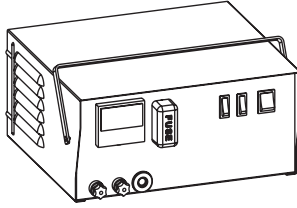
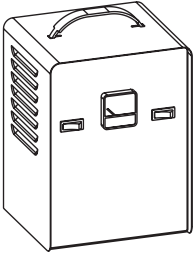


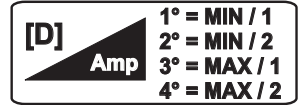
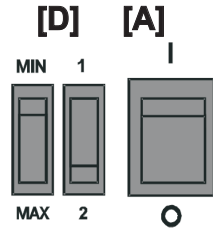
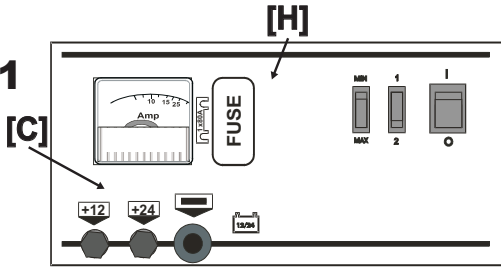
CB BOOSTER



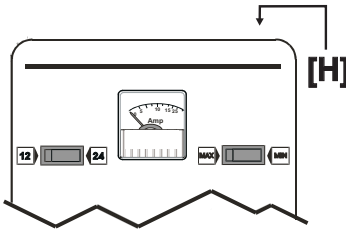
IT	4	Manuale istruzioni
EN	6	Instruction Manual
FR	8	Manuel d'instruction
ES	10	Manual de instrucciones
PT	12	Manual de instruções
DE	14	Bedienungsanleitung
DA	16	Brugermanual
NL	18	Handleiding
SV	20	Brukanvisning
NO	22	Instruksjonsmanual
FI	24	Käyttöohjekirja
ET	26	Kasutusõpetus
LV	28	Instrukciju rokasgrāmata
LT	30	Instrukcijų vadovas
PL	32	Instrukcja obsługi
CS	34	Návod k obsluze
HU	36	Használati kézikönyv
SK	38	Návod k obsluhu
HR		
SRB	40	Priručnik za upotrebu
SL	41	Priločnik z navodili za uporabo
EL	43	Εγχειρίδιο Χρήσης
RU	45	Рабочее руководство
BG	47	Ръководство за експлоатация
RO	50	Manual de instrucțiuni
TR	52	Kullanım kılavuzu
AR	54	دليل التعليمات

Fig.1

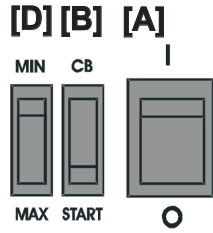
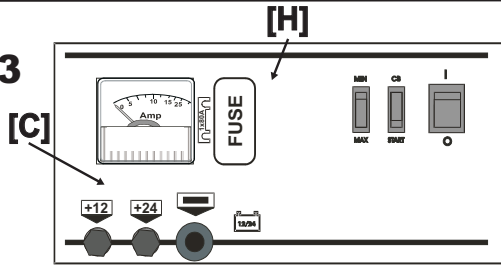
Mod.1



Mod.2



Mod.3



Mod.4

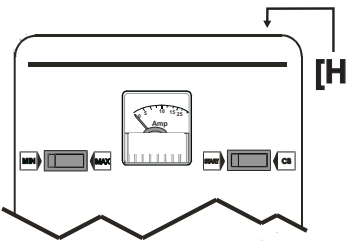
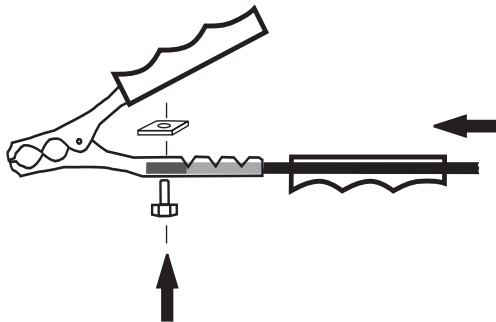
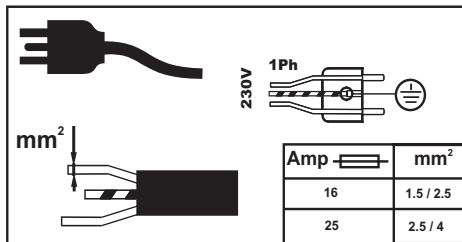
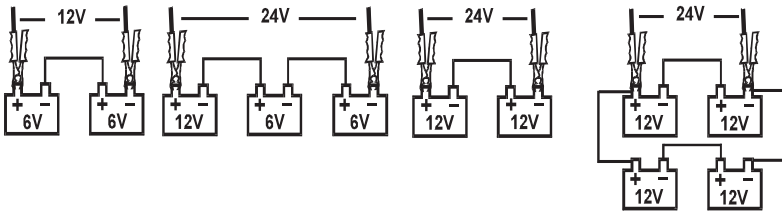


Fig.2



ATTENZIONE: GAS ESPLOSIVI
AVVERTENZE
 X Y
 Scollegare l'alimentazione
 attentamente
 Pr
 Scollegare
 il manuale
 di collegare
 le batterie
 cariche

