

INTELLI-START
12V LITHIUM JUMP STARTER
and Portable Power Bank



IMPORTANT SAFETY INFORMATION

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

WARNINGS

- This unit has been designed for vehicles with 12V DC electrical systems only.
- This appliance contains batteries that are non-replaceable – during charging, the battery must be placed in a well-ventilated area (for chargers for batteries that release gases into the atmosphere during normal charging).
- Risk of explosive gas. Working in the vicinity of car batteries can be dangerous. Batteries release explosive gases during normal operation, charging and jump starting. Before using this jump starter, read and follow the instructions carefully. Follow all manufacturer's instructions and warnings of the vehicle's battery and other equipment being used.
- Jump start 12V DC automotive lead acid batteries only. Do not use to jump start dry cell batteries commonly found in household appliances. These batteries may burst and seriously 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/fire.
- Remove rings, bracelets, necklaces, and watches when working at the vehicle and/or jump starting a vehicle.
- The jump starter contains a sealed non-spillable Lithium Iron Phosphate battery (LiFePO₄). This must be disposed of properly.
- Ensure correct polarity when connecting to vehicle.
- The jump starter is not designed to be left outside for extended periods of time or submerged in water.
- Do not store the jump starter in temperatures above 45°C or below -10°C as this can affect the health of the internal battery.
- Always wear eye protection when operating the jump starter.
- Although the jump starter has been designed to protect the battery, do not drop the jump starter or attempt to pierce it in any way. This can result in an explosion and/or fire.
- If the jump starter is physically damaged in any way, it should not be used.
- Not to be used by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction - children being supervised not to play with the appliance - only to be used with the power supply unit provided and it must only be supplied at SELV.
- Do not try and charge the unit via its own USB output as this will damage the jump starter and the USB output.
- Do not allow positive/red and negative/black clamp touching each other when in override mode and 12V DC mode.
- When in manual override, pay careful attention not to reverse-connect clamp or short-circuit.
- Do not charge jump starter from laptop/computer USB ports.
- Do not leave clamps connected to external battery indefinitely for it will continuously drain the jump starter battery.

- Make sure to have strong clamp connection to starting battery to maximise jump starting current.

IMPORTANT CHARGING INFORMATION

- Charge the jump starter prior to use using ISEUSB3A. This may take up to 5 hours.
- Fully recharge the jump starter after every use to ensure your jump starter is ready for use in case of an emergency.
- Do not allow the jump starter battery to become very flat. If the display shows 'Low Battery' ensure the jump starter is charged immediately to ensure the maximum battery life. Refer to "ERROR AND ALARM MESSAGES" section (page 10).
- The jump starter has a USB-C charging port. This allows the user to charge the jump starter using a USB-C cable (5V DC, 3A).
- Always use the USB-C cable and chargers that are provided with the unit.
- To extend the life of your jump starter, do not let the battery charge level fall below 1 bar.
- To extend the life of the jump starter battery, do not charge in an environment above 45°C or below 0°C.

FEATURES

RAPID RECHARGE TECHNOLOGY (RRT)

- The Lithium Iron Phosphate (LiFePO₄) battery can rapidly recover charge from the vehicle's alternator following a successful jump start. Leaving the clamps connected to the vehicle's battery for 40 seconds will recharge the jump starter to 100%¹ of the original charge status. Once the jump starter is fully charged, the RRT will shut off avoiding overcharging.

LITHIUM SAFE

- Intelli-Start Lithium Iron Phosphate (LiFePO₄) batteries are specifically designed for cranking therefore purpose built for jump starting and are safer than Lithium Cobalt (LiCoO₂) battery types. The LiFePO₄ batteries provide more starts and have an operational life of up to 2000 battery cycles.

JUMP STARTING PERFORMANCE

- This IS1400 is suitable for starting most 12V vehicles up to 7.0 litre petrol and 5.0 litre diesel.
- With 40 seconds of rapid recharge after each jumpstart, the IS1400 will not need to be recharged during the working day.
- It is recommended that the IS1400 jump starter is charged via the supplied 12-24V DC USB socket charger and USB-C cable to maximise the jump starter performance.

