PROJECTA IS2000 12-24V Lithium Jump Starter Instruction Manual

Contents

PROJECTA IS2000 12-24V Lithium Jump Starter

Product Information

- The INTELLI-START 12/24V Lithium Jump Starter (P/No. IS2000) is a portable power bank designed for jump starting vehicles and providing power on-the-go. It features a Lithium Iron Phosphate (LiFePO4) battery with a capacity of 6.0Ah at 12.8V DC and 24,000mAh at 3.2V DC, offering unparalleled safety and reliability. The jump starter has a peak current of 2000A, making it suitable for jump starting both 12V and 24V vehicles.
- The jump starter comes with jump starter leads, a USB socket charger, a USB-C cable, and a 240V AC charging dock. It is recommended to use the provided USB charger or a 3rd party 240V AC 10W USB adaptor for optimum performance. The jump starter can be recharged via DC charging or the main power source.
- The IS2000 jump starter also features a LED work light, an LCD display screen, overload protection, polarity protection, and low voltage disconnect. It is equipped with a durable carry handle and comes with a premium EVA case for easy transportation and storage.

Product Usage Instructions

Before using the IS2000 jump starter, please ensure to read the manual thoroughly for important safety information.

Jump Starting:

1. Charge the IS2000 jump starter for approximately 8 hours prior to first use.
2. Ensure the vehicle’s battery voltage is within the compatible range (12V DC or 24V DC).
3. Connect the positive (+) and negative (-) clamps of the jump starter leads to the corresponding terminals on the vehicle’s battery.
4. Turn on the jump start selector on the jump starter.
5. Start the vehicle’s engine and once successful, turn off the jump start selector.

6. Leave the clamps connected to the vehicle's battery for 40 seconds to recharge the jump starter to its full capacity.
7. Disconnect the clamps from the vehicle's battery.

Note: The IS2000 jump starter is designed for jump starting purposes and should not be left connected to the vehicle's battery for an extended period of time.

Charging:

1. Connect the IS2000 jump starter to a DC charging source or use the provided USB charger and USB-C cable for charging.
2. If using a DC charging source, ensure the voltage is within the compatible range (12-24V DC).
3. If using the provided USB charger, connect it to the USB socket charger on the jump starter.
4. Monitor the LCD display screen to check the battery status and charging progress.
5. The jump starter can be fully charged in approximately 8 hours.
6. Once fully charged, the jump starter will automatically shut off to avoid overcharging.

Note: It is recommended to charge the jump starter after each use to maintain its performance.
For more detailed information and instructions, please refer to the user manual provided with the product.

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 and 24V 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 or 24V 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 cause serious 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 anyway. 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 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.
- 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 or ISCA2000 (WJA-Y181501000W). This may take up to 8 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 IS2000 is suitable for starting most 12V DC vehicles up to 8.0 litre petrol and 6.0 litre diesel as well as 24V

DC 7.0 litre diesel vehicles.

- With 40 seconds of rapid recharge after each jumpstart, the IS2000 will not need to be recharged during the working day.
- It is recommended that the IS2000 jump starter is charged via the supplied 12-24V DC USB socket charger and USB-C cable or 240V AC charging dock to maximise the jump starter performance.

INTUITIVE colour display

- The intuitive colour display makes the IS2000 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.

POWER BANK WITH 2 USB OUTPUTS (2.1A, 3A)

- The IS2000 allows charging of phones, tablets, and other small portable devices. 5V DC USB CHARGING
- The IS2000 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 IS2000 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 allowing users to operate the unit on the engine or starter battery. DESIGN FOR EASY TRANSPORTATION
- With an ergonomically designed handle, the IS2000 jump starter is portable and compact compared to a conventional high-power lead acid jump starters.

HIGH PERFORMANCE BATTERY

- The high quality 4-cell, 6Ah Lithium Iron Phosphate (LiFePO4) 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 (LiCoO2)). It is certified to meet International Standard UN 38.3.

ULTRA LONG SHELF LIFE

- The IS2000 features a special circuit designed to prevent the internal battery from consuming current over extended period. Simply put, the user doesn't 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.