Fig.3**Fig.4**

(IT) Smaltimento apparecchiature elettriche ed elettroniche: Simbolo che indica la raccolta separata delle apparecchiature elettriche ed elettroniche. L'utilizzatore ha l'obbligo di non smaltire questa apparecchiatura come rifiuto solido urbano misto (indifferenziato), ma di rivolgersi ai centri di raccolta autorizzati. **(EN)** Electrical and electronic equipment disposal: Symbol indicating separate collection for waste of electrical and electronic equipment. When the end-user wishes to discard this product, it must not be disposed of as (unsorted) mixed municipal solid waste but sent to duly authorised collection facilities. **(FR)** Élimination des appareils électriques et électroniques: Symbole qui indique la collecte séparée des appareillages électriques et électroniques. L'utilisateur a l'obligation de ne pas éliminer cet appareillage comme un déchet solide urbain mixte, mais doit s'adresser à des centres de récolte autorisés. **(ES)** Eliminación de equipos eléctricos y electrónicos: Símbolo que indica la recogida diferenciada de los equipos eléctricos y electrónicos. El usuario tiene la obligación de no eliminar este equipo como residuo sólido urbano mixto (indiferenciado), sino que debe dirigirse a los centros de recogida autorizados. **(PT)** Eliminação de aparelhagens eléctricas e electrónicas. O utilizador possui a obrigação de não eliminar esta aparelhagem como resíduo sólido urbano misto (indiferenciado) e sim dirigir-se aos centros de recolha autorizados. **(DE)** Entsorgung elektrischer und elektronischer Geräte: Symbol, das die getrennte Entsorgung von elektrischen und elektronischen Geräten angibt. Der Anwender hat die Pflicht, dieses Gerät nicht als (ungetrennten) Hausmüll zu entsorgen, sondern sich an die zugelassenen Sammelstellen zu wenden. **(DA)** Bortskaffelse af elektriske og elektroniske apparater. Dette symbol angiver særskilt indsamling af elektriske og elektroniske apparater. Brugeren har pligt til ikke at bortskaffe dette apparat som fast blandet husholdningsaffald (ikke-adskilt), men i stedet henvende sig til de autoriserede indsamlingscentre. **(NL)** Afval van elektrische en elektronische apparatuur. Dit symbool staat voor afval van elektrische en elektronische apparatuur dat gescheiden moet worden van ander afval. De gebruiker mag dit afval niet bij het gewone stedelijke afval doen, maar moet het naar een speciaal en erkend verzamelpunt brengen.

(SV) Avfallshantering för elektrisk och elektronisk utrustning. Symbol som indikerar separat avfallshantering för elektrisk och elektronisk utrustning. Användaren får inte slänga denna utrustning såsom fast avfall (ej sorterad) men måste vända sig till en auktoriserad uppsamlingsplats för sorterad avfallshantering. **(NO)** Avhending av elektriske og elektroniske apparater. Symbolet angir at man kildesortere elektriske og elektroniske apparater. Brukeren har forbud mot å avhende dette apparatet som vanlig restavfall, og må i stedet henvende seg til godkjente oppsamlingsstasjoner. **(FI)** Sähkö- ja elektroniikkalaitteiden hävittäminen. Symboli, joka osoittaa sähkö- ja elektroniikkalaitteiden erilliskeräyksen. Käyttäjää ei saa hävittää tätä laitetta normaalin kiinteän kaupunkijätteen (lajittelematon) mukana vaan hänen tulee toimittaa se valtuutettuun keräyspisteeseen. **(ET)** Elektriliste aparateide ja elektroonikaseadmete jäätmekäitus. Sümbol tähistab elektriliste aparateide ja elektroonikaseadmete eraldi kogumise kohustust. Kasutaja on kohustatud pöörduma volitatud kogumiskeskuste poole ning seda aparati ei tohi käsitleda kui segajäätet. **(LV)** Elektrisko un elektronisko iekārtu atkritumi. Simbols, kas apzīmē dalītu elektrisko un elektronisko iekārtu atkritumu savākšanu. Lietotājam ir pienākums nenodot šo aparāturu atkritumus kā cietus, jautkus (nešķirotus) sadzīves atkritumus, bet ir jāvēršas pie pilnvarota atkritumu savākšanas centra. **(LT)** Elektrinės ir elektroninės aparatūros atliekų šalinimas. Simbols, kuris nurodo diferencijuotą elektrinės ir elektroninės aparatūros surinkimą. Vartotojas privalo neutilizuoti šios aparatūros, kaip kietųjų mišrių miesto atliekų (nediferencijuotų), tačiau privalo kreiptis į autorizuotus surinkimo centrus. **(PL)** Usuwanie sprzętu elektrycznego i elektronicznego. Jest surowo wzbronione usuwanie niniejszego urządzenia wraz ze stałymi odpadami mieszkimi (nieselektywna zbiórka odpadów). Użytkownik ma obowiązek zwrócić się do punktów autoryzowanych do selektywnej zbiórki zużytego sprzętu elektrycznego i elektronicznego. **(CS)** Likvidace elektrických a elektronických



Instruction manual. Battery charger



To identify your battery charger please refer to Models illustrated on page 1



WARNING STICKER Fig.2
Before putting into operation for the first time, attach the supplied sticker in your language on the battery charger.



Carefully read this manual, and both the instructions provided with the battery and the vehicle in which it will be used before charging.

Overview and warnings

This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.

This battery charger can be used to charge lead-acid batteries of the following types only:

“WET” cells: Sealed, with liquid electrolyte inside. Low maintenance or maintenance free (MF), “AGM”, “GEL”.

- Never attempt to charge batteries that cannot be recharged or other types than those indicated.
- Never charge frozen batteries that might explode.



For indoor use only.



WARNING: EXPLOSIVE GAS!

- Batteries generate explosive gas (hydrogen) during normal operation and even greater quantities during recharging.



Avoid creating flames or sparