

# Skan 25.0 Battery charger

JM no. 609 03 30



**ES** Cargador de baterías

(IT) Caricatore batteria

(PL) Ładowarka do akumulatorów

(DA) Batterioplader

(CS) Nabíječka baterií

(SK) Nabíjačka batérií

(NL) Acculader

(FR) Chargeur de batterie



## Scope of supply: :

JMP Skan 25.0 with adapter cable and terminals

Thank you for choosing a JMP Skan battery charger. The JMP Skan 25.0 battery charger is suitable for daily use for rapid charging of a battery and as a power supply during diagnostic work and flashing.

#### Technical data:

12-24 V / 5-25 A, for batteries from 5 Ah to 800 Ah

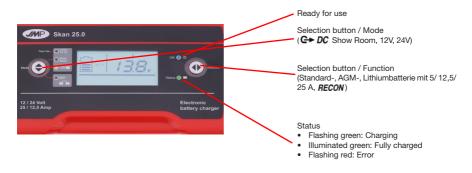
Dimensions: 280 x 270 x 80 mm, weight: 2.14 kg, mains power cable: 1.90 m, connection cable: 2.10 m

#### Suitable for:

- · Standard lead acid
- GelAGM
- AGN
- Lithium

## Safety information:

- · Read the instructions for use through carefully before using the charger.
- The charger is intended for charging lead acid, gel, AGM, EFB and lithium (LiFePO4) batteries. It must not be used for any other purposes. Disposable batteries must not be charged. Do not charge any frozen batteries.
- Battery acid is corrosive. In case of accidental contact between the acid and the skin or eyes, rinse immediately under running
  water and consult a doctor.
- When connecting and disconnecting the battery, wear safety glasses and keep the battery away from your face at all times.
- Keep out of reach of children. This device is not a toy and must not be used as such.
- This device should not be operated by people (including children) with limited physical, sensory or mental capabilities, nor by people without sufficient relevant knowledge and experience if such people are not being supervised and have not received comprehensive instruction.
- Potentially explosive gases may develop during the charging procedure. As such, sparks and naked flames must be avoided.
   No smoking.
- Perform the charging procedure in a well ventilated and dry environment.
- Never place the battery charger on top of the battery during the charging procedure.
- Repairs and maintenance work on the device and mains power cable may only be performed by skilled professionals.
- Improper use of and interference with the device will void all warranty claims.



Adjustable	12 V chargin	g mode:	
5 A	STD	Charging of 12 V batteries, 5 Ah to 100 Ah Trickle charging of 12 V batteries, 5 Ah to 150 Ah Suitable for charging standard and gel batteries	
12.5 A	STD	Charging of 12 V batteries, 70 Ah to 250 Ah Trickle charging of 12 V batteries, 70 Ah to 360 Ah Suitable for charging standard and gel batteries	
25 A	STD	Charging of 12 V batteries, 150 Ah to 550 Ah Trickle charging of 12 V batteries, 150 Ah to 800 Ah Suitable for charging standard and gel batteries	
5 A	AGM	Charging of 12 V batteries, 5 Ah to 100 Ah Trickle charging of 12 V batteries, 5 Ah to 150 Ah Suitable for charging AGM and EFB batteries – or standard batteries at temperatures below 5°C.	
12.5 A	AGM	Charging of 12 V batteries, 70 Ah to 250 Ah Trickle charging of 12 V batteries from 70 Ah to 360 Ah Suitable for charging AGM and EFB batteries – or standard batteries at temperatures below 5°C.	
25 A	AGM	LCharging of 12 V batteries, 150 Ah to 550 Ah Trickle charging of 12 V batteries, 150 Ah to 800 Ah Suitable for charging AGM and EFB batteries – or standard batteries at temperatures below 5°	
5 A	Ц	Charging of 12 V batteries, 5 Ah to 100 Ah Trickle charging of 12 V batteries, 5 Ah to 150 Ah Suitable for the charging of lithium batteries: LiFePO4 (no other types of lithium batteries)	
12.5 A	LI	Charging of 12 V batteries, 70 Ah to 250 Ah Trickle charging of 12 V batteries, 70 Ah to 360 Ah Suitable for the charging of lithium batteries: LiFePO4 (no other types of lithium batteries)	
25 A	LI	Charging of 12 V batteries, 150 Ah to 550 Ah Trickle charging of 12 V batteries, 150 Ah to 800 Ah Suitable for the charging of lithium batteries: LiFePO4(no other types of lithium batteries)	
Ш	Lithium batteries are equipped with a battery management system (BMS), which can impede the start of the charging cycle in some cases. In such cases, press and hold the Function button for 5 seconds after setting the battery charger to lithium mode in order to initiate the charging procedure.		
<b>RECON</b> 5 A - 12.5 A - 25 A	For standard and AGM batteries which have not been used for a long period of time and where the battery acid has settled. CAUTION: Due to the high voltages attained during the charging cycle, the battery must be disconnected from the vehicle for reconditioning. Reconditioning the battery with it still connected to the vehicle could damage the vehicle electronics. (Only available in 12 V mode)		

