

# Clarke®



## LITHIUM POLYMER JUMPSTARTER

MODEL NO: JSM400

PART NO: 6239015

### OPERATION & MAINTENANCE INSTRUCTIONS



ORIGINAL INSTRUCTIONS

GC1020 - ISS 2

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## INTRODUCTION

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Thank you for purchasing this CLARKE product.

Please read this manual thoroughly and follow the instructions. In doing so you will ensure the safety of yourself and that of others around you, and you can look forward to your purchase giving you long and satisfactory service.

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## GUARANTEE

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This product is guaranteed against faulty manufacture for a period of 12 months from the date of purchase. Please keep your receipt which will be required as proof of purchase.

This guarantee is invalid if the product is found to have been abused or tampered with in any way, or not used for the purpose for which it was intended.

Faulty goods should be returned to their place of purchase, no product can be returned to us without prior permission.

This guarantee does not effect your statutory rights.

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## ENVIRONMENTAL PROTECTION

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Do not dispose of this product with general household waste. All tools, accessories and packaging should be sorted, taken to a recycling centre and disposed of according to the laws governing Waste Electrical and Electronic Equipment.

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## SPECIFICATIONS

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Model Number	JSM400
Battery Capacity	21 Ah
Jumpstart Output Current	Starting 400A / Peak 800A
USB Output	5V @ 1A + 5V @ 2.1A
DC Output	19V @ 3A
Dimensions (L X W X H)	220 x 90 x 30 mm
Weight	1.37 kg
Engine Capacity	Up to 6L Petrol - Up to 4L Diesel
Operating Temperature	0°C to 45°C

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## GENERAL SAFETY RULES

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**WARNING: ALL LEAD ACID BATTERIES GENERATE HYDROGEN GAS DURING NORMAL OPERATION. THIS PROCESS INCREASES DURING A PERIOD OF RAPID DISCHARGE.**

**WARNING: HYDROGEN GAS AND BATTERY ACID (SULPHURIC ACID) CAN BE EXPLOSIVE, CORROSIVE TO SKIN, EYES AND HAIR, DAMAGING TO CLOTHING AND METALS, FLAMMABLE, POISONOUS TO BREATHE.**

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1. DO NOT leave the device exposed to the elements. Avoid direct sunlight, direct heat, rain/moisture etc.
2. The device must only be used indoors or completely protected from the rain. This also applies to any device being powered by the device.
3. DO NOT operate the device if any of the cables are damaged. Consult your CLARKE dealer for repair or replacement of the parts.
4. DO NOT operate the device if the case is damaged. Consult your CLARKE dealer or a qualified person for inspection and repair.
5. To prevent the battery from overheating and consequent damage, DO NOT exceed our recommendations for the duration of jump starting.
6. The unit is NOT designed to be used as a replacement for a vehicle battery.
7. NEVER allow the battery to become completely discharged.
8. NEVER jump start the engine whilst the unit is being charged.
9. NEVER attempt any repairs yourself. If you have a problem with the unit contact your local CLARKE dealer.
10. ALWAYS keep your body and clothing dry. Never work in a damp area without adequate insulation against electric shock.
11. ALWAYS store the device out of reach of children.
12. ALWAYS wear safety glasses when working with lead acid batteries.
13. If splashed by battery acid, immediately flush the area of the splash with clean water. If a burning sensation is felt or any blistering occurs, seek medical help.
14. If battery acid comes into contact with the eyes, flush the eyes with clean water continuously and seek medical help.
15. ALWAYS ensure that there is air circulating around the unit when in use.
16. When not in use, store in a safe dry place.

17. NEVER allow the jumpstart leads, to touch each other or to touch the same metal object.
18. Ensure the vehicle battery posts and battery clamps are perfectly clean before use.
19. Connect the red clamp to the unearthed battery terminal first, (this is usually the positive (+ve) terminal and coloured RED); then connect the black clamp to the earthed battery terminal, (this is usually the negative (-ve) terminal and coloured BLACK).
20. ALWAYS wear suitable protective clothing and eye protection when working with lead acid batteries.
21. NEVER allow the cables to become wrapped around the operator or any other person.
22. Wipe the body of the unit clean using a soft damp cloth, DO NOT use abrasives to clean this product.

