

USER'S MANUAL

Microprocessor Controlled MMA
Welding Inverter with
IGBT Technology

GORILLA POCKETPOWER 130 VRD
GORILLA POCKETPOWER 150 VRD
GORILLA POCKETPOWER 170 VRD
GORILLA POCKETPOWER 190 VRD

Introduction

First of all, thank you for choosing an IWELD welding or cutting machine!

Our mission is to support your work with the most up-to-date and reliable tools both for DIY and industrial application.

We develop and manufacture our tools and machines in this spirit.

All of our welding and cutting machines are based on advanced inverter technology, reducing the weight and dimensions of the main transformer.

Compared to traditional transformer welding machines the efficiency is increased by more than 30%.

As a result of the technology used and the use of quality parts, our welding and cutting machines are characterized by stable operation, impressive performance, energy efficient and environmentally friendly operation.

By activating the microprocessor control and welding support functions, it continuously helps maintain the optimum character of welding or cutting.

Read and use the manual instructions before using the machine please!

The user's manual describes the possible sources of danger during welding, includes technical parameters, functions, and provides support for handling and adjustment but keep in mind it doesn't contain the welding knowledge!

If the user's manual doesn't provide you with sufficient information, contact your distributor for more information!

In the event of any defect or other warranty event, please observe the „General Warranty Terms”.

The user manual and related documents are also available on our website at the product data sheet.

IWELD Kft.
2314 Halásztelek
II. Rákóczi Ferenc street 90/B
Tel: +36 24 532 625
info@iweld.hu
www.iweld.hu

WARNING!

Welding is a dangerous process! The operator and other persons in the working area must follow the safety instructions and are obliged to wear proper Personal Protection Items. Always follow the local safety regulations! Please read and understand this instruction manual carefully before the installation and operation!

- The switching of the machine under operation can damage the equipment.
- After welding always disconnect the electrode holder cable from the equipment.
- Always connect the machine to a protected and safe electric network!
- Welding tools and cables used with must be perfect.
- Operator must be qualified!

ELECTRIC SHOCK: may be fatal

- Connect the earth cable according to standard regulation.
- Avoid bare hand contact with all live components of the welding circuit, electrodes and wires. It is necessary for the operator to wear dry welding gloves while he performs the welding tasks.
- The operator should keep the working piece insulated from himself/herself.

Smoke and gas generated while welding or cutting can be harmful to health.

- Avoid breathing the welding smoke and gases!
- Always keep the working area good ventilated!

Arc light-emission is harmful to eyes and skin.

- Wear proper welding helmet, anti-radiation glass and work clothes while the welding operation is performed!
- Measures also should be taken to protect others in the working area.

FIRE HAZARD

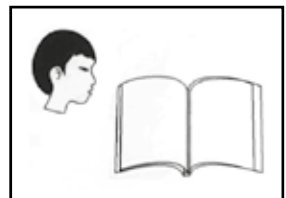
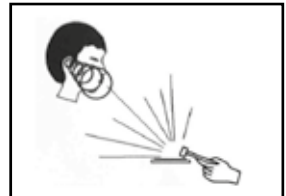
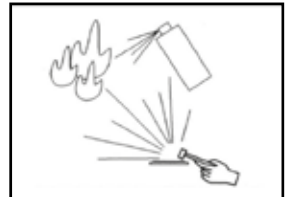
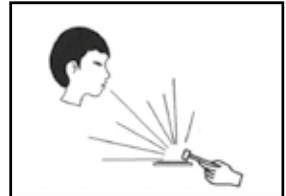
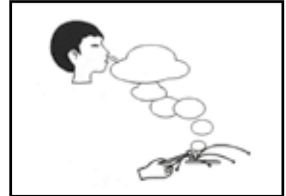
- The welding spatter may cause fire, thus remove flammable materials from the working area.
- Have a fire extinguisher nearby in your reach!

Noise can be harmful for your hearing

- Surface noise generated by welding can be disturbing and harmful. Protect your ears if needed!

Malfunctions

- Check this manual first for FAQs.
- Contact your local dealer or supplier for further advice.



The main parameters

| | | POCKETPOWER 130 VRD | POCKETPOWER 150 VRD | POCKETPOWER 170 VRD | POCKETPOWER 190 VRD | |
|--------------------|----------------------------------|------------------------------|-------------------------------|-------------------------------|-------------------------------|---|
| Art. Nr. | | 80POCPWR130 | 80POCPWR150 | 80POCPWR170 | 80POCPWR190 | |
| FUNCTIONS | Inverter type | IGBT | IGBT | IGBT | IGBT | |
| | Warranty (year) | 2 | 2 | 2 | 2 | |
| | MMA | Arc Force | ✓ | ✓ | ✓ | ✓ |
| | | Adjustable Arc Force | ✓ | ✓ | ✓ | ✓ |
| | | Hot star | ✓ | ✓ | ✓ | ✓ |
| | | VRD | ✓ | ✓ | ✓ | ✓ |
| PARAMETERS | Phase number | 1 | 1 | 1 | 1 | |
| | Rated input Voltage | 230VAC±15% 50/60Hz | 230VAC±15% 50/60Hz | 230VAC±15% 50/60Hz | 230VAC±15% 50/60Hz | |
| | Max./eff. input Current | 22.1A/16.4A | 26.7A/19.5A | 31A/23A | 36.5A/25.6A | |
| | Efficiency | 85% | 85% | 85% | 85% | |
| | Duty Cycle (10 min/20 °C) | 120A@60% 93A@100% | 140A@60% 108A@100% | 160A@60% 124A@100% | 180A@60% 139A@100% | |
| | Welding Current Range | 20A-120A | 20A-140A | 20A-160A | 20A-180A | |
| | Output Voltage | 20.8V-24.8V | 20.8V-25.6V | 20.8V-26.4V | 20.8V-27.2V | |
| | No-Load Voltage | 64V | 64V | 64V | 64V | |
| | Electrode diameter | Ø2.0-3.2mm | Ø2.0-3.2mm | Ø2.0-4.0mm | Ø2.0-4.0mm | |
| | Insulation | F | F | F | F | |
| | Protection Class | IP23 | IP23 | IP23 | IP23 | |
| | Weight | 2.8kg | 2.8kg | 2.8kg | 2.8kg | |
| Dilemsions (LxWxH) | 230x100x150mm | 230x100x150mm | 230x100x150mm | 230x100x150mm | | |

2. Installation

2-1. Power Connection

1. Each machine has its own primary power cable, it must be connected to the mains through a grounded power outlet on the right!
2. Power cable must be plugged into an appropriate power outlet!
3. Check the correct earth connection



2-2. Accession output lines

1. Each machine has two connectors. Check the cables connected tightly to avoid risk of burning or over heating!
2. Connect electrode cable to the negative pole , while the workpiece (earth) to the positive!
3. Pay attention to the right polarity! Generally, there are two ways of switching the rectifier welding machine: positive and negative connections . Positives: electrode "- " , while the work on the "+ " to . Negatives: piece work " - " elect-rod while "+ " is linked to . The proper practice mode , choose as faulty switching unstable arc and cause a lot of splashing . In this case, switch the polarity to use the machine correctly!
4. Use a high cross section supply cable to avoid voltage drop and to keep the performance of the machine. Low input voltage will reduce the lifetime of the machine!

2-3. Checking

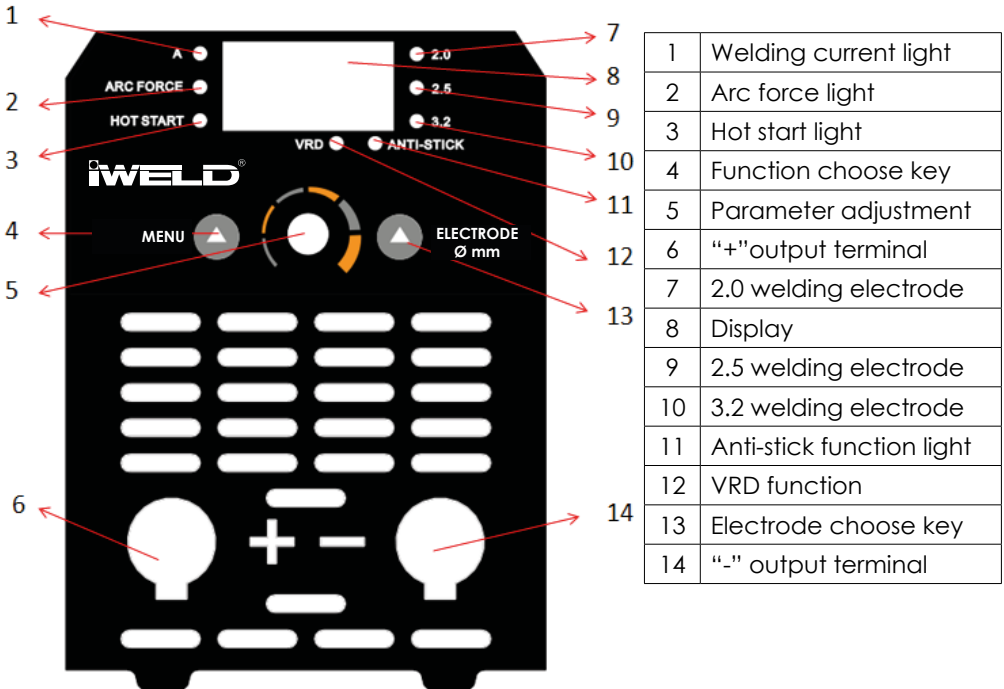
1. Make sure the machine is properly grounded!
2. Make sure that all connections are perfect, especially grounding of the machine!
3. Check that the electrode cable connection to be perfect!
4. Make sure that the polarity is correct outputs!
5. Welding spatter can cause a fire, so make sure there are no flammable materials in the work area!

