

**PROJECTA**

**12 Volt 1500 Amp Intelli-Start**

# **LITHIUM JUMPSTARTER**



P/No. IS1500

## IMPORTANT SAFETY INFORMATION

Please read this manual thoroughly before use and store in a safe place for future reference.

### WARNINGS

- **Do not jumpstart 24V batteries.** This unit is designed for 12V vehicles only and will not operate when used on 24V vehicles.
- **Risk of explosive gas.** Working in the vicinity of car batteries can be dangerous. Batteries release explosive gases during normal operation, charging and while jumpstarting a battery. Before using this jumpstarter, read and follow the instructions carefully. Follow all manufacturer's instructions and warnings of the vehicle's battery and other equipment being used.
- **Jumpstart lead acid batteries only.** Do not use to jumpstart dry cell batteries commonly found in household appliances. These batteries may burst and cause injury and/or property damage.
- Do not smoke, use matches, use a cigarette lighter, or allow a spark or flame near the battery.
- Do not allow metal to come in contact with the battery posts. It may spark or short-circuit the battery and cause an explosion.
- Remove rings, bracelets, necklaces and watches when working with a lead acid battery.
- The Jumpstarter contains a sealed non-spillable Lithium Iron Phosphate battery. It must be disposed of properly.
- Ensure correct polarity when connecting to vehicle.
- Do not submerge jumpstarter in water, keep out of the rain.
- IS1500 is not rain proof and is not designed to be left outside of extended periods of time or submerged in water.
- Do not store the jumpstarter in temperatures above 45°C or below -10°C as this can affect the health of the battery.

### IMPORTANT CHARGING INFORMATION

- Charge the IS1500 jumpstarter prior to use, this may take up to 24 hours.
- Recharge the jumpstarter after every use and follow charging instructions.
- When the jumpstarter is not in use ensure it is always on charge.
- Do not allow the jumpstarter to become very flat. If the 'Low' BATTERY STATUS LED is illuminated on the front of the unit, ensure the jumpstarter is charged immediately.

### FEATURES

#### RAPID RECHARGE TECHNOLOGY (RRT)

The Lithium Iron Phosphate (LiFePO<sub>4</sub>) battery is able to rapidly recover charge from the vehicles alternator. Leaving the clamps connected to the vehicle battery for 40 seconds will recharge the jumpstarter to 100%\* of the original charge status. Once the jumpstarter is fully charged the RRT will shut off avoiding overcharging.

## **JUMPSTARTING PERFORMANCE**

This jumpstarter is designed to start vehicles that require a clamp output of up to 550 Amps to start their engine. Fully charged with 20 seconds of RRT the IS1500 can do 150 petrol or 26 diesel starts (without a battery) or 300 petrol and 144 diesel emergency jumpstarts (with flat vehicle battery\*\*). With 40 seconds of RRT the jumpstarter will not need to be recharged during the working day. However it is recommended that the IS1500 be charged on the dock when not in use to increase the battery life by 10–20%.

## **ENGINE BAY SAFE OPERATION**

The IS500 jumpstarter is light and compact compared to conventional Lead Acid jumpstarters. With best in class over-mould material which provides secure grip and impact protection allowing users to operate the unit on the engine or starter battery.

## **HIGH PERFORMANCE BATTERY**

High quality 4-cell 8Ah Lithium Iron Phosphate battery delivers instant starting power to petrol and diesel vehicles. The battery offers longer life, better power density and is inherently safer (compared to lead acid batteries and other Lithium Batteries e.g. Lithium Cobalt). It is certified to meet International Standard UN DOT 38.3.

## **ULTRA LOW BATTERY LEAKAGE CURRENT**

A special circuit is added to prevent internal battery from leaking current. The user doesn't need to worry about battery depletion over time. Simply put it has longer shelf life between recharging.

## **DOCKING STATION FOR 240V**

A slim and stable docking station is provided to allow the unit to be charged from a 240 Volt AC outlet.

## **AUTOMATIC CELL BALANCED CHARGE CONTROL**

Automatically stops charging when the battery is fully charged and initiates maintenance mode, keeping the battery fully charged ready for use. You can leave the unit on charge indefinitely without the risk of overcharging. Using the docking station increases the life by 10–20%.

## **REVERSE POLARITY PROTECTION & ALARM**

Prevents sparking from accidental reverse connection. Alarm sounds when jumpstarter clamps are connected incorrectly. If the alarm sounds check for reverse connection.

## **OVER-TEMPERATURE PROTECTION**

Should the unit overheat by continuous or numerous jumpstarts, the unit will shut off automatically and restart once the over-temperature condition subsides.

## **UNDER-VOLTAGE AND OVER-VOLTAGE PROTECTION**

The jumpstarter will deactivate and sound an alarm if connected to a vehicle battery which is higher than 14.6V, or if the internal battery is discharged to a level whereby the battery might be damaged.

## **BATTERY AND JUMPSTART STATUS INDICATION**

Monitor the jumpstarter's charge level and display jumpstart status from the easy to read LED indicators and BATTERY STATUS button.