Adjustab	e 24 V charging mode:	
5 A	Charging of 24 V batteries, 5 Ah to 100 Ah Trickle charging of 24 V batteries, 5 Ah to 150 Ah Suitable for charging standard and gel batteries	
12.5 A	Charging of 24 V batteries, 70 Ah to 250 Ah Trickle charging of 24 V batteries, 70 Ah to 360 Ah Suitable for charging standard and gel batteries	
5 A	Charging of 24 V batteries, 5 Ah to 100 Ah Trickle charging of 24 V batteries, 5 Ah to 150 Ah Suitable for charging AGM and EFB batteries – or standard batteries at temperatures below 5°C	
12.5 A	Charging of 24 V batteries, 70 Ah to 250 Ah Trickle charging of 24 V batteries, 70 Ah to 360 Ah Suitable for charging AGM and EFB batteries – or standard batteries at temperatures below 5°C.	
Additional	charging functions can be selected as follows using the Mode button.	
SHOW ROOM	SHOW ROOM function: 13.8 V.  This function is used to keep the vehicle's loads running during demonstrations in the car showroom without draining the battery. (Only in 12 V mode)	
SUPPLY  C→ DC	Power supply function: 14.0 V.  To activate this function, press and hold the Mode button for 5 seconds. This function is used to maintain th power supply to a vehicle's memory modules when changing the battery or in all cases where the battery in disconnected from the vehicle's electrical circuit. (Only in 12 V mode) CAUTION: IN THIS FUNCTION, TH BATTERY CHARGER IS NOT PROTECTED AGAINST REVERSE POLARITY. RISK OF DAMAGE!	

## Use of the battery charger:

#### Connection

- 1. Connect the charger power supply unit to the socket.
- 2. Select the desired charging mode based on the battery.
- 3. First connect the red terminal to the positive terminal on the battery.
- 4. Then connect the black terminal to either the negative terminal on the battery or the ground terminal on the vehicle chassis. (In the case of vehicles with a battery management system (BMS) on the negative terminal, please use the ground terminal on the vehicle chassis. If in doubt, consult the vehicle manual.)

#### Disconnection

- 5. After using the battery charger, disconnect it from the mains socket first of all.
- 6. Remove the black terminal from the negative terminal/ground terminal on the vehicle chassis.
- 7. Then remove the red terminal from the positive terminal on the battery.

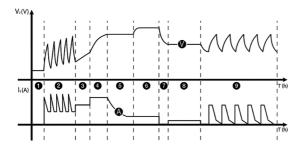
## Battery analysis and error messages:

The charger is capable of checking the battery status before and during the charging procedure and displaying any errors between the charger and the battery to be charged. This is done via a digital display on which the error code is shown. The following displays may appear in case of faults during the charging procedure:

Display	Reason	Solution
[]*  & -:	The terminals of the output cables are not connected to the battery correctly. Possible reverse polarity.	Connect the clamps correctly and recommence the charging procedure (see "Use of the charger").
<u> </u>	"Battery voltage too low. (Attempt made to charge a 12 V battery with a charger set to 24 V.) Battery voltage too high. (Attempt made to charge a 24 V battery with a charger set to 12V.)	Check the voltage of the battery. Ensure the settings are correct. Otherwise the battery is likely faulty.
□"  ε'- 3	Battery charger faulty.	Have the battery charger checked by a trained specialist.
□" E-4	The battery is not capable of accepting charge after a set time has elapsed.	Battery likely defective.
0" E-5	Battery reconditioning unsuccessful following a complete desulphurisation cycle.	Battery likely defective.
[]"  & - 8	The charging rate with the Supply function is too high.	Reduce the charging rate.
<u>                                      </u>	Cable disconnected or short-circuited.	Connect the terminals correctly and recommence the charging procedure (see "Use of the charger").
	Battery completely short-circuited.	Battery likely defective.

#### Charging cycles:

The charging cycles of the new battery chargers have been specially developed so as to optimise the charging of all conventionally available batteries. The range of different technologies employed in the batteries commercially available today require different charging characteristics to ensure correct and complete charging. The JMP Skan chargers extend the life of your batteries as they guarantee the right charging cycle for each type of battery.



1. First diagnostics step: "Diagnostic I" (initial diagnosis)	The charger analyses the battery's charge level and the voltage with which it needs to be charged.
2. First charging step: "Repair Mode" (desulphurisation)	Charging with pulse current until the battery achieves the optimum voltage and current values to commence the second charging step.
3. Second charging step: "Initial Charge" (battery activation)	Charging with reduced, constant current.
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 current until current reaches minimum values.
Fifth charging step: "Optimise"     (for Recon charging mode only)	Intensive charging phase with constant current and increasing voltage to boost the battery's charging performance.
Second diagnostic step: "Diagnostic II" (second diagnosis)	The charger checks the status of the charged battery.
Sixth charging step: "Float Mode"     (trickle charge with constant voltage)	Trickle charging with constant, reduced voltage.
Seventh charging step: "Trickle Mode"     (trickle charge with pulse current)	Trickle charging with pulse current (constantly available).

## Safety precautions:

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

- · Complete protection against generation of sparks
- Protection against short circuits
- · Voltage compensation
- Protection against overheating
- · Protection against reverse polarity
- IP 20