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## ELECTRICAL CONNECTIONS

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This device is supplied with a 13 amp, 230 volt (50Hz), charging adaptor for connection to a standard, domestic electrical supply.

This appliance is of double insulated design. No earth conductor is provided.

If in any doubt, consult a qualified electrician. DO NOT attempt any electrical repairs yourself.

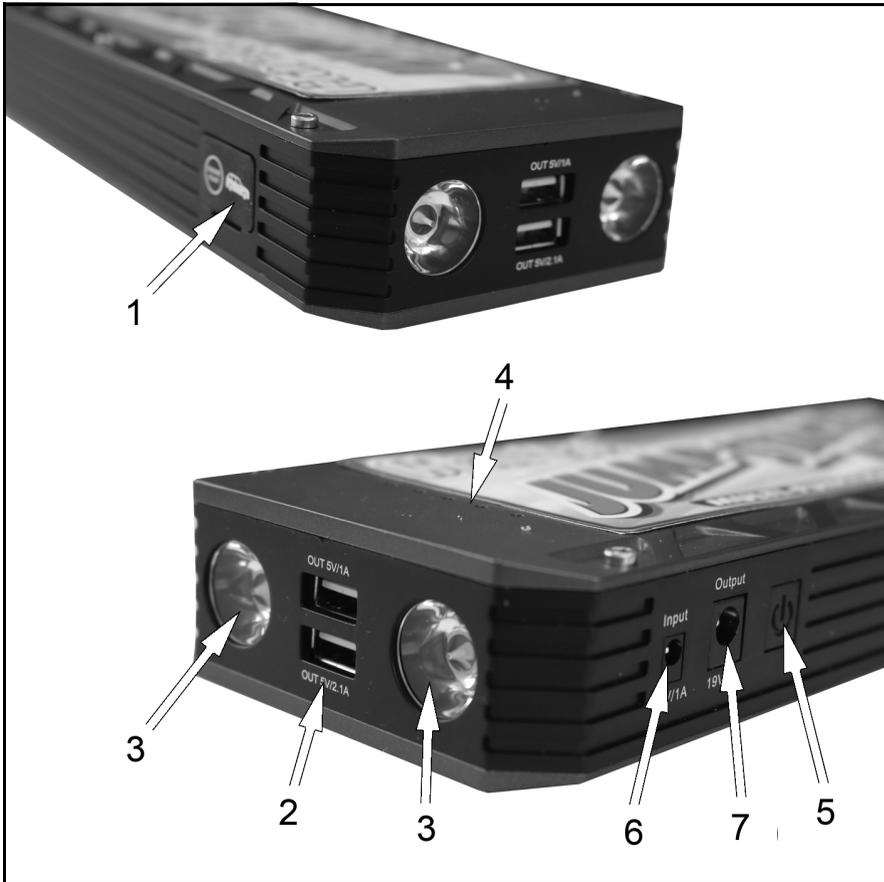
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## SAFETY SYMBOLS

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	Class II appliance (charger)		Always read instructions before use
	Suitable for indoor use only (refers to mains adaptor only)		Subject to Waste Electrical & Electronic Equipment Directive
	Live centre pin		Wear Eye Protection

# OVERVIEW

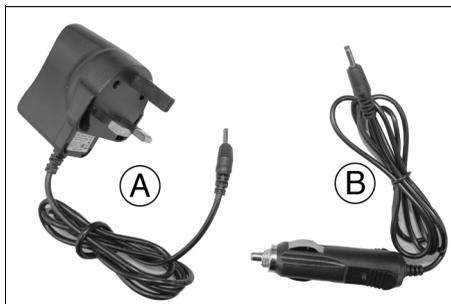


NO	DESCRIPTION	NO	DESCRIPTION
1	Jumpstart Lead Socket	5	On/Off Button
2	USB Sockets 5V DC	6	Charger Input Socket
3	Worklight	7	19V DC Output Socket
4	Power Indicator Lights		

## CHARGE THE POWER PACK

You can charge the power pack using:

- The 230V AC mains charger (A) or
- The 12V DC cigar lighter (aux power) adapter (B).



