



Skán 4.0

Battery charger

JM-No. 609 01 97



- (EN) Battery charger
- (PL) Ładowarka do akumulatorów
- (ES) Cargador de baterías
- (IT) Caricatore batteria
- (CZ) Nabíječka baterií

Scope of delivery:

JMP Skán 4.0, adapter cable with terminals, adapter cable with eyelets for permanent connection to the battery, Adapter cable for on-board socket outlet (CAN bus)

Thank you very much for choosing a JMP Skán battery charger. The JMP Skán 4.0 charger is suitable for both daily use involving rapid charging of a battery and long-term trickle charging (e.g. where vehicles are in winter storage).

Technical data:

12 V / 1 - 4 A, for batteries from 4 Ah to 120 Ah

Dimensions: 190 x 80 x 50 mm, weight: 0.75 kg, mains power cable: 2 m, connection cable: 2.10 m

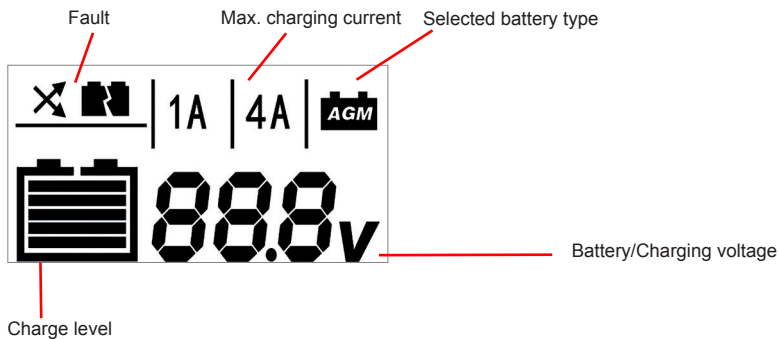
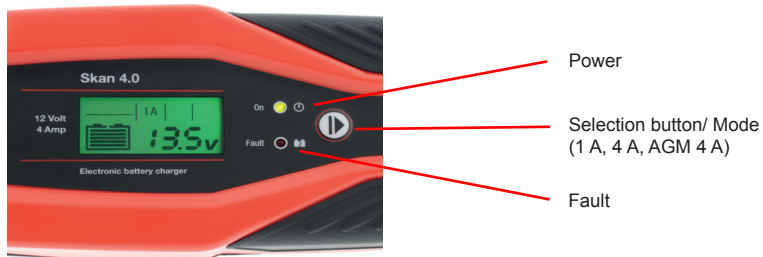
Suitable for:

- Standard lead acid
- Gel
- AGM
- EFB
- Lithium (LiFePO₄)

Safety instructions:

- Read the operating instructions carefully prior to using the charger.
- The charger is intended for charging lead acid, gel, AGM, EFB and lithium (LiFePO₄) batteries. It should not be used for any other purposes.
- Disposable batteries should not be charged. Do not charge any frozen batteries.
- Battery acid is caustic. In the event of unintentional contact between the skin or eyes and acid, rinse the skin off and the eyes out immediately under flowing water and consult a doctor.
- Always wear protective goggles when connecting and disconnecting the battery and keep the battery away from the face.
- Keep out of reach of children. This device is not a toy and should not be used as such.
- This device should not be used by persons (including children) with limited physical, sensory or mental aptitude or lacking in adequate knowledge and experience if these persons are not being supervised or have not received comprehensive instruction.
- Potentially explosive gases can be created during charging. Sparking and naked flames should be avoided as a result. Do not smoke.
- Realise charging in a ventilated and dry environment.
- Never deposit the charger on the battery during charging.
- Interventions in the device for the purpose of repair and maintenance should only be undertaken by skilled personnel.
- No warranty claims will be entertained in the event of improper use of or interventions in the device.

User interface:



Adjustable charging mode:

1 A	Charging of 12 V batteries from 4 Ah to 30 Ah Charge retention of 12 V batteries from 4 Ah to 70 Ah Suitable for charging of lithium or standard batteries
4 A	Charging of 12 V batteries from 30 Ah to 80 Ah Charge retention of 12 V batteries from 30 Ah to 120 Ah Suitable for charging of lithium or standard batteries
AGM	Charging of 12 V batteries from 30 Ah to 80 Ah with 4 A Charge retention of 12 V batteries from 30 Ah to 120 Ah Suitable for charging of gel, AGM or EFB batteries

Charger use:

Connection

1. Connect the charger power supply unit to the socket.
2. First connect the red terminal to the positive terminal on the battery.
3. Then connect the black terminal to either the negative terminal on the battery or the earth terminal on the vehicle body.
4. Select the desired charging mode based on the battery.