3. Operation

1. Turn on the main power switch.
2. Adjust welding parameters for welding in accordance with the value specified for practical application.
3. Usually the welding current is formed in accordance with the electrode diameters as follows. Make sure that it is current with reserve your unit has, otherwise do not even try to get the job done!

| The welding current reference for different electrode diameter | | | | | |
|--|-------|--------|--------|---------|---------|
| Electrode diameter/mm | 1.6 | 2.0 | 2.5 | 3.2 | 4.0 |
| Welding current/A | 40-80 | 60-100 | 80-120 | 100-150 | 140-180 |

3-1. Control Panel Functions



| | |
|----|---------------------------|
| 1 | Welding current light |
| 2 | Arc force light |
| 3 | Hot start light |
| 4 | Function choose key |
| 5 | Parameter adjustment |
| 6 | "+" output terminal |
| 7 | 2.0 welding electrode |
| 8 | Display |
| 9 | 2.5 welding electrode |
| 10 | 3.2 welding electrode |
| 11 | Anti-stick function light |
| 12 | VRD function |
| 13 | Electrode choose key |
| 14 | "-" output terminal |

Precautions

Workspace

1. Welding equipment free of dust, corrosive gas, non-flammable materials, up to 90% humidity for use!
2. Avoid welding outdoors unless protected from direct sunlight, rain, snow, work area temperature must be between -10 °C and +40°C.
3. Wall to position the device at least 30 inches away.
4. Well-ventilated area to perform welding.

Safety requirements

Welding provides protection against overvoltage / overcurrent / overheating. If any of the above events occurs, the machine stops automatically. However, over-stress damage to the machine, keep the following guidelines:

1. Ventilation. When welding a strong current going through the machine, so the machine is not enough natural ventilation for cooling. The need to ensure adequate cooling, so the distance between the plane and any object around it at least 30 cm. Good ventilation is important to normal function and service life of the machine.
2. Continuously, the welding current does not exceed the maximum allowable value. Current overload may shorten its life or damage to the machine.
3. Surge banned! Observance of tension range follow the main parameter table. Welding machine automatically compensates for voltage, allowing the voltage within permissible limits of law. If input voltages exceed the specified value, damaged parts of the machine.
4. The machine must be grounded! If you are operating in a standard, grounded AC pipeline in the event of grounding is provided automatically. If you have a generator or foreign, unfamiliar, non-grounded power supply using the machine, the machine is required for grounding connection point earth to protect against electric shock.
5. Suddenly stopping may be during welding when an overload occurs or the machine overheats. In this case, do not restart the computer, do not try to work with it right away, but do not turn off the power switch, so you can leave in accordance with the built-in fan to cool the welding machines.

WARNING!

If the welding equipment is used with the welding parameters above 180 amperes, the standard 230V electrical socket and plug for 16 amp circuit breaker is not sufficient for the required current consumption, it is necessary to use the welding equipment with 20A, 25A or even to the 32A industrial fuses! In this case, both the plug and the plug socket fork have to be replaced to 32A single phase fuse socket in compliance with all applicable rules. This work may only be carried out by specialists!

Maintenance

1. Remove power unit before maintenance or repair!
2. Ensure that proper grounding!
3. Make sure that the internal gas and electricity connections are perfect and tighten, adjust if necessary, if there is oxidation, remove it with sandpaper and then reconnect the cable.
4. Hands, hair, loose clothing should be kept away under electric parts, such as wires, fan.
5. Regularly dust from the machine clean, dry compressed air, a lot of smoke and polluted air to clean the machine every day!
6. The gas pressure is correct not to damage components of the machine.
7. If water would be, for example. rain, dry it in the machine and check the insulation properly! Only if everything is all right, go after the welding!
- 8 When not in use for a long time, in the original packaging in a dry place.

