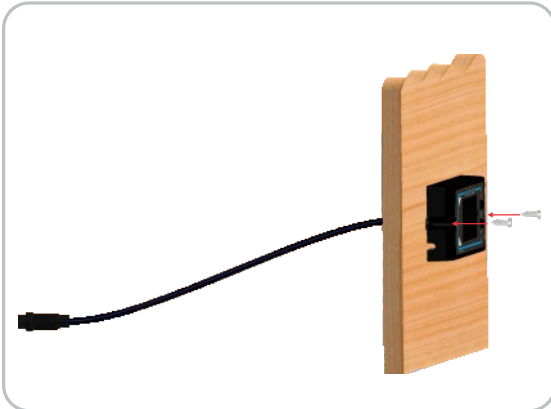
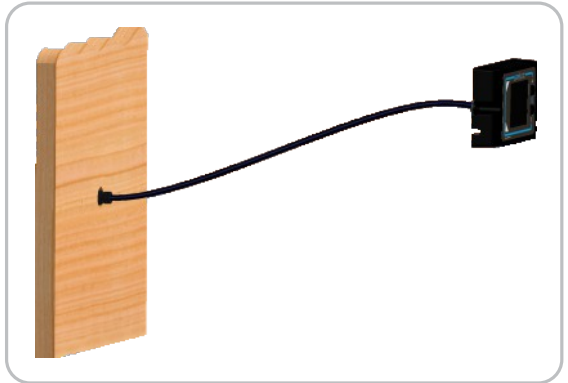
# MOUNTING

The Remote Display Unit features versatile cable mounting positions.

In the position where the RDU will be installed, mark hole locations as per the drilling template.  
(see last page)

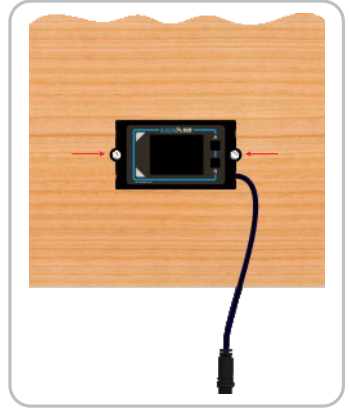
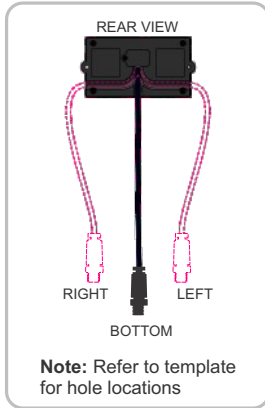
## Mounting Through Wall

1. Using a 2mm drill bit, Drill a 15mm deep pilot hole into the mounting surface. When through wall mounting the unit, drill an additional 18mm hole for the dongle to pass through.
2. Guide the wire and dongle through the hole then screw the unit on its side on the surface with the provided screws.



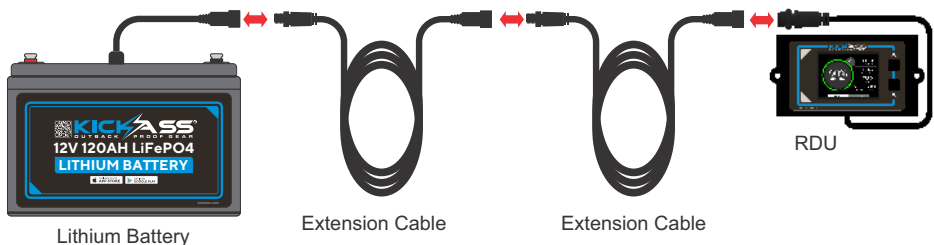
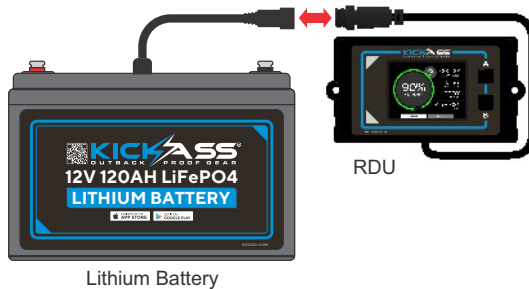
## Mounting On Wall

1. Select which direction you want the cable to extend to. (3 options available - bottom, left & right sides).  
On the sample below, we chose to extend it to the right side of the unit.
2. Drill pilot holes for the screws.
3. Align your unit to the pilot holes and screw in place.



