

DRAPER®

INSTRUCTIONS FOR 12V DC 230V 1000W AC Inverter

Stock No.23245

Part No.IN1000

IMPORTANT: PLEASE READ THESE INSTRUCTIONS CAREFULLY TO ENSURE THE SAFE AND EFFECTIVE USE OF THIS PRODUCT.



DRAPER®

GENERAL INFORMATION

These instructions accompanying the product are the original instructions. This document is part of the product, keep it for the life of the product passing it on to any subsequent holder of the product. Read all these instructions before assembling, operating or maintaining this product.

This manual has been compiled by Draper Tools describing the purpose for which the product has been designed, and contains all the necessary information to ensure its correct and safe use. By following all the general safety instructions contained in this manual, it will ensure both product and operator safety, together with longer life of the product itself. All photographs and drawings in this manual are supplied by Draper Tools to help illustrate the operation of the product. Whilst every effort has been made to ensure the accuracy of information contained in this manual, the Draper Tools policy of continuous improvement determines the right to make modifications without prior warning.

1. TITLE PAGE

1.1 INTRODUCTION:

USER MANUAL FOR:

12V DC 230V 1000W AC INVERTER

Stock no. 23245

Part no. IN1000

1.2 REVISIONS:

Date first published April 2012

Date revised July 2016

As our user manuals are continually updated, users should make sure that they use the very latest version.

Downloads are available from: <http://www.drapertools.com/b2c/b2cmanuals.pgm>

DRAPER TOOLS LIMITED

HURSLEY ROAD

CHANDLER'S FORD

EASTLEIGH

HAMPSHIRE

SO53 1YFUK

WEBSITE: www.drapertools.com

PRODUCT HELPLINE: +44 (0) 23 8049 4344

GENERAL FAX: +44 (0) 23 8026 0784

1.3 UNDERSTANDING THIS MANUALS SAFETY CONTENT:

WARNING! Information that draws attention to the risk of injury or death.

CAUTION! Information that draws attention to the risk of damage to the product or surroundings.

1.4 COPYRIGHT © NOTICE:

Copyright © Draper Tools Limited.

Permission is granted to reproduce this publication for personal & educational use only.

Commercial copying, redistribution, hiring or lending is prohibited.

No part of this publication may be stored in a retrieval system or transmitted in any other form or means without written permission from Draper Tools Limited.

In all cases this copyright notice must remain intact.

2. CONTENTS

2.1 CONTENTS

	PAGE	CONTENT	PAGE
1		TITLE PAGE	
	1.1	INTRODUCTION	2
	1.2	REVISION HISTORY	2
	1.3	UNDERSTANDING THIS MANUAL	2
	1.4	COPYRIGHT NOTICE	2
2		CONTENTS	
	2.1	CONTENTS	3
3		GUARANTEE	
	3.1	GUARANTEE	4
4		INTRODUCTION	
	4.1	SCOPE	5
	4.2	SPECIFICATION	5
	4.3	HANDLING & STORAGE	5
5		HEALTH & SAFETY INFORMATION	6
6		TECHNICAL DESCRIPTION	
	6.1	IDENTIFICATION	7
7		UNPACKING & CHECKING	
	7.1	PACKAGING	8
	7.2	WHAT'S IN THE BOX	8
8		PREPARING THE INVERTER	
	8.1	POWER INLET CONNECTIONS	9
9		BASIC INVERTER OPERATIONS	
	9.1	CONNECTING	10
	9.2	AC OUTPUT	10
	9.3	USB OUTPUT	10
	9.4	LOW POWER WARNING	10
10		EXPLANATION OF SYMBOLS	
	10.1	EXPLANATION OF SYMBOLS	11
11		DISPOSAL	
	11.1	DISPOSAL	12
		DECLARATION OF CONFORMITY	ENCLOSED

3. GUARANTEE

3.1 GUARANTEE

Draper tools have been carefully tested and inspected before shipment and are guaranteed to be free from defective materials and workmanship.

Should the tool develop a fault, please return the complete tool to your nearest distributor or contact Draper Tools Limited, Chandler's Ford, Eastleigh, Hampshire, SO53 1YF. England.

Telephone: (023) 8026 6355.

A proof of purchase must be provided with the tool.

If upon inspection it is found that the fault occurring is due to defective materials or workmanship, repairs will be carried out free of charge. This guarantee period covering parts/labour is 12 months from the date of purchase. The guarantee is extended to 24 months for parts only. This guarantee does not apply to normal wear and tear, nor does it cover any damage caused by misuse, careless or unsafe handling, alterations, accidents, or repairs attempted or made by any personnel other than the authorised Draper warranty repair agent.

Note: If the tool is found not to be within the terms of warranty, repairs and carriage charges will be quoted and made accordingly.

This guarantee applies in lieu of any other guarantee expressed or implied and variations of its terms are not authorised.

Your Draper guarantee is not effective unless you can produce upon request a dated receipt or invoice to verify your proof of purchase within the guarantee period.

Please note that this guarantee is an additional benefit and does not affect your statutory rights. Draper Tools Limited.