INTUITIVE COLOUR DISPLAY

- The intuitive colour display makes the IS1400 easy for anyone to use with step by step instructions.

INBUILT LED FLOOD LIGHT

- Provides illumination for safer, more convenient operation at night.
- The flood light will timeout after 4 hours if left on. Users should take care to turn off flood light when not used to preserve battery life.

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

POWER BANK WITH 3A USB OUTPUT

- The IS1400 allows charging of phones, tablets, and other small portable devices.

5V DC USB CHARGING

- The IS1400 can be charged via a vehicle's USB output or supplied 12-24V DC socket.

PREMIUM SPARK FREE CLAMPS

- Ensures safe jump starting.

ENGINE BAY SAFE OPERATION

- The IS1400 jump starter is light and compact compared to a conventional lead acid jump starter. With best-in-class over-mold material which provides secure grip and impact protection, it allows users to operate the unit on the engine or starter battery.

DESIGN FOR EASY TRANSPORTATION

- Ergonomically designed, the IS1400 jump starter is portable and compact compared to a conventional high-power lead acid jump starters.

HIGH PERFORMANCE BATTERY

- The high quality 4-cell, 4Ah Lithium Iron Phosphate (LiFePO₄) battery delivers instant starting power to petrol and diesel vehicles. The battery offers longer life, higher power density and is inherently safer (compared to lead acid batteries and other lithium batteries e.g., Lithium Cobalt (LiCoO₂)). It is certified to meet International Standard UN 38.3.

ULTRA LONG SHELF LIFE

- The IS1400 features a special circuit designed to prevent the internal battery from consuming current over extended period. Simply put, the user does not need to worry about battery depletion over time between uses.

AUTOMATIC CELL BALANCED CHARGE CONTROL

- Automatically stops charging when the battery is fully charged. This initiates maintenance mode, keeping the battery fully charged and ready for use. You can leave the unit on charge indefinitely without the risk of overcharging.

UNPARALLELED SAFETY AND RELIABILITY

NO SOLDERED HIGH CURRENT CONNECTIONS

- All wired connections within jump starter are crimped and bolted to ensure maximum reliability and current output.

REVERSE POLARITY PROTECTION & ALARM

- Prevents sparking from accidental reverse connection.
- The IS1400 jump starter displays and sounds an alarm when the jump starter's clamps are connected incorrectly. Refer to "ERROR AND ALARM MESSAGES" section (page 10).

OVER-TEMPERATURE PROTECTION

- The IS1400 jump starter has different layers of temperature protection. Should the unit overheat by continuous or numerous jump starts, the unit will shut off automatically and restart once the over-temperature condition subsides.

UNDER AND OVER-VOLTAGE PROTECTION

- The IS1400 jump starter will deactivate and sound an alarm if connected to a vehicle battery which is higher than 14.6V DC, or if the internal battery is discharged to a level whereby the battery might be damaged.

SURGE PROTECTION

- The IS1400 features built in surge protection so you can safely jump starting of vehicles with EFI (electronic fuel injection) and computer management systems.

SPECIFICATIONS

P/No.	IS1400
Battery	
Battery Capacity	4.0Ah at 12.8V DC, 16,000mAh at 3.2V DC, 51.2Wh
Battery Chemistry	Lithium Iron Phosphate (LiFePO ₄)
Peak Amps	1400A
Clamp Power	500A
Nominal Voltage	12.8V DC
Battery Cycles	2000
Jump starter Leads	
Length	±400mm Positive & Negative
Cable	AWG 4
Polarity Protection	MCU controlled with mechanical relay
Overload Protection	MCU controlled with mechanical relay
Recharging	
USB Charging Port	5V DC 3A max USB-C charging port, 3rd party 15W 240V AC USB adaptors can be used (not provided)
USB 12/24V DC Socket	5V DC 3A max output (provided)
DC Charging	May take up to 5 hours
Jump start Connection Voltages	
Vehicle Voltage Range	2–14.6V DC
USB	
USB Output	5V DC 3A max
USB Low Voltage Disconnect	Battery voltage at 12V DC
Cable	1m long USB-A to USB-C
Dimensions, Weight & Environmental	
Height	69mm
Length	225mm
Width	162mm (with clamp attached)
Weight	1.7kg
Operating Temperature	-20°C to 60°C
Operating Temperature (charging)	0°C to 45°C
Storage Temperature (long term)	-10°C to 45°C
Ingress Protection	IP65 (Rain Proof) with covers over the ports