Certificate identification number: LIV_IWELD_MMA_01/2023

Machine types and accessories of the IWELD family of MMA welding machines

| Code of IWELD | Product name | International product name |
|----------------|---|---|
| 80MROFRC120 | IWELD GORILLA MICROFORCE 120 VRD hegesztő inverter | IWELD GORILLA MICROFORCE 120 VRD Inverter Welding Machine |
| 80POC-PWR130 | IWELD GORILLA POCKETPOWER 130 (120A) Hegesztő inverter, koffer nélkül | IWELD GORILLA POCKETPOWER 130 (120A) Inverter Welding Machine |
| 80POC-PWR150 | IWELD GORILLA POCKETPOWER 150 VRD (140A) Hegesztő inverter | IWELD GORILLA POCKETPOWER 150 VRD (140A) Inverter Welding Machine |
| 80POC-PWR170 | IWELD GORILLA POCKETPOWER 170 VRD (160A) Heg. inverter, koffer nélkül | IWELD GORILLA POCKETPOWER 170 VRD (160A) Inverter Welding Machine |
| 80POC-PWR190 | IWELD GORILLA POCKETPOWER 190 VRD (180A) Hegesztő inverter | IWELD GORILLA POCKETPOWER 190 VRD (180A) Inverter Welding Machine |
| 80POCFRC200 | IWELD GORILLA POCKETFORCE 200 (200A) Hegesztő inverter | IWELD GORILLA POCKETFORCE 200 (200A) Inverter Welding Machine |
| 80GOS-PFC220LT | IWELD GORILLA SUPERFORCE 220 LT Hegesztő inverter | IWELD GORILLA SUPERFORCE 220 LT Inverter Welding Machine |
| 80GOS-PFC230 | IWELD GORILLA SUPERFORCE 230 (215A) Hegesztő inverter | IWELD GORILLA SUPERFORCE 230 (215A) Inverter Welding Machine |
| 8000ARC160M | IWELD ARC 160 MINI Hegesztő inverter | IWELD ARC 160 MINI Inverter Welding Machine |
| 8HD220LTDP | IWELD HD 220 LT DIGITAL PULSE Hegesztő inverter | IWELD HD 220 LT DIGITAL PULSE Inverter Welding Machine |
| 8HD170MTARC | IWELD HD 170 MULTIARC Hegesztő inverter | IWELD HD 170 MULTIARC Welding Machine |
| 8HD200MTARC | IWELD HD 200/220 MULTIARC Hegesztő inverter | IWELD HD 200/220 MULTIARC Inverter Welding Machine |
| 8HD250LTIGBT | IWELD HD 250 LT IGBT hegesztő inverter | IWELD HD 250 LT IGBT Inverter Welding Machine |
| 800G2200CELL | IWELD HEAVY DUTY 2200 Cell. Hegesztő inverter | IWELD HEAVY DUTY 2200 Cell. Inverter Welding Machine |
| 800G315IGBT | IWELD HEAVY DUTY 315 IGBT Hegesztő inverter | IWELD HEAVY DUTY 315 IGBT Inverter Welding Machine |
| 800G4000IGBT | IWELD HEAVY DUTY 4000 Cell. IGBT Hegesztő inverter | IWELD HEAVY DUTY 4000 Cell. IGBT Inverter Welding Machine |

Halásztelek, 21 March 2023.



Molnár János
Managing Director

Dear Customer!

Thank you for choosing IWELD Kft.'s product!

We hope that the product purchased from the manufacturer (hereinafter: Product) serves to fully satisfy your expectations works properly.

We would like to inform you that the product you have purchased is not covered by Government Decree 151/2003 (IX.22) (hereinafter: Regulation) and thus the warranty obligation stipulated therein is not covered either.

Instead, the manufacturer undertakes a one/two-year voluntary warranty for each product, Ptk. 6:171. of the rules of § taking into account.

The warranty period begins on the day the product is handed over to the customer.

The defect is not covered by the warranty if its cause occurred after the product was handed over to the buyer, so for example, if the error

- unprofessional commissioning,
- improper use, disregarding the instructions for use and management,
- improper storage, improper handling, damage,
- elemental damage, caused by a natural disaster.

As a general rule, the rights arising from the warranty can be enforced with the warranty card. Irregular issuance of the warranty card or failure to provide the customer with the warranty card does not affect the validity of the warranty.