4. INTRODUCTION

4.1 SCOPE

Converts 12V DC to 230V AC using power via battery connector leads.
Ideal for use in caravans, boats and heavy goods vehicles etc.

4.2 SPECIFICATION

Stock no.	23245
Part no.	IN1000
Input voltage	12V DC
Output voltage	AC 230V/50Hz
USB output	DC 5.0V/500mA
Fuse	40Amp
Max. Continuous power	1000W
Peak watts	2000W
Output type	Modified sine wave

4.3 HANDLING & STORAGE

Although this machine is small in size, care must still be taken when handling and lifting. Dropping this machine will have an effect on the accuracy and may also result in personal injury. This machine is not a toy and must be respected.

The environment will have a negative result on its operation if you are not careful. If the air is damp, components will rust. If the machine is unprotected from dust and debris; components will become clogged: And if not cleaned and maintained correctly or regularly the machine will not perform at its best.

5. HEALTH & SAFETY INFORMATION

Always use the inverter in a well ventilated environment.

Do not expose to direct sunlight or heat sources.

Keep out the reach of children.

Do not expose to moisture, water, oil or grease.

Do not use or connect the inverter near flammable substances.

Do not connect to any AC power source.

Do not connect to any power source with a positive earth electrical system.

The power source must provide between 10.6 And 15 Volts DC. and must be able to supply sufficient current to operate the load.

Never exceed the input voltage: 15V DC. Always disconnect the inverter when not in use or when unattended.

Regularly check the connections for the input and output are secure.

When connecting always ensure the correct polarity is observed.

Reverse polarity will cause the inverter fuse to blow and possibly result in permanent damage to the unit.

WARNING: Sparks may occur when connecting the unit to a power source, this is normal.

Do not connect in the vicinity of flammable or explosive substances.

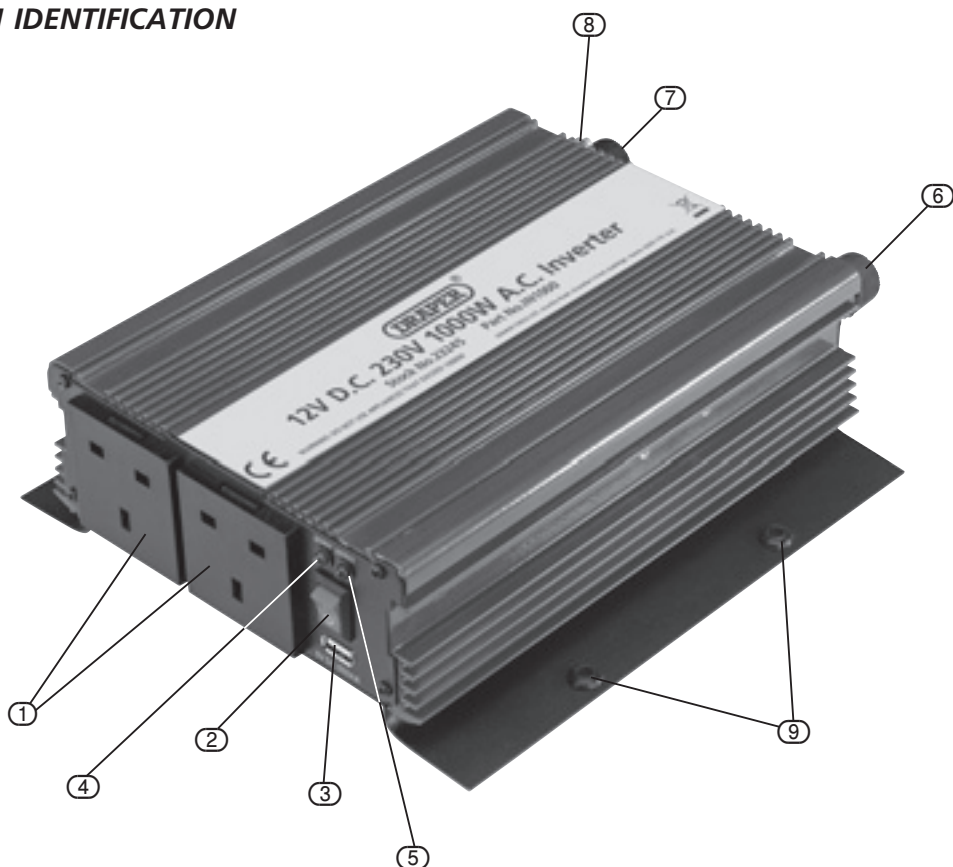
Do not start the engine where the inverter is connected or running.

The inverter will not operate most appliances designed to produce heat, such as hair dryers, irons, toasters, heaters and coffee machines as these items drain high amounts of current in excess of 500 watts.

CAUTION: Certain types of rechargeable devices are designed to be plugged directly into an AC power source. These types of device can cause damage to the inverter. If in doubt, contact the manufacturer of the appliance before connecting to the inverter. Draper Tools Limited accepts no liability for damage caused in any way by incorrect or inadvertent connection. This problem does not occur with the majority of battery operated equipment where there is a separate charger to be plugged into the AC power source. With delicate equipment, for example laptop computers, it is good practice to use an anti-surge device in conjunction with the inverter.