DOCKING STATION FOR 240V AC

- A slim and stable docking station is provided to allow the IS2000 to be charged from a 240V AC outlet.

UNPARALELLED 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 IS2000 jump starter displays and sounds an alarm when the jump starters clamps are connected incorrectly. Refer to “ERROR AND ALARM MESSAGES” section (page 10).

OVER-TEMPERATURE PROTECTION

The IS2000 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

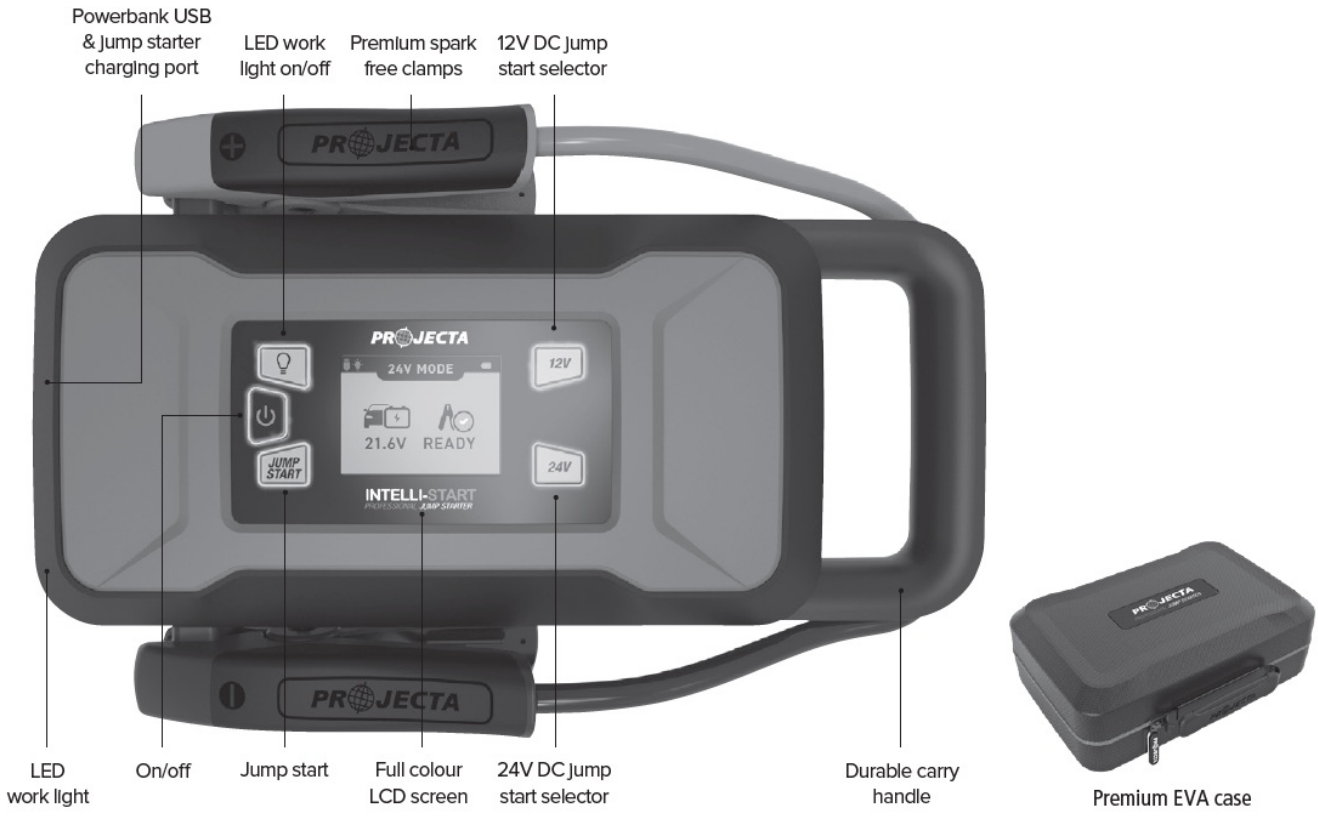
Before the IS2000 jump starter activates the jump start function, it will sound an alarm if the vehicle battery is higher than 30V DC. In addition, the IS2000 will deactivate the jump start function and sound an alarm if the vehicle battery is higher than 14.6V DC on 12V DC vehicle or 30V DC on 24V DC vehicle during jump start.