PRODUCT OVERVIEW




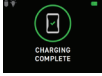



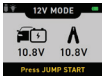


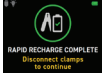



LCD DISPLAY SCREEN LAYOUT

	<ul style="list-style-type: none"> IS1400 jump starter battery status. Message Overview Icon. IS1400 jump starter suggested action.
	<p>The LCD display shows the IS1400 jump starters status and supports its operation. In addition to the primary function the LCD display shows the following icons:</p> <ul style="list-style-type: none"> USB icon (ON/OFF) Light icon (ON/OFF) IS1400 jump starter battery status icon FULL/DEPLETED/LOW

JUMP STARTER INSTRUCTIONS


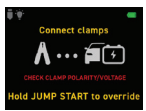
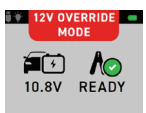
- Notes:
- Instructions for negatively earthed vehicles only. (Most vehicles after 1970 are negatively earthed).
 - Before jump starting a vehicle, it is recommended to ensure the jump starter is fully charged.

JUMP STARTING

Step	Instruction	Display
1	The IS1400 jump starter should be charged for around 5 hours prior to first use and as soon as possible after each use.	
2	If the IS1400 jump starter has been fully charged, step 3 can be skipped.	
3	Before connecting the IS1400 jump starter to a battery/vehicle, check the IS1400 jump starter battery status by pressing the  button. If the IS1400 starts up and shows the welcome screen (1 second) following with "Connect clamps" screen, you can proceed to next step. The small battery icon should be in green or at least yellow.	
4	Before connecting the IS1400 clamps to the vehicle, turn the vehicle's ignition to OFF.	
5	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. Make sure to connect clamps firmly to battery posts to maximise jump start current and the battery posts are clean from grease and dust build-up. DO NOT CONNECT TO FUEL LINE. Always double check you have proper connections.	
6a	Once the IS1400 has detected the vehicle battery voltage, press the  button to engage the jump start function.	
6b	The IS1400 is then ready for jump start.	
7	Turn the vehicle's ignition to ON and start the vehicle.	
8	After the engine has started, leave the clamps connected for a minimum of 40 seconds to allow the IS1400 RRT to charge the unit. NOTE The IS1400 will not switch OFF as long the clamps are connected to the vehicle battery. RRT (Rapid Recharge Technology) may take more than 40 seconds depending how depleted the jump starter battery is.	 
9	To turn off the IS1400, press the power button.	
10a	To disconnect the IS1400 from the battery/vehicle, disconnect the black negative (-) clamp from the negative battery pole of the battery. Disconnect the red positive (+) clamp from the positive battery pole of the battery.	
10b	If clamps are left connected after vehicle has been jump started for an extended period, the IS1400 will ask user to disconnect clamps.	

OVERRIDE MODE

Under normal conditions, the IS1400 automatically detects the jump start voltage. However, the user is required to manually select output voltage if the vehicle battery voltage is between 0 to 1V DC.


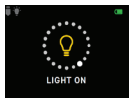
Vehicle Battery Voltage between 0V to 1V DC		
Step	Detail	Display
1	Press and hold the  button to enter override mode.	
2	"12V OVERRIDE MODE" has been entered and your vehicle is ready to be jump started.	

WARNING

- Do not allow positive (+)/red and negative (-)/black clamps to touch each other whilst jump starter is in override mode.
- Pay careful attention when enabling manual override; reverse-connection and short-circuit protections are disabled.


FLOOD LIGHT

IS1400 provides the user with ample light when checking the vehicle's various compartments in low light conditions.

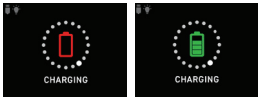
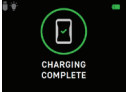

Step	Detail	Display
1	Press  button Note: <ul style="list-style-type: none"> • If the IS1400 flood light is in operation, the "LIGHT ON" icon will appear on the display • Flood light will turn off if the internal battery has low charge or after 4 hours if user does not operate the unit. 	

