TUFF TERRAIN
4 x 4   A C C E S S O R I E S

12V MINI
POWER BOX
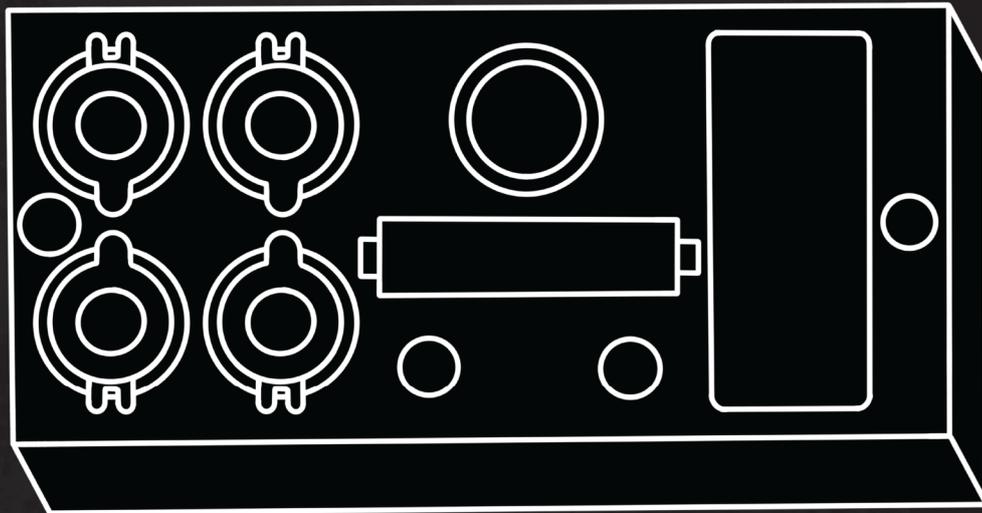
USER MANUAL

MENU

TUFF TERRAIN

01 / INTRODUCTION

The 12V Mini Power Box is a compact low voltage distribution device with multiple outlets suited to 12 Volt and other low voltage appliances.

The Mini Power Box is perfect for use when connecting many devices to one 12 Volt power source as the multiple sockets allow for easy connection. Up to 5 x 12 Volt main devices can be connected and up to 6 x USB devices with a maximum current of 40 Amps.

The 12V Mini Power Box has an inbuilt voltmeter for battery voltage monitoring and also an integrated LED interior light with dimming function. The unit can be used as a portable freestanding device or it can be mounted for fixed installation.

