

BEDIENUNGSANLEITUNG

USER MANUAL | INSTRUKCJA OBSŁUGI | MANUEL D'UTILISATION | ISTRUZIONI D'USO | MANUAL DE INSTRUCCIONES

S-MIGMA-195 UK

USER MANUAL

SYMBOLS



The operation manual must be read carefully.



Never dispose of electrical equipment together with household waste.

CE

This machine conforms to CE declarations.



Use full body protective clothes.



Attention! Wear protective gloves.



Safety goggles must be worn.



Protective footwear must be worn.



Attention! Hot surface may cause burns.



Attention! Risk of fire or explosion.



Attention! Harmful fumes, danger of poisoning. Gases and vapours may be hazardous to health. Welding gases and vapours are released during welding. Inhalation of these substances may be hazardous to health.



Use a welding mask with appropriate filter shading.



CAUTION! Harmful radiation of welding arc.



PLEASE NOTE!! Drawings in this manual are for illustration purposes only and in some details may differ from the actual product.

The original operation manual is in German. Other language versions are translations from German.

I. SAFETY OF USE

I.1 GENERAL NOTES

- Take care of your own safety and that of bystanders by reviewing and strictly following the instructions, included in the operating manual of the device.
- Only qualified and skilled personnel are allowed to start, operate, maintain and repair the machine.
- The machine must never be operated contrary to its intended purpose.

I.2 PREPARATION OF WELDING WORK SITE

WELDING OPERATIONS MAY CAUSE FIRE OR EXPLOSION

- Strictly follow the occupational health and safety regulations applicable to welding operations and make sure to provide appropriate fire extinguishers at the welding work site.
- Never carry out welding operations in flammable locations posing the risk of material ignition.
- Never carry out welding operations in an atmosphere containing flammable particles or vapours of explosive substances.
- Remove all flammable materials within 12 meters from the welding operations site and if removal is not possible cover flammable materials with fire retardant covering.
- Use safety measures against sparks and glowing particles of metal.
- Make sure that sparks or hot metal splinters do not penetrate through the slots or openings in the coverings, shields or protective screens.
- Do not weld tanks or barrels that contain or have contained flammable substances. Do not weld in the vicinity of such containers and barrels.

- Do not weld pressure vessels, pipes of pressurised installations or pressure trays.
- Always ensure adequate ventilation.
- It is recommended to take a stable position prior to welding.

I.3 PERSONAL PROTECTION EQUIPMENT

ELECTRIC ARC RADIATION CAN DAMAGE EYES AND SKIN

- When welding, wear clean, oil stain free protective clothing made of non-flammable and non-conductive material (leather, thick cotton), leather gloves, high boots and protective hood.
- Before welding remove all flammable or explosive items, such as propane butane lighters or matches.
- Use facial protection (helmet or shield) and eye protection, with a filter featuring a shade level matching the sight of the welder and the welding current. The safety standards suggest colouring No. 9 (minimum No. 8) for each current below 300 A. A lower colouring of the shield can be used if the arc is covered by the workpiece.
- Always use approved safety glasses with side protection under the helmet or any other cover.
- Use guards for the welding operations site in order to protect other people from the blinding light radiation or projections.
- Always wear earplugs or another hearing protection to protect against excessive noise and to avoid spatter entering the ears.
- Bystanders should be warned to not look at the arc.

I.4 PROTECTION AGAINST ELECTRIC SHOCK

ELECTRIC SHOCK CAN BE LETHAL

- The power cable must be connected to the nearest socket and placed in a practical and secure position. Positioning the cable negligently in the room and on a surface which was not checked must be avoided as it can lead to electrocution or fire.
- Touching electrically charged elements can cause electrocution or serious burns.
- Electrical arc and the working area are electrically charged during the power flow.
- Input circuit and inner power circuit of the devices are also under voltage charge when the power supply is turned on.
- The elements under the voltage charge must not be touched.
- Dry, insulated gloves without any holes and protective clothing must be worn at all times.
- Insulation mats or other insulation layers, big enough as not to allow for body contact with an object or the floor, must be placed on the floor.
- The electrical arc must not be touched.
- Electrical power must be shut down prior to cleaning or electrode replacement.
- It must be checked if the earthing cable is properly connected and the pin is correctly connected to the earthed socket. Incorrect connection of the earthing can cause life or health hazard.
- Power cables must be regularly checked for damage or lack of insulation. Damaged cables must be replaced. Negligent insulation repair can cause death or serious injury.
- The device must be turned off when not in use.
- The cable mustn't be wrapped around the body.
- A welded object must be properly grounded.
- Only equipment in good condition can be used.
- Damaged device elements must be repaired or replaced. Safety belts must be used when working at height.
- All fitting and safety elements must be stored in one place.
- From the moment of turning on the release, the handle end must be kept away from the body.
- The chassis ground must be mounted to the welded element or as close to it as possible (e.g. to a work table).