## **SURGE PROTECTION**

Allows safe jumpstarting of vehicles with EFI (electronic fuel injection) and computer management systems.

\*Under normal conditions with a fully functioning alternator.

\*\*Tested on Ford Ranger 3.2L Diesel and Ford Territory 4.0L Petrol with a flat battery on good condition.

# SPECIFICATIONS

<b>Battery</b>	
Battery Capacity	8Ah
Battery Chemistry	Lithium Iron Phosphate (LiFePO <sub>4</sub> )
Peak Amps	1500A
Clamp output	550A
Number of Jumpstarts (vehicle without a battery)	150 Starts (Petrol), 26 Starts (Diesel) UNLIMITED with 40 sec RRT*
Number of Emergency Jumpstarts (with a flat vehicle battery**)	300 Starts (Petrol), 144 Starts (Diesel) UNLIMITED with 40 sec RRT*
Battery Cycles	2000
<b>Jumpstarter Leads</b>	
Length	0.55 metres
Cable	20mm <sup>2</sup> pure copper wire
Polarity protection	Automatic solenoid control
<b>Recharging</b>	
Via	Charger Docking Station
Source	112V/1A AC Adaptor
Main Charge	Internally cell-balanced Constant Current/Constant Voltage
Maintenance Charge	Constant Voltage at 14.6V
<b>Jumpstart Connection Voltages</b>	
Auto Connect	3.0V–15.0V
Override	<3.0V
<b>Jumpstarter</b>	
Weight	4Kg
<b>Dimensions</b>	
Height	196mm
Length	235mm
Width	180mm
Lead Length	550mm
Operating Temperature	-10°C to 60°C (Discharge), 0°C – 45°C (Charge)
Storage Temperature	-10°C to 45°C

\*Under normal conditions with a fully functioning alternator.

\*\*Tested on Ford Ranger 3.2L Diesel and Ford Territory 4.0L Petrol with a flat battery on good condition.

## LED INDICATION

Battery Status LED	Jumpstart Status LED	Audio Alarm	Description
<b>On Charging</b>			
Yellow (Flashing)			The jumpstarter is being charged
Green (Solid)			The jumpstarter is fully charged
<b>Rapid Recharge from Alternator</b>			
Red/Green (Flashing)			The jumpstarter is being charged
Green (Flashing)			The jumpstarter is fully charged
<b>Not On Charge – Press “Test” Button to Check internal Battery Status</b>			
Green (Solid)			Battery is full and ready for use
Yellow (Solid)			Not fully charged but still good to use
Red (Solid)			Internal battery voltage is low and needs to be charged. It might not have sufficient capacity to jumpstart the vehicle.
Red (Flashing)			Internal battery voltage is too low and needs to be charged immediately.
<b>Jumpstarter connected to the car battery (&gt;3V) or Press Override Button</b>			
	Green (Solid)		
<b>Error Indication</b>			
	Red (Solid)	On	Reverse Connection or Input over-voltage is detected
	Red (Flashing)	On	Short-circuit, overload or over-temperature is detected

## PRODUCT OVERVIEW



## VEHICLE JUMPSTARTING INSTRUCTIONS

NOTE: Instructions for negatively earthed vehicles only.

1. Charge your jumpstarter for 24 hours prior to first use and as soon as possible after each use.
2. Before making any connections, check the jumpstarter battery status by pressing the red BATTERY STATUS button:
  - Green LED:** Full Charge. Ready to use.
  - Yellow LED:** Medium charge. Ready to use, but recharge recommended.
  - Red LED:** Low charge. Need to be recharged and Not recommend to use.
  - Flash Red LED:** Need to be recharged immediately.
3. Turn your vehicle's ignition to OFF before connecting the jumpstarter's clamps to your vehicle.
4. Connect the red positive (+) clamp to the positive (+) terminal of the vehicle battery, then connect the black negative (-) clamp to the negative (-) terminal of the battery or a non-moving metal part of the engine block. DO NOT CONNECT TO FUEL LINE. Always double check you have proper connections.
5. Check Jumpstarter Status LED:
  - Red:** If illuminated check that the vehicle being jumpstarted is 12V, or the jumpstart cables are incorrectly connected onto the vehicle battery. This jumpstarter is suitable for 12V vehicles only.
  - Green:** Ready to jumpstart.
  - None:** If neither LED is illuminated, check that the clamps are correctly connected with good contact. If the LED's remain unilluminated it may indicate that the vehicle's battery is below 2.6V, the jumpstarter will only activate when connected to a battery above 2.6V. In this circumstance ensure all connections are correct and then press the OVERRIDE button for 2 seconds to engage the jumpstarter.
6. Turn the vehicle's ignition to ON and start the vehicle.
7. After the engine has started leave the clamps connected for 40 seconds to allow the jumpstarter recovery to occur (optional). Then disconnect the black clamp and then the red clamp.
8. Recharge jumpstarter.
  - Note:** With the use of RRT the jumpstarter does not require charging during the working day, however while not it use it should stored on the docking station to increase the life by 10–20%