We hope you enjoy your Mini Power Box, please read the instructions below carefully to get the most out of it.
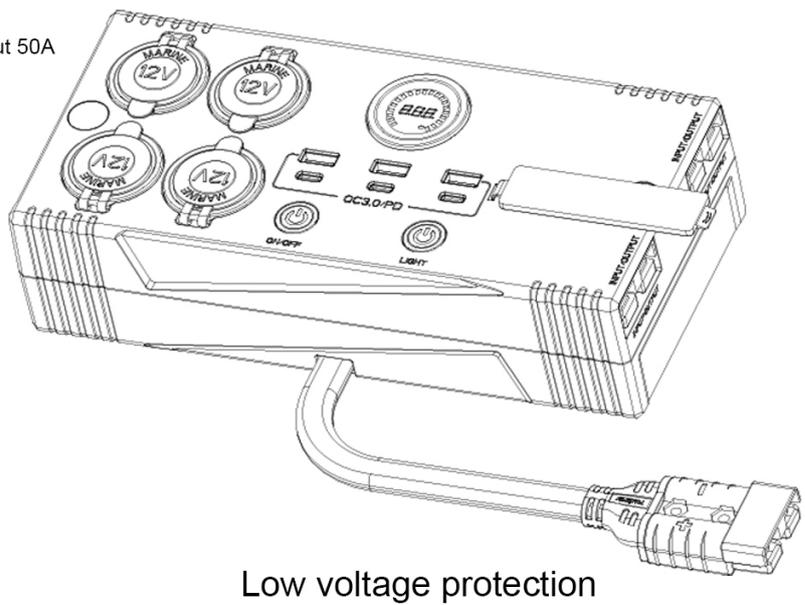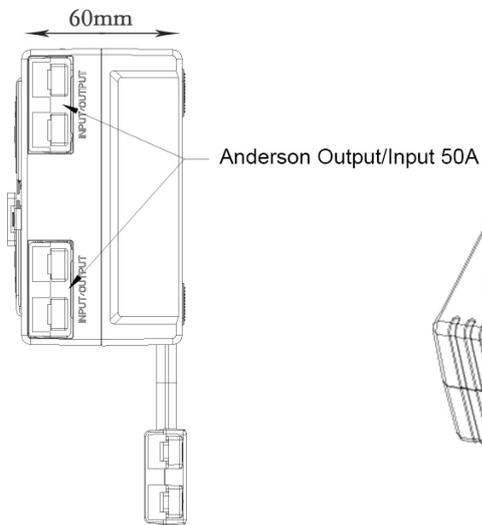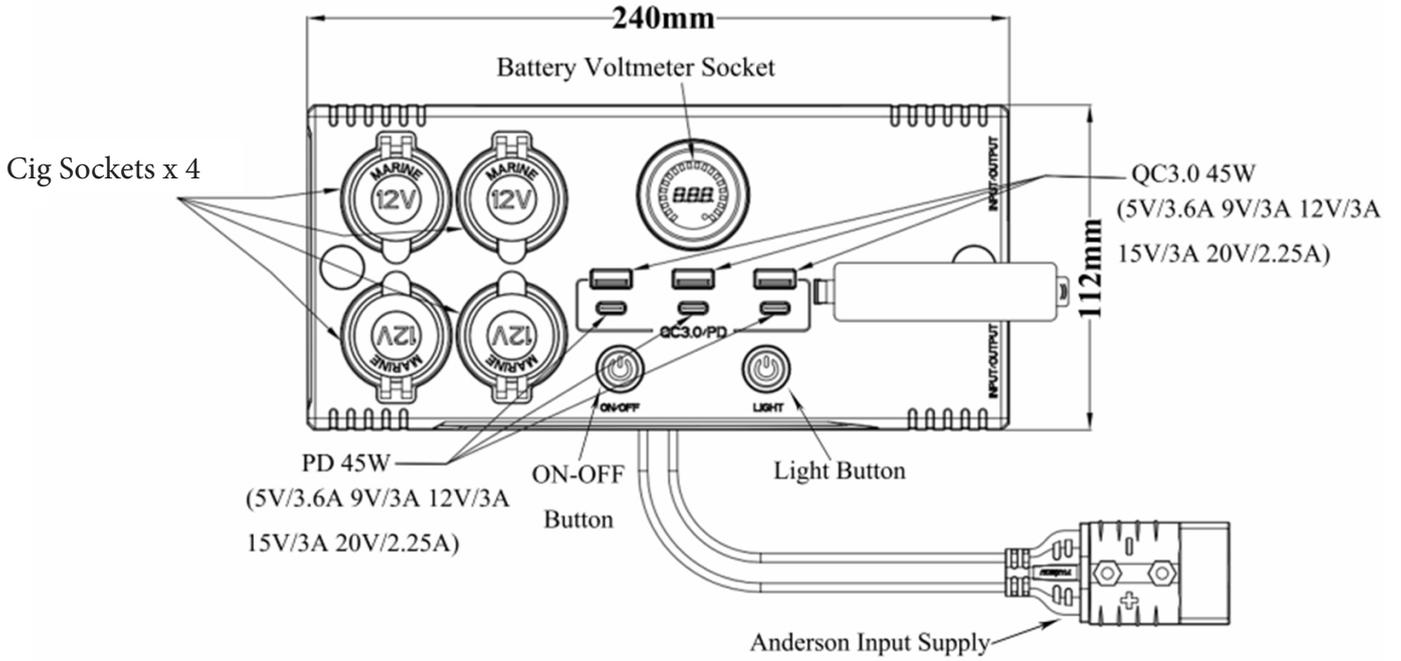
02 / INSTALLATION

The Mini Power Box may be used free standing for portable use. If however you want it permanently mounted follow the steps below:

a) Ensure the installation area is a flat surface and accessibility to the unit is not obstructed.

b) Ensuring the unit is level use the screws provided to secure. We recommend pre drilling the mounted surface first and fastening the screws by hand. screwdriver only. Do not over tighten the mounting screws.

c) Connect the 12 Volt supply via the input Anderson style connector. This is either a permanent supply from a battery, or it could also be from and Anderson extension cable from a portable battery box when using the unit for portable use.