6. TECHNICAL DESCRIPTION

6.1 IDENTIFICATION



- ① AC Power outlet
- ② On/Off switch
- ③ USB Output DC
- ④ LED power indicator
- ⑤ LED low battery indicator

- ⑥ Red terminal (positive)
- ⑦ Black terminal (negative)
- ⑧ Earth terminal
- ⑨ Anchor points (both sides)

7. UNPACKING & CHECKING

7.1 PACKAGING

Carefully remove the inverter from the packaging and examine it for any sign of damage that may have happened during shipping. Lay the contents out and check them against the parts shown below. If any part is damaged or missing; please contact the Draper Helpline (the telephone number appears on the Title page) and do not attempt to use the inverter. The packaging material should be retained at least during the guarantee period: in case the machine needs to be returned for repair.

Warning! Some of the packaging materials used may be harmful to children. Do not leave any of these materials in the reach of children.

If any of the packaging is to be thrown away, make sure they are disposed of correctly; according to local regulations.

7.2 WHAT'S IN THE BOX?

As well as the inverter; there are two items not fitted or attached to it.



10 Black battery terminal connection lead (negative)

11 Red battery terminal connection lead (positive)

8. PREPARING THE INVERTER

8.1 POWER INLET CONNECTIONS - FIG. 1

To attach the desired DC connector loosen terminal ⑦ (Black/Negative). Pass the Black fork spade behind the terminal and tighten securely. Ensure it is away from the positive terminal. follow the same process to attach the red fork spade to terminal ⑥ (Red/Positive).



9. BASIC INVERTER OPERATIONS

9.1 CONNECTING - FIG. 2

Prior to connection ensure the on/off switch is in the off position.

The battery connectors. Attach the red connector to the battery positive terminal and the black connector to the negative terminal.

9.2 AC OUTPUT - FIG. 3

Most electrical tools, appliances and equipment have a rating label indicating the power consumption in amps or watts. Calculate the power consumption of these items you will be using simultaneously, keeping the rating under the inverter's maximum capacity.

NOTE: If the rating is stated in amps, multiply the value by the voltage (230V) to determine the wattage.

Place the inverter in a well ventilated area for optimum cooling.

Plug the device to be powered into the AC outlet ①. Position the on/off switch ② to the 'on' position.

9.3 USB OUTPUT - FIG. 4

Insert USB plug ③. Position the on/off switch ② to the 'on' position.

The current draw will vary depending on the load being placed on the battery. The battery life will also vary depending on the age and condition of the battery.

Ensure the vehicle is started and run regularly to avoid starting problems due to a flat battery, however do not start the engine while running the inverter.

SWITCH OFF THE INVERTER, START THE ENGINE, SWITCH ON THE INVERTER.

9.4 LOW POWER WARNING

If the battery voltage drops significantly an audible alarm will sound. When the battery voltage reaches a low level the LED will illuminate red and the unit will automatically shut off. Switch the unit off and unplug the load. The battery will need recharging before using again.



FIG.2.

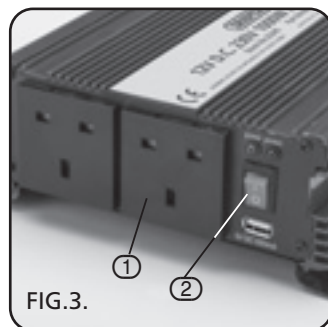


FIG.3.

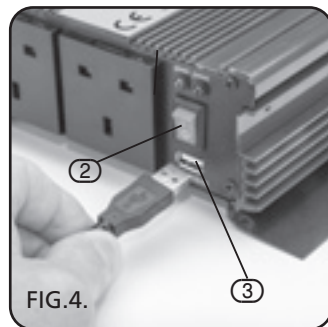


FIG.4.

10. EXPLANATION OF SYMBOLS

10.1 EXPLANATION OF SYMBOLS



WEEE

Do not dispose of Waste Electrical
& Electronic Equipment in with
domestic rubbish

11. DISPOSAL

11.1 DISPOSAL

- At the end of the machine's working life, or when it can no longer be repaired, ensure that it is disposed of according to national regulations.
- Contact your local authority for details of collection schemes in your area.

In all circumstances:

- Do not dispose of power tools with domestic waste.
- Do not incinerate.
- Do not abandon in the environment.
- Do not dispose of WEEE* as unsorted municipal waste.



* Waste Electrical & Electronic Equipment.

- **DRAPER TOOLS LIMITED,**
Hursley Road, Chandler's Ford,
Eastleigh, Hampshire. SO53 1YF. U.K.
- **Helpline:** (023) 8049 4344
- **Sales Desk:** (023) 8049 4333
- **General Enquiries:** (023) 8026 6355
- **Service/Warranty Repair Agent**
For aftersales servicing or warranty repairs, please
contact the Draper Tools Helpline for details of an
agent in your local area.

YOUR DRAPER STOCKIST

PJDH0716

