

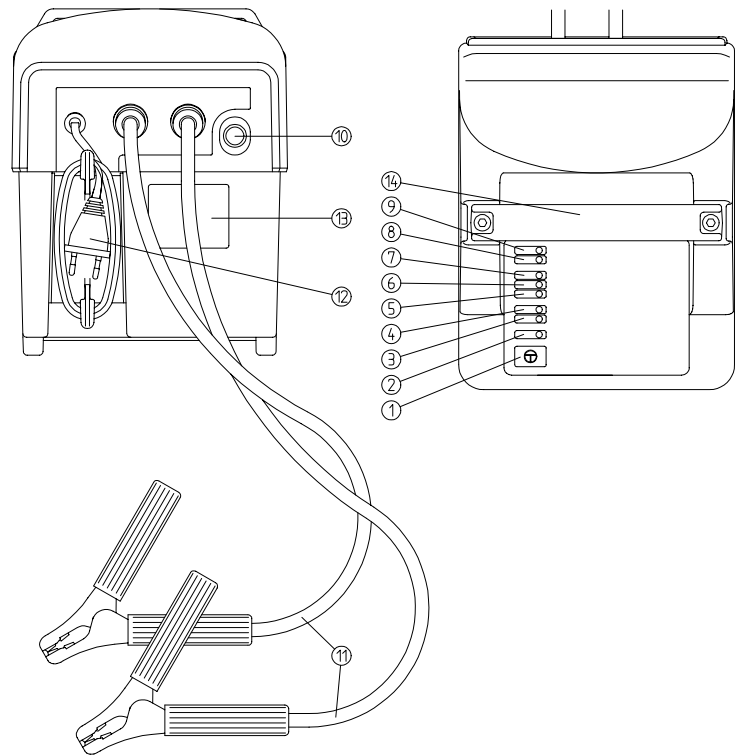


Operating instructions

GB

# MasterPower 12 V-700 A

# MasterPower 12 V - 700 A



**Legend** (LED = light emitting diode)  
(MP = Truck Power)

- |   |   |
|---|---|
| (1) On / Off key  | (7) LED green - MP fully charged  |
| (2) LED yellow - vehicle with faulty/<br>without battery: Press key (10)<br>at rear side - MP ready for star<br>ting aid (without safety control) | (8) LED green - charging of MP<br>battery completed / floating charge                     |
| (3) LED red - fault indicator, wrong<br>polarity / no contact to battery  | (9) LED yellow - MP battery is<br>being charged   |
| (4) LED green - ready for starting aid<br>LED yellow - support mode   | (10) Key for battery replacement<br>operation, starting with faulty<br>or without battery |
| (5) LED red - starting aid not possible -<br>first charge MP  | (11) Starting aid cable   |
| (6) LED yellow - starting aid possible,<br>but do charge MP   | (12) Mains cable for incorporated charger   |
|   | (13) Rating plate   |
|   | (14) Handles  |

## 9.0 Technical Data

Starting aid current	$I_{\max} = 700 \text{ A}$
Supporting current	$I_{\max} = 50 \text{ A}$
Voltage	$U_N = 12 \text{ V}$
Plastic housing (WxHxD in mm)	216 x 272 x 277
Weight	14.9 kg
Length of starting aid cables	2.0 m
Cross-section of starting aid cable	25 mm <sup>2</sup>
Type of protection	IP34
Operating temperature	-10 ° bis 60 °C
Incorporated charger: Charging characteristic	IUoU
Mains supply	230 V 50/60 Hz

**The battery starter MasterPower 12V-700A  
complies with the requirements of the  
automotive industry.**

## 7.0 Charge MasterPower

- **Charge the MP regularly!**
- **Do not store MP with partly discharged battery.**

The charger for the **MP** battery is incorporated in the **MasterPower**.

- ➔ Plug the mains plug of the mains supply cable (12) into a mains socket.
- Yellow LED (9) lights up.  
The **MP** battery is being charged.
- The yellow LED (9) extinguishes, the green LED (8) lights up.
- Charging completed / floating charge of the **MP** battery.

The **MP** can remain connected to the mains supply unlimited which keeps the battery constantly charged.

The maximum charging period of a discharged battery is approx. 14 hrs.

**Charging the MP battery with lower line voltage will extend the charging time.**

## 8.0 Trouble shooting

**Fault indicator (3) is permanently red:**

Starting aid cable connected with wrong polarity

or

Current clamp has fallen off the vehicle battery during starting procedure.

**Remedy:**

- ➔ Switch off MP by shortly pressing key (1).
- ➔ Check connection of current clamps, Clean contact areas of the battery poles and current clamps.