## CHARGING WITH AC ADAPTOR

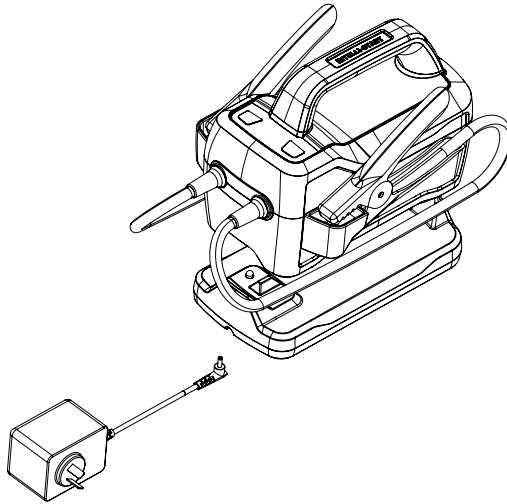
IMPORTANT: DO NOT POWER ANY APPLIANCE FROM THE JUMPSTARTER WHILE IT IS BEING CHARGED USING THE AC CHARGER.

1. To charge, plug the output end of the AC adaptor into the charging socket (back of charging dock) and connect the AC adaptor to a 240VAC outlet and turn it 'ON'.
2. The Battery Status LED will illuminate orange when charging and green when the jumpstarter is fully charged. The jumpstarter will automatically stop charging and the jumpstarter will initiate maintenance charge mode keeping the battery fully charged and ready for use without the risk of overcharging.

**Charging time:** 4–6 hours if the battery is down to 50% of its capacity.

## WHEN TO CHARGE

To prolong the life of your jumpstarter battery it is recommended to charge the jumpstarter after each use. If the jumpstarter is not being used, it is recommended to leave the jumpstarter permanently on charge ensuring the battery is always maintained fully charged and ready for use. It is recommended to charge the jumpstarter before the first use as the jumpstarter is shipped only partially charged.



## FREQUENTLY ASKED QUESTIONS

- Q. How many jumpstarts can a fully charged IS1500 do?**
- A. 150 petrol/26 diesel jumpstarts with 20 sec RRT (vehicle without a battery) or 300 petrol/144 diesel emergency jumpstarts (with a flat vehicle battery\*\*). With 40 seconds of RRT IS1500 will do an UNLIMITED\* number of starts.
- Q. Why does my jumpstarter take so long to charge?**
- A. Lower charging rate can lengthen the battery life. The built-in charging circuit provides gentle and cell-balanced 2-stage charge for the internal lithium iron phosphate battery.
- Q. Can IS1500 jumpstart vehicles at below zero temperature?**
- A. If IS1500 operates at temperatures below zero degrees, its jumpstart capacity will be reduced but it will start vehicles with lower clamp output requirements.
- Q. Why didn't my jumpstarter start my vehicle?**
- A. There could be a number of reasons why the jumpstarter did not start your vehicle. Check the following:
1. Ensure the jumpstarter is fully charged. Press the BATTERY STATUS button to check the condition of the battery.
  2. Ensure you have followed the correct operating procedure. Refer to page 6 (Vehicle Jumpstarting Instructions)
  3. Ensure the vehicle operates at 12V DC.
  4. If the ambient temperature is low (<15°C), the jumpstarter capacity will be reduced. Repeat the jumpstart routine 1–3 times as the battery performance will improve with each jumpstart.
  5. Ensure the vehicle being jumpstarted does not require a clamp output of greater than 550 Amps in order to jumpstart the vehicle.
- Q. What is Peak Amps?**
- A. Peak amps is the maximum current the battery in the Jumpstarter can produce.
- Q. What is Clamp Power?**
- A. Clamp power is the maximum current available at the clamps.

\*Under normal conditions with a fully functioning alternator.

\*\*Tested on Ford Ranger 3.2L Diesel and Ford Territory 4.0L Petrol with a flat battery on good condition.

## **WARRANTY STATEMENT**

Brown & Watson International Pty. Ltd. ("BWI") of 1500 Ferntree Gully Road, Knoxfield, Vic., telephone (03) 9730 6000, fax (03) 9730 6050, warrants that all products described in its current catalogue will under normal use and service be free of failures in material and workmanship for a period of one (1) year from the date of the original purchase by the customer as marked on the invoice (see elsewhere for specific warranty period). This warranty does not cover ordinary wear and tear, abuse, alteration of products or damage caused by the purchaser.

To make a warranty claim the consumer must deliver the product at their cost to the original place of purchase or to any other place which may be nominated by either BWI or the retailer from where the product was bought in order that a warranty assessment may be performed. The consumer must also deliver the original invoice evidencing the date and place of purchase together with an explanation in writing as to the nature of the claim.

In the event that the claim is determined to be for a minor failure of the product then BWI reserves the right to repair or replace it at its discretion. In the event that a major failure is determined the consumer will be entitled to a replacement or a refund as well as compensation for any other reasonably foreseeable loss or damage.

This warranty is in addition to any other rights or remedies that the consumer may have under State or Federal legislation.

### **IMPORTANT NOTE**

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

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