The Device can still be under Voltage upon Power Source Disconnection

- Voltage in the input capacitor must be checked upon turning off the device and disconnecting it from the power source. One must make sure that the voltage value is equal to zero. Otherwise, the device elements must not be touched.

1.5 GASES AND FUMES

PLEASE NOTE! GAS MAY BE LETHAL OR DANGEROUS TO HUMAN HEALTH!

- Always stay clear of the gas exhaust.
- Ensure proper ventilation of the work space and avoid gas inhalation.
- Chemical substances (lubricants, solvents) must be removed from the surfaces of welded details as they burn and emit toxic smokes under the influence of temperature.
- Welding galvanised details is permitted only when efficient ventilation is provided with filtration and access to fresh air. Zinc fumes are highly toxic, an intoxication symptom is so-called metal fever.

2. TECHNICAL DETAILS

Product name	Welding machine
Model	S-MIGMA-195 UK
Voltage / frequency	230 V~ / 50Hz
Rated input current	16 A (MMA)
	14 A (MIG)
No-load voltage	22-39 V
Welding current (MMA/MIG)	70-195 A
Duty cycle (MMA/MIG)	15 %
Welding current at 100% duty cycle (MMA/MIG)	75 A
Wire diameter	0,6 – 0,8 mm
Wire type	Full / core (FLUX)

3. CONNECTION OF THE DEVICE

3.1 GENERAL NOTES

- The device must be used according to its purpose, with observance of OHS regulations and restrictions resulting from data included in the rating plate (IP level, operation cycle, supply voltage, etc.).
- The machine must not be opened as it will cause warranty loss and, in addition, exploding, unshielded elements can cause serious injuries.
- The producer does not bear any responsibility for technical changes in the device or material losses caused by the introduction of the said changes.
- In case of incorrect device operation, contact the service centre.
- Louvers must not be shielded - the welder must be positioned at 30 cm distance from objects surrounding it.
- The welder must not be kept under your arm or near to your body.
- The machine must not be installed in rooms with aggressive environments, high dustiness and near devices with high electromagnetic field emission.

3.2 DEVICE STORAGE

- The machine must be protected against water and moisture.
- The welder must not be positioned on heated surfaces.
- The device must be stored in a dry and clean room.

3.3 CONNECTING THE DEVICE

3.3.1 CONNECTING THE POWER

- Connection of the device must be performed by a qualified person. In addition, a person with required qualifications should check if the earthing or electrical installation with protection system is in line with the safety regulations and if they operate correctly.
- The device must be placed near the work station.
- Connection of excessively long conduits to the machine must be avoided.
- One-phase welders should be connected to a socket fitted with an earthing prong.
- Welders powered from a 3-Phase network are delivered without a plug, the plug must be obtained independently and installation should be assigned to a qualified person.

PLEASE NOTE! THE DEVICE MAY ONLY BE USED UPON CONNECTION TO AN INSTALLMENT WITH A PROPERLY FUNCTIONING FUSE

3.3.2 CONNECTING GAS

- Gas tanks must be placed far from the welded object and be protected against falling.
- Gas connector of the welder must be connected with the tank or gas installation by means of the correct pipe and regulator with gas flow regulation. Please note! Connection of line regulators to the tank and the other way round is prohibited. Such a change can result in regulator damage and serious injuries.
- Economical gas use extends the welding time

4. OPERATION

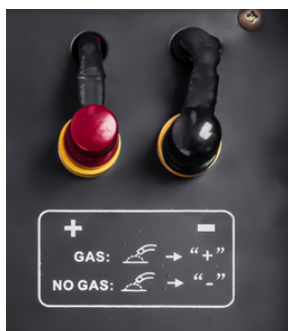
S-MIGMA-195 UK



1.	Power cord
2.	Wire feed rate adjustment knob
3.	On/off switch
4.	Welding current adjustment switch
5.	Operation mode switch MIG / MMA
6.	MIG cable

7.	ERROR INDICATOR = The indicator lights in the following two situations: a) If the machine has malfunctioned and cannot be operated. b) If the cutting device has exceeded the standard working time the protection mode is initiated and the machine will stop functioning. This means that the machine is now being cooled in order to be able to restore temperature control again after the device has overheated. Therefore the machine is stopped. During this process, the red warning light on the front panel lights up. In this case it is not necessary to remove the power plug from the socket. The ventilation system may be left on in order to enhance the cooling of the machine. When the red light goes dark, this means that the temperature is now down to the normal level and the unit can be put back into operation.
8.	GAS connection – at the back of the device
9.	MMA-connection = Manual arc welding, called MMA, is one of the oldest electric welding procedures used for metallic materials which is still used today. An electronic arc, formed between an electrode melted as a filler metal and the workpiece, is used as a heat source for welding.
10.	Grounding cable connection

The device can be operated both with gas and solid wire, as well as with flux-cored wire. In order to use flux-cored wires with the S-MIGMA-195 UK the poles must be changed according to the drawing.