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## 1.0 Safety instructions

- ➔ Only apply starting aid to vehicles with 12 V on-board supply!
- ➔ Please read operating instructions carefully before using MasterPower!
- ➔ Ensure secure location of the MasterPower when providing starting aid. Always place MasterPower in upright position!
- ➔ Ensure secure and correct connection of current clips to the battery poles of the vehicle.
- ➔ Remove the clamps of the starting aid cables from the vehicle battery only after the MP has been switched off.
- ➔ When using „battery replacement operation“ (key (10) at rear of the unit) there is no safety control! Ensure correct polarity!
- ➔ For safety reasons only trained personnel familiar with the operation may use the MasterPower!
- ➔ TAKE CARE when opening the MP!  
Battery is charged.  
Danger of short circuit at the connection points. Only work with insulated tools!

## 2.0 Device description

The **MasterPower 12 V-700 A** (herein-after referred to as **MP**) is a **battery starter for private cars, trucks as well as construction and agricultural machines with 12 V on-board voltage** and is controlled by microprocessor. The **MP** is completely independent of a mains supply.

**The starting aid voltage is free of peaks and guarantees data security in the on-board supply.**

**Starting aid current at 12 V: 700 A.**

This ensures that even at low temperatures all engines can be started.

Switch the **MP** on and off with key (1). The **MP** is ready for starting aid when LED (4) lights up green.

The **MP** detects the end of the starting operation. When the engine fires, the **MP** switches off automatically.

**The MP** checks whether the vehicle battery is intact.

If a battery is missing or faulty, the red LED (3) and the yellow LED (2) light up.

You can then switch on the **MP** with key (10) at the rear side (battery replacement mode). With this battery replacement mode the **MP** remains activated after starting the engine. Switch off the **MP** with key (1). The **MP** monitors itself.

With every switching on the **MP** checks the state of its battery. This will be indicated for 10 sec. by LED (5), (6) or (7).

The **MP** detects faults and indicates them with LED (3):

- Current clamps connected to the vehicle battery with wrong polarity.
- Current clamps fallen off the battery.

## 3.0 Starting aid

→ Connect clamps of the starting aid cables (11) to the correct poles of the vehicle battery.

→ Red clamp (+) to the positive pole of the battery.

→ Black clamp (-) to negative pole of the battery.

→ Shortly press key (1), **MP** is ready for starting aid.  
LED green (4) lights up.

→ Start the engine.

**ATTENTION! The current clamps are under current now!**

**If the engine starts:** **MP** automatically switches off. The current clamps are at zero voltage.

→ Remove the clamps of the starting aid cables from the vehicle battery.

**If the engine does not start after 10 sec.:**

- The starting aid process is terminated automatically. After a waiting period of 5 sec. a new starting attempt is possible.

**Note:**

**If a number of starting attempts with the MP prove unsuccessful, it is necessary to check the vehicle itself.**

## 4.0 Starting aid with faulty or without battery

If the vehicle has a faulty battery or none at all, or if the vehicle to start is equipped with an electronic immobilizer resp. an additional start relay, it is possible to start the vehicle under „battery replacement mode“.

Do not nonnect the **MP** to the battery!

**ATTENTION! Risk of short circuit!**

**Ensure that the pole clips cannot cause a short circuit. Ensure proper insulation!**

→ Shortly press key (1).

- The red LED fault indicator (3) - „no contact to battery“ and the yellow LED (2) „vehicle with faulty/without battery“ light up.

→ Connect the pole clamps "pole right" (see point 3.0) to the battery.

**ATTENTION! Risk of short circuit!**

→ Shortly activate key (10) at the rear side.

- LED (4) lights alternate green and yellow.

→ Start the engine.

**If the engine fires:** The **MP** remains activated.

**If the engine does not fire after 10 sec.:**

- The starting aid process is terminated automatically. After 5 sec. a new starting attempt is possible.

**The function is to be switched off with the ON/OFF push button on the operator panel.**

## 5.0 Support mode

The function „support mode“ enables the **MP** to supply electricity to the on-board system of the vehicle, e.g. when the battery is being changed, making sure that no data get lost.

**Support mode** (up to 50 A)

→ Connect current clips to vehicle battery clamps.

→ Hold key (1) for 2 sec.

- LED (4) lights up yellow. Support mode is activated.

**ATTENTION! The current clips are under current now!**

**ATTENTION! MP automatically switches off support operation, if the current consumption exceeds 50 A.**

**Start under support mode:**

If you chose support mode and want to start now, this is possible within 1 min:

→ Start the engine.

- **The MP automatically switches from support mode to starting aid. LED (4) changes from yellow to green.**

## 6.0 Battery test MasterPower

Any time the **MP** is switched on it checks the charging state of its battery. The LED's (5), (6) or (7) indicate the state of charge of the **MP** battery.

- **Green LED (7) lights up:**  
**MP** battery fully charged.
- **Yellow LED (6) lights up:**  
**MP** battery partly discharged, **starting aid possible, charge MP battery by all means.**
- **Red LED (5) lights up:**  
**MP** battery is discharged, **starting aid not possible, charge MP battery.**

## 6.1 Deep discharge protection

To avoid a damaging deep discharge of the **MP** battery, the power-on time of the **MP** is limited to 4 hours in all operating modes. Depending on the operating mode, the voltage of the **MP** battery is permanently observed. When under-running a critical limit, the **MP** switches off.