## CONNECTING THE RDU

The RDU can be connected to your KickAss Lithium Battery with up to two 5m RDU extension cables. To connect the RDU to the battery, connect the black data dongle on the RDU to the black data connector on the battery.



# USING THE RDU

## 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.

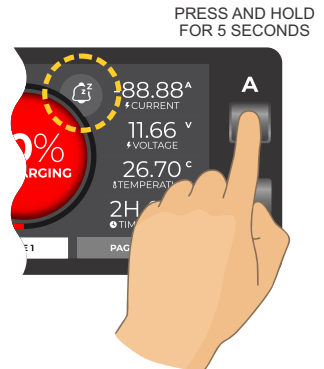


## Switching between Displays

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.



# KICKASS LITHIUM BMS ALARM MODES

The KickAss Lithium battery is fitted with Battery protection features which protect the cells from damage. When these protection features are activated, the following will be displayed on your RDU display:

ALARM MODE	LCD SCREEN SYSTEM WARNING
<b>Over Voltage Protection:</b> The voltage of your battery has exceeded the normal range. Remove charger from battery	A red circle with a white exclamation mark on a black background. Below it, the text reads "CHARGING OVER VOLTAGE (Check Manual)".
<b>Under Voltage Protection:</b> The voltage of your battery is below the normal range. Connect charger to battery	A red circle with a white exclamation mark on a black background. Below it, the text reads "UNDER VOLTAGE (Please Recharge)".
<b>Charging High Temperature Protection:</b> The temperature of your battery has exceeded the normal range. Disconnect all loads/chargers and place your battery in a cooler location	A red circle with a white exclamation mark on a black background. Below it, the text reads "CHARGING HIGH TEMPERATURE (Check Manual)".
<b>Charging Low Temperature Protection:</b> The temperature of your battery is below the normal range. Disconnect all loads/chargers and place your battery in a warmer location	A red circle with a white exclamation mark on a black background. Below it, the text reads "CHARGING LOW TEMPERATURE (Check Manual)".
<b>Discharging High Temperature Protection:</b> The temperature of your battery has exceeded the normal range. Disconnect all loads/chargers and place your battery in a cooler location	A red circle with a white exclamation mark on a black background. Below it, the text reads "DISCHARGING HIGH TEMPERATURE (Check Manual)".
<b>Discharging Low Temperature Protection:</b> The temperature of your battery is below the normal range. Disconnect all loads/chargers and place your battery in a warmer location	A red circle with a white exclamation mark on a black background. Below it, the text reads "DISCHARGING LOW TEMPERATURE (Check Manual)".
<b>Charging Over Current Protection:</b> The charging current of your battery has exceeded the normal range. Disconnect all chargers from the battery	A red circle with a white exclamation mark on a black background. Below it, the text reads "CHARGING OVERCURRENT (Check Manual)".
<b>Discharging Over Current Protection:</b> The discharging current of your battery has exceeded the normal range. Disconnect all load from the battery	A red circle with a white exclamation mark on a black background. Below it, the text reads "DISCHARGING OVERCURRENT (Check Manual)".
<b>Short Circuit Protection:</b> The battery is short-circuited. Check all wiring and connections for short circuits	A red circle with a white exclamation mark on a black background. Below it, the text reads "Short Circuit Protection (Check Manual)".

# DRILLING TEMPLATE