The unit is now ready for use.

TUFF TERRAIN

240mm

Battery Voltmeter Socket

Cig Sockets x 4

MARINE 12V
MARINE 12V
888

12V MARINE
12V MARINE

QC3.0/PD

ON-OFF

LIGHT

INPUT/OUTPUT

112mm

QC3.0 45W
(5V/3.6A 9V/3A 12V/3A
15V/3A 20V/2.25A)

PD 45W
(5V/3.6A 9V/3A 12V/3A
15V/3A 20V/2.25A)

ON-OFF
Button

Light Button

Anderson Input Supply

60mm

INPUT/OUTPUT

INPUT/OUTPUT

Anderson Output/Input 50A

MARINE 12V
MARINE 12V
888

12V MARINE
12V MARINE

QC3.0/PD

ON-OFF

LIGHT

Low voltage protection

04 / OPERATION

VOLTMETER & USB PORTS

Once installed and connected to a 12 Volt power source the unit is ready to power devices. The On/Off button is used to turn the voltmeter display on and off. All other outputs including the USB/PD/QC and 50A Anderson ports are always ON as soon as the main input supply is connected.

LED LIGHT

To operate the LED light, simply press the Light button to active the LED light. The brightness of the light can be adjusted in steps. Simply keep pressing the Light button to reach the desired brightness. To turn off the light, keep pressing until the light goes out.

CIGARETTE SOCKETS & ANDERSON INPUTS/OUTPUTS

Both cigarette sockets and Anderson sockets will supply 12 volts as soon as the 12 Volt input is connected. The Anderson input/outputs can also accept a charging connection such as a solar panel. DC charger input, alternator input or battery charger. When connecting a charging connection input to the Mini Power Box ensure that it is a regulated charge and do not exceed 40Amps. When in use, do not exceed 40Amps maximum current draw. Do not exceed 10Amps per Cig socket.

05 / TROUBLESHOOTING

PROBLEM	*SOLUTION*
USB/PD/QC Ports not working/ changing.	Ensure the unit is at operating voltage 12 Volt+
The LED Light button is not working.	a) Ensure the unit is at operating voltage 12 Volt+ b) Ensure you have pressed the button multiple times to step up the brightness level.
There is no power from the cigarette sockets.	The internal fuse may have blown. Carefully unscrew the back of the unit, there is one spare red 10A fuse inside which can be used for quick field repair.
There is no power from the unit at all.	The unit may be overloaded. There is an auto reset circuit breaker inside. Disconnect all appliances, wait 5 minutes, then check ON modes is working. If so, try appliances one by one to ensure no short circuits.

TUFF TERRAIN

06 / SPECIFICATIONS

GENERAL INFORMATION

VOLTAGE: 12 Volt DC
CURRENT MAX:
- CIG SOCKETS 30A FUSED
(SPARE INSIDE)
- ANDERSON STYLE INPUT/OUTPUTS
50A
TOTAL AUTO RESET BREAKER
USB-C PD: 3 X 45W
OC 3.0: 3 X 45W

BATTERY STATE OF CHARGE GUIDE

12.7 VOLT 100% 25.4 VOLT. 100%
12.5 VOLT-80%
25 VOLT 80%
24.4 VOLT-50%
12.2 VOLT 50%
10.5 VOLT FLAT 21 VOLT-FLAT
INPUT CONNECTION
50AMP ANDERSON CONNECTOR
1M 8B&S CABLE

TUFF TERRAIN