„GAS:“ –MIG full-wire welding
 „NO GAS:“ – cored-wire welding (FLUX)
 Installation of the wire coil and inserting the wire:



1. Open the left side door of the welder by pulling the lever.
2. Please observe the size of the coil holder. The size must match the diameter of the coil. Place the coil on the rack.
3. Next pull out the wire clockwise. The beginning of the wire is usually fixed to the coil, so that the wire cannot be separated from the coil. Use a standard coil. The size of the holder is in accordance with the standard.
4. Loosen the anchor bolt on the coil holder. Then place the coil on the rack. Attach the anchor bolt and tighten it so that the wire cannot slip off. Please remember not to attach this element too tightly, as it might negatively impact the welding effectiveness of the device. Please keep the end of the wire straight and free of burrs.

5. Open the rotary knob
6. Raise the pressure element.
7. Check that the grooves on the wire feed roll match the wire diameter.
8. Now lower the pressure element and tighten the knob until the wire runs evenly on the rolls. If the wire slips on the rolls, tighten the knob further. Caution: Do not tighten the element too much, as excessive pressure on the rolls may damage the wire feed motor.
9. Switch on the welding device (ON/OFF switch).
10. Set the required volume of gas at the valve of the gas cylinder.
11. The device is now ready for welding.

5. DISPOSING OF PACKAGING

The various items used for packaging (cardboard, plastic straps, polyurethane foam) should be kept, so that the device can be sent back to the service centre in the best possible condition in case of any problems!

6. TRANSPORTATION AND STORAGE

Shaking, crashing and turning upside down of the device should be prevented when it is transported. Store it in a properly ventilated surrounding with dry air and without any corrosive gas.

7. CLEANING AND MAINTENANCE

- Disconnect from electricity when cleaning equipment.
- Use cleaner without corrosive substances to clean surface.
- Dry all parts well after cleaning, before the device is used again.
- Store the unit in a dry, cool location, free from moisture and direct exposure to sunlight.

8. REGULAR CONTROL OF THE DEVICE

Check regularly that the device doesn't present any damage. If there is any damage, please stop using the device. Please contact your customer service to solve the problem.

What to do in case of a problem?

Please contact your customer service and prepare following information:

- Invoice number and serial number (the latter is to be found on the technical plate on the device).
- If relevant, a picture of the damaged, broken or defective part.
- It will be easier for your customer service clerk to determine the source of the problem if you give a detailed and precise description of the matter. The more detailed your information, the better the customer service will be able to solve your problem rapidly and efficiently!

CAUTION: Never open the device without the authorization of your customer service. This can lead to a loss of warranty!

Umwelt – und Entsorgungshinweise

Hersteller an Verbraucher

Sehr geehrte Damen und Herren,

gebrauchte Elektro – und Elektronikgeräte dürfen gemäß europäischer Vorgaben **[1]** nicht zum unsortierten Siedlungsabfall gegeben werden, sondern müssen getrennt erfasst werden. Das Symbol der Abfalltonne auf Rädern weist auf die Notwendigkeit der getrennten Sammlung hin. Helfen auch Sie mit beim Umweltschutz. Sorgen Sie dafür, dieses Gerät, wenn Sie es nicht mehr weiter nutzen wollen, in die hierfür vorgesehenen Systeme der Getrenntsammlung zu geben.



In Deutschland sind Sie gesetzlich **[2]** verpflichtet, ein Altgerät einer vom unsortierten Siedlungsabfall getrennten Erfassung zuzuführen. Die öffentlich – rechtlichen Entsorgungsträger (Kommunen) haben hierzu Sammelstellen eingerichtet, an denen Altgeräte aus privaten Haushalten ihres Gebietes für Sie kostenfrei entgegengenommen werden. Möglicherweise holen die rechtlichen Entsorgungsträger die Altgeräte auch bei den privaten Haushalten ab.

Bitte informieren Sie sich über Ihren lokalen Abfallkalender oder bei Ihrer Stadt – oder Gemeindeverwaltung über die in Ihrem Gebiet zur Verfügung stehenden Möglichkeiten der Rückgabe oder Sammlung von Altgeräten.

- [1]** RICHTLINIE 2002/96/EG DES EUROPÄISCHEN PARLAMENTS UND DES RATES
ÜBER ELEKTRO – UND ELEKTRONIK – ALTGERÄTE
- [2]** Gesetz über das Inverkehrbringen, die Rücknahme und die umweltverträgliche Entsorgung
von Elektro – und Elektronikgeräten (Elektro – und Elektronikgerätegesetz – ElektroG).

For the disposal of the device please consider and act according to the national and local rules and regulations.

CONTACT

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