It is recommended that the optional eyelets be used for sustained connection to the charger (e.g. for battery trickle charging).

Connection by CAN bus




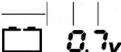
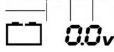
1. Connect the charger power supply unit to the socket.
2. Connect the CAN bus connector to the on-board socket.
3. Switch on the ignition and wait until the charger stops flashing. Then switch off the ignition.

Disconnection

1. Following use of the charger, disconnect the link to the mains socket.
2. Then disconnect the black terminal from the negative/earth terminal.
3. Disconnect the red terminal from the positive terminal on the battery.

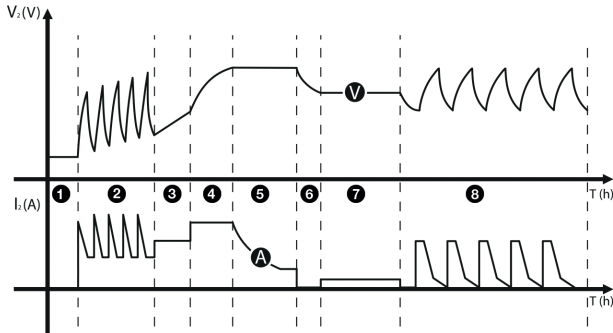
Battery analysis and fault signals:

The charger is capable of checking the battery status prior to and during charging and indicating any connection faults between the charger and the battery to be charged. This occurs via a digital display on which the error code is indicated. The following indications can appear in the event of faults during charging:

Display message	Cause	Solution
	Terminals are not connected correctly to the battery. Possible reverse polarity.	Connect the terminals correctly and restart charging (see "Charger use").
	Battery voltage too high (attempt to charge a 24 V battery).	Check battery voltage range.
	Battery charge capacity too high.	Use a charger with a greater charge capacity.
	Battery is incapable of retaining a good charge level.	Battery may be faulty.
	Battery voltage too weak, not rechargeable. Charging of batteries under 0.8 V is impossible.	Battery may be faulty.
	Cable disconnected or short circuited.	Connect the terminals correctly and restart charging (see "Charger use").
	Complete short circuit on battery.	Battery may be faulty.

Charge cycles:

The charge cycles of new battery chargers have been specially developed to optimise charging of all commercially available batteries. The variety of technologies employed in batteries available today in retail demand different charging characteristics to ensure correct and complete charging. JMP Skan chargers guarantee the right charge cycle for every type of battery, thus extending the life of your batteries.



1. First diagnostic step: "Diagnostic I" (initial diagnosis)	The charger analyses the battery charge level and determines the optimum charging mode.
2. First charging step: "Repair Mode" (desulfation)	Charging with pulse current until the battery achieves the optimum voltage and current values to commence the next charging step.
3. Second charging step: "Initial Charge" (battery activation)	Charging with reduced, constant current.
4. Third charging step: "Bulk Charge" (charge with constant current)	Charging with constant current until maximum battery voltage is achieved.
5. Fourth charging step: "Absorption Charge" (charge with constant voltage)	Charging with stabilised voltage until complete charging is achieved.
6. Second diagnostic step: "Diagnostic II" (second diagnosis)	The charger checks the status of the charged battery.
7. Fifth charging step: "Float Mode" (trickle charging with constant voltage)	Trickle charging with constant, reduced voltage.
8. Sixth charging step: "Trickle Mode" (trickle charging with pulse current)	Trickle charging with pulse current (constantly available).

Safety precautions:

JMP Skan chargers are equipped with protective features that ensure maximum safety during operation and use of the device.

- Complete protection against sparking
- Protection against short circuiting
- Voltage compensation
- Overheating protection
- Protection against reverse polarity
- Protection against weather conditions

(IP65: Protected against total dust ingress and low pressure water jets from any direction)

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