1. Switch the power pack off.
2. Plug the mains charger or cigar lighter adapter into the charger input socket
3. If you are using the cigar lighter adapter, start the engine.
4. Connect the other end to either the mains supply or cigar lighter socket in the vehicle.



5. The 5 power indicator lights on the top show the current charge level, 20%, 40%, 60%, 80% and 100%.
5. Disconnect the charger when all 5 power indicator lights are lit up.

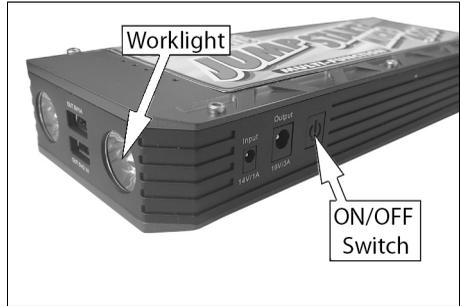
### TO GET THE MAXIMUM LIFE FROM THE BATTERY

- Charge the power pack before first use.
- Charge the power pack after each operation or a minimum of once every 3 months.
- DO NOT leave the power pack in a state of discharge.

# OPERATION

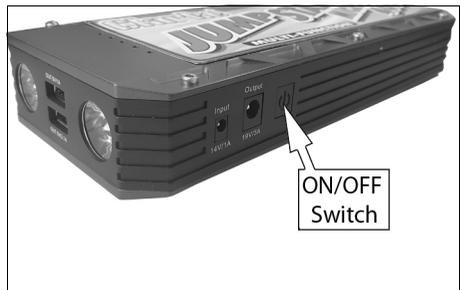
## WORK LIGHT

1. Push and hold the ON/OFF button for 3 seconds to turn the work light on.
  - The work light flashes on and off.
2. Push the ON/OFF button again.
  - The work light flashes with the morse code SOS pattern.
3. Push the ON/OFF button again.
  - The work light flashes with the morse code SOS pattern.
4. Push the ON/OFF button again to turn the work light off.



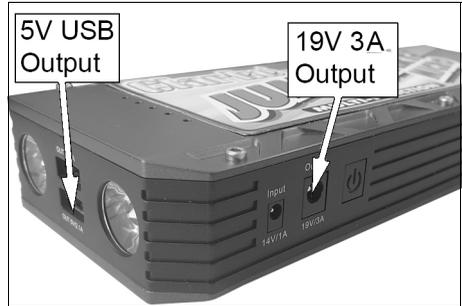
## USB POWER SUPPLY

- The top socket supplies a maximum of 1A at 5V.
  - The lower socket supplies a maximum of 2.1A at 5V.
1. Put the USB cable into one of the USB sockets.
  2. Connect the other end of the cable to your device.
  3. Push the ON/OFF button to start supplying power.

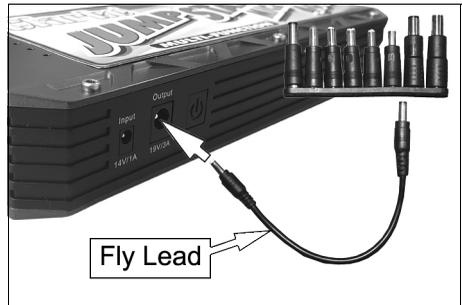


## DC POWER SUPPLY

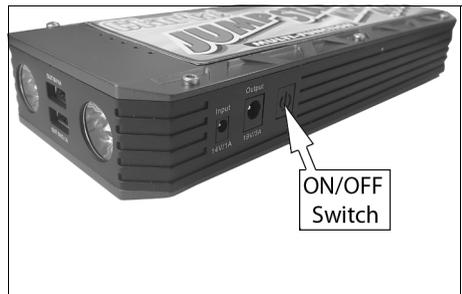
1. Insert the small fly lead into the power pack.



2. Install the connector you need onto the other end of the fly lead.
3. Insert the connector into the device you want to power.