SURGE PROTECTION

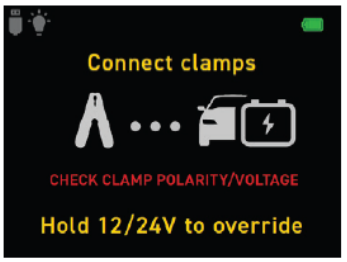
The IS2000 features built in surge protection so you can safely jump start vehicles with EFI (electronic fuel injection) and computer management systems.

SPECIFICATIONS

PRODUCT OVERVIEW



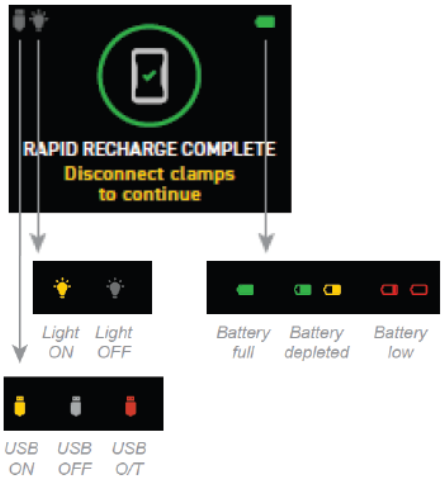
LCD DISPLAY SCREEN LAYOUT



IS2000 jump starter battery status.

Message overview Icon.

IS2000 jump starter suggested action.



The LCD display shows the IS2000 jump starters status and supports its operation. In addition to the primary function the LCD display shows the following icons:

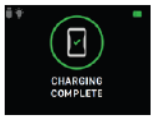
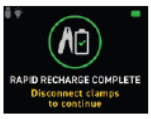
- USB icon (ON/OFF)
- Light icon (ON/OFF)
- IS2000 jump starter battery status icon FULL/DEPLETED/LOW

JUMPSTARTER 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.

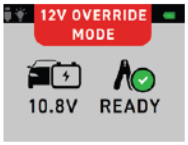
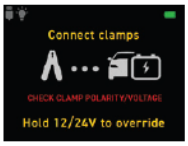
JUMP STARTING

Step	Instruction	Display
1	The IS2000 jump starter should be charged for around 8 hours prior to first use and as soon as possible after each use.	
2	If the IS2000 jump starter has been fully charged, step 3 can be skipped.	
3	Before connecting the IS2000 jump starter to a battery/vehicle, check the IS2000 jump starter battery status by pressing the ⏻ button. If the IS2000 starts up and shows the welcome screen momentarily 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 IS2000 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.	
6	The IS2000 automatically detects the vehicle battery voltage and selects the required voltage source. **Note:** • Given the correct clamp voltage, the user can manually select the operating voltage by pushing and holding for 3 seconds 12V or 24V button. Upon manual selection of the voltage, the JUMP START button will flash and needs to be pressed again for confirmation, then the jump start can commence.	
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 IS2000 RRT to charge the unit. Once the IS2000 is fully charged, the RRT will shut off to avoid overcharging. **Note:** • The IS2000 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 IS2000, press the power button ⏻.	
10a	To disconnect the IS2000 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 IS2000 will ask user to disconnect clamps.	

OVERRIDE MODE

Under normal conditions, the IS2000 automatically selects 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 0 to 1V DC		
Step	**Detail**	**Display**
1	Press and hold the 12V button for a 12V DC vehicle system	 
2	Press and hold the 24V button for a 24V DC vehicle system	 

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

IS2000 provides the user with ample light when checking the vehicle's various compartments in low light conditions.

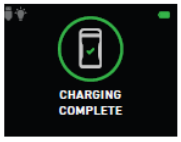
Step	Detail	Display
1	Press button **Note:** • If the IS2000 flood light is in operation, the "LIGHT ON" icon will appear on the display or the lamp icon in the upper left corner will light up. • Flood light will turn off if the internal battery has low charge or after 4 hours if user does not operate the unit.	