In the event of a defect covered by the warranty, at the buyer's option:

- a) may request repair or replacement, unless it is impossible to fulfill the chosen warranty claim or if it is for the manufacturer - compared to fulfilling another warranty claim - would result in disproportionate additional costs, or
- b) you can request a proportional delivery of the compensation, you can repair the defect at the manufacturer's expense yourself or with someone else or have it repaired or withdraw from the contract if the obliged has not undertaken the repair or replacement, this obligation is unable to comply, or if the right holder has ceased to have an interest in repair or replacement. Insignificant there is no room for cancellation due to an error. An insignificant defect is one that prevents the intended use of the goods/products obstructs (e.g. aesthetic defects, wear, minor damages). The repair or replacement - to the properties of the thing and taking into account the purpose expected by the holder - within an appropriate deadline, while protecting the interests of the holder must be done. During the repair, only new parts may be installed in the product.

The customer can switch from the chosen warranty claim to another. The costs caused by the transition must be paid to the manufacturer, unless the manufacturer gave a reason for the transition, or the transition was otherwise justified.

If, during the first repair of the product during the warranty period, a finding is made by the manufacturer's brand service wins that the product cannot be repaired, the manufacturer is obliged to replace the product within 8 days.

If the product it is not possible to exchange it, the manufacturer is obliged to pay the purchase price of the product presented by the customer shown on the supporting document - on the invoice or receipt issued under the VAT Act to refund the purchase price to the customer within 8 days.

If, during the warranty period, the product fails again after three repairs - the customer in the absence of a different provision - and if Act V of 2013 on the Civil Code 6:159. § (2) based on paragraph b) the customer does not demand a proportional reduction of the purchase price, and the customer does not wish to a repair the product at the company's expense or have it repaired by someone else, the manufacturer is obliged to replace the product within 8 days.

If it is not possible to exchange the product, the manufacturer is obliged to pay for the product presented by the customer on a receipt confirming payment - on an invoice issued on the basis of the General Sales Tax Act on the receipt - to refund the purchase price to the customer within 8 days.

The period of the warranty claim for the part affected by the replacement or repair of the product begins anew. This rule must be applied also in the event that a new error occurs as a result of the repair.

If the product is not repaired within 30 days from the notification of the repair request to the manufacturer, - the customer unless otherwise provided - the manufacturer is obliged to sell the product after the unsuccessful expiry of the 30-day period Exchange within 8 days. If it is not possible to replace the product, the manufacturer is obliged to replace the product presented by the customer, a on a receipt certifying the payment of the consideration for the product - issued on the basis of the General Sales Tax Act on the invoice or receipt - stated purchase price 8 days after the 30-day repair period has expired to be refunded to the customer within days. If the manufacturer does not know about the fulfillment of the customer's warranty or guarantee claim at the time of notification to declare his position - in case of rejection of the request, the reason for the rejection - within 5 working days, it can be verified is obliged to notify the customer.

The manufacturer must endeavor to carry out the repair or replacement within 15 days at most. If the repair or the duration of the exchange exceeds 15 days, then the manufacturer will notify the customer you are obliged to inform the repair or about the expected duration of the exchange. In case of the prior consent of the buyer, the information is provided electronically or a it is done in another way suitable for proof of receipt by the customer.

The manufacturer is released from the warranty obligation if it proves that the cause of the defect arose after the performance. The warranty does not affect the enforcement of the buyer's legal rights.

The customer may submit his request for repair at the manufacturer's headquarters, any location, branch office, and the manufacturer's can also be validated directly at the service center indicated on the warranty card.

The origin of the malfunction can only be judged by the manufacturer's after-sales service. Replacing the product or a significant part of it If Repairs are carried out at the manufacturer's service center. The duration of the warranty repair is normally 15 days, which can be extended to 60 days may be longer. The customer takes care of the delivery and delivery of the product weighing less than 300 kg to the manufacturer.

For products weighing more than 300 kg, the manufacturer carries out the repair at the place of operation.

If a dispute arises regarding the nature of the defect (e.g. the repair ability of the product, the method of repair), the



WARRANTY CARD

Number:

| | |
|---|---|
| Product article number: | |
| Product name/type: | |
| Product serial number: | |
| Name and address of manufacturer/distributor: | IWELD Trade and Service Limited Liability Company, 2314 Halásztelek, II. Rákóczi Ferenc st. 90/B |
| Winter: | +36 24 532 625 |
| Error message: | info@iweld.hu |
| E-mail: | info@iweld.hu |

| | |
|------------------------------------|--|
| Buyer's name and address: | |
| Name and address of sales company: | |
| Date of contract: | |
| Delivery date: | |

.....
signature (seller)

PS.

| | Date of notification of the warranty claim: | Date of acceptance for repair: | Description of the fault, method of repair: | Date the product was returned to the customer | Name of service, worksheet number | Warranty new deadline |
|---|---|--------------------------------|---|---|-----------------------------------|-----------------------|
| 1 | | | | | | |
| 2 | | | | | | |
| 3 | | | | | | |
| 4 | | | | | | |