4. Push the ON/OFF button to start supplying power.



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# JUMP STARTING

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**WARNING: SOME VEHICLE ELECTRONIC EQUIPMENT MAY BE DAMAGED BY JUMP STARTING. ALWAYS CHECK WITH THE VEHICLE HANDBOOK.**

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**NOTE:** This device will not jumpstart a vehicle if the battery is very low or completely flat.

## CONNECTING THE SMART CABLE TO THE POWER PACK

1. When jumpstarting, a minimum of 3 of the power indicator lights located on top of the device must be lit. Recharge the device if required.
2. Lift the rubber plug and insert the blue EC5 connector of the smart lead into the power pack.
  - The red & green LEDs on the smart lead flash alternately.



## CONNECT THE JUMP START LEADS TO THE BATTERY

1. Connect the red clamp to the unearthed battery terminal first, (this is usually the positive (+ve) terminal and coloured RED).
2. Connect the black clamp to the earthed battery terminal, (this is usually the negative (-ve) terminal and coloured BLACK)
3. Once you have connected the leads you have 30 seconds to try and start the vehicle, otherwise you will need to remove the leads and reattach them.

## SMART CABLE STATUS LIGHTS

STATUS	GREEN LED	RED LED	BEEPING
Detecting	Flashing	Flashing	No
Low voltage	Off	Solid	No
Ready to start	Solid	Off	No
Short circuit	Off	Solid	Beeping
Reverse polarity	Off	Solid	Discontinuous Beeping
Reverse charge	Off	Solid	Slow Beeping
Over-heating	Off	Solid	Fast Beeping
Over current	Solid	Solid	
Timing protection (30 seconds)	Solid	Solid	

## JUMPSTART THE VEHICLE



CAUTION: MAKE SURE THAT THE POWER PACK IS AT LEAST 60% CHARGED (3 POWER INDICATOR LIGHTS ARE LIT) BEFORE YOU ATTEMPT TO JUMPSTART.

ALWAYS carry out the following preliminary checks:

- Switch off the vehicle ignition and ALL ancillary equipment (lighting, radio etc.)
- Ensure the vehicle battery is rated at 12V and is not damaged in any way.
- Ensure the area is well ventilated.
- Make sure that the device is at least 60% charged (3 power indicator lights are lit).

**NOTE:** This device will not jumpstart a vehicle if the battery is very low or completely flat.

1. Switch the ignition to 'start' for **NO MORE than 6 seconds**. If the engine does not start within this time, SWITCH OFF the ignition and wait for at least 3 minutes before trying again.
2. Once the engine is running, disconnect the clamps within 30 seconds, BLACK clamp FIRST, then disconnect the RED clamp.
3. Leave the vehicle engine running for a while to let the alternator recharge the battery.

# DECLARATION OF CONFORMITY



**Clarke**<sup>®</sup>  
**INTERNATIONAL**

Hemnall Street, Epping, Essex CM16 4LG

## DECLARATION OF CONFORMITY

This is an important document and should be retained.

We hereby declare that this product(s) complies with the following directive(s):

- 2014/30/EU *Electromagnetic Compatibility Directive.*
- 2014/35/EU *Low Voltage Equipment Directive.*
- 2011/65/EU *Restriction of Hazardous Substances (amended by (EU) 2015/863).*

The following standards have been applied to the product(s):

- EN 60950-1:2006+A11:2009+A1:2010+A12:2011+A2:2013, EN 61547-2-16:2009+A1:2013,*
- EN 61547-1:2005+A1, EN 55032:2015, EN 55024:2010+A1:2015, EN 61000-3-2:2014,*
- EN 61000-3-3:2013.*

The technical documentation required to demonstrate that the product(s) meet(s) the requirement(s) of the aforementioned directive(s) has been compiled and is available for inspection by the relevant enforcement authorities.

The CE mark was first applied in: 2020

**Product Description:** Jump Starter 21000 mAh  
**Model number(s):** JSM400  
**Serial / batch Number:** N/A  
**Date of Issue:** 15/05/2020

Signed:

J.A. Clarke  
Director

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# Clarke®

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