USB OUTPUT

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

Step	Detail	Display
1	If the IS2000 is not in jump starting operation, and the user connects an external device to charge the following screen will be displayed. **Note:** The USB output will be automatically disabled in the following conditions: • IS2000 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 temperate above 45°C	

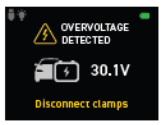
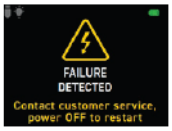
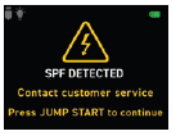
CHARGING

Step	Detail	Display
1	Plug the output of the AC charging dock into a 240V AC socket. Once the AC dock is plugged into a 240V AC source, you can place the IS2000 onto the charging dock. Alternatively, plug a USB-C cable into the USB-C port on the IS2000 to begin charging the jump starter. ****Using a non-supplied charger and USB cable may extend charge time.****	
2	The battery charging screen will be shown when the IS2000 is being charged either by the 240V AC dock or USB-C socket plugged in.	
3	When the IS2000 is fully charged, it will display "CHARGING COMPLETE".	
4	The IS2000 will display the "CHARGER TIMEOUT" screen if the charging cycle cannot be completed in 24 hours. The typical charging time is 4 hours if the battery is at 50% state of charge.	

Note:
It is recommended to fully charge the IS2000 before the first use, as the IS2000 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 IS2000 is too low for a jump start. Please charge the IS2000 immediately.	
Reverse polarity	The clamps are reverse connected to the vehicle battery. The clamps should be disconnected and reconnect in the correct polarity.	
Overvoltage	The vehicle battery voltage is too high for a 12V DC or 24V DC vehicle. Please disconnect the clamp and ask a qualified mechanic to check the vehicle's alternator.	
Jump starter timeout	The IS2000 will display the "CHARGER TIMEOUT" screen if the charging cycle cannot be completed in 24 hours.	
Short circuit	The IS2000 detected the clamps are short-circuited. The IS2000 will not jump start until the short circuit is resolved. Please disconnect the clamps and check the vehicle electrical system.	
Overload	The IS2000 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 IS2000 detected a malfunction of internal contactors or abnormal internal battery voltage.	
Low temperature	The operating temperature is too low for the IS2000 to perform its required functions. ****NOTE: The jump starter can be warmed up by turning on the flood light, at the expense of battery charge.****	
High temperature	The operating temperature is too high for the IS2000 to perform its required functions.	
Surge protection failure	The jump starter has detected surge protection system failed. User is advised to contact customer service.	

FREQUENTLY ASKED QUESTIONS

- **Q. Why does my IS2000 take so long to charge on the dock?**
  A. Lower charging rate extends the battery life. The built-in charging circuit provides gentle 2-stage charge with cell-balancing for the internal Lithium Iron Phosphate (LiFePO4) battery.
- **Q. Can the IS2000 jump start vehicles at temperature lower than 0°C?**
  A. If the IS2000 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 IS2000 start my vehicle?**
  A. There could be a number of reasons why the IS2000 did not start your vehicle.
  Check the following:
  - Ensure you have firm clamp connection to battery posts and the battery postsare clean from grease and dust build-up.
  - Ensure the IS2000 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 or 24V DC.
  - If the ambient temperature is low (<15˚C), the jump starter 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 750A for 12V DC batteries and 500A for 24V DC batteries in order to jump start the vehicle.
- **Q. What is Peak Amps?**
  A. Peak amps is the maximum current the battery in the IS2000 can produce.
- **Q. What is Clamp Power?**
  A. Clamp power is the maximum current available at the 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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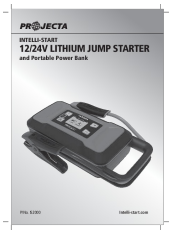
Documents / Resources

	PROJECTA IS2000 12-24V Lithium Jump Starter [pdf] Instruction Manual IS2000 12-24V Lithium Jump Starter, IS2000, 12-24V Lithium Jump Starter, Lithium Jump Starter, Jump Starter, Starter

References

- Intelli-Start