USB OUTPUT

The USB output allows the user to charge external compatible devices.

Step	Detail	Display
1	<p>If the IS1400 is not in jump starting operation, and the user connects an external device to charge the following screen will be displayed.</p> <p>Note: The USB output will be automatically disabled in the following conditions:</p> <ul style="list-style-type: none"> • IS1400 is turned off • Once USB device is fully charged • Exit mode • Jump start mode • Error mode • Rapid Recharge (RRT) mode • Low battery condition • Battery temperature below -20°C or above 60°C, or ambient temperature above 45°C 	



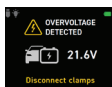
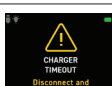













CHARGING

Step	Detail	Display
1	<p>Plug a USB-C cable into the USB-C port on the IS1400 to begin charging the jump starter.</p> <p>**Using a non-supplied charger and USB cable may extend charge time.**</p>	
2	<p>The battery charging screen will be shown when the USB-C cable is plugged into the USB-C socket of the IS1400.</p>	
3	<p>When the IS1400 is fully charged, it will display "CHARGING COMPLETE".</p>	
4	<p>The IS1400 will display the "CHARGER TIMEOUT" screen if the charging cycle cannot be completed in 24 hours. The typical charging time is 3 hours if the battery is at 50% state of charge.</p>	

Note: It is recommended to charge the IS1400 before the first use, as the IS1400 is shipped only partially charged.

UNDERSTANDING YOUR JUMP STARTER

ERROR AND ALARM MESSAGES

Error type	Error detail	Error display
Low battery	The internal battery voltage of the IS1400 is too low for a jump start. Please charge the IS1400 immediately.	
Reverse polarity	The clamps are reverse connected to the vehicle battery. The clamps should be disconnected and reconnect with the correct polarity.	
Overvoltage	The vehicle battery voltage is too high for a 12V DC vehicle. Please disconnect the clamp and ask a qualified mechanic to check the vehicle's alternator.	
Jump starter timeout	The IS1400 will display the "CHARGER TIMEOUT" screen if the charging cycle cannot be completed in 24 hours.	
Short circuit	The IS1400 detected the clamps are short-circuited. The IS1400 will not jump start until the short circuit is resolved. Please disconnect the clamps and check the vehicle electrical system.	
Overload	The IS1400 detected excess current (more than the contactor and internal battery can handle) occurred. Jump starting will be disabled. Please disconnect the clamps and check the vehicle electrical system.	
Failure	The IS1400 detected a malfunction of internal contactors or abnormal internal battery voltage.	
Low temperature	The operating temperature is too low for the IS1400 to perform its required functions.	   
High temperature	The operating temperature is too high for the IS1400 to perform its required functions.	    
Surge protection failure	The jump starter has detected surge protection system has failed. User is advised to contact customer service.	

FREQUENTLY ASKED QUESTIONS


Q. Can the IS1400 jump start vehicles at below 0°C?

A. If the IS1400 operates at temperatures below 0°C, its jump start rated performance will be reduced but it will start vehicles with lower clamp output requirements.

TIP Turn on the flood lights to warm up the jump starter at the expense of battery charge.

Q. Why didn't my IS1400 start my vehicle?

A. There could be a number of reasons why the IS1400 did not start your vehicle. Check the following:

- Ensure you have firm clamp connection to battery posts and the battery posts are clean from grease and dust build-up.
- Ensure the IS1400 is fully charged. Press the POWER () button to check the battery state of charge.
- Ensure you have followed the correct operating procedure. Refer to page 7 (JUMP STARTING INSTRUCTIONS)
- Ensure the vehicle operates at 12V DC.
- If the ambient temperature is low (<15°C), the jump starting performance will be reduced. Repeat the jump start routine 1–3 times as the battery performance will improve with each concurrent jump start.
- Ensure the vehicle being jump started does not require a clamp output of greater than 500A.

Q. What is Peak Amps?

A. Peak amps is the maximum current the battery in the IS1400 can produce.

Q. What is Clamp Power?

A. Clamp power is the maximum current available at the IS1400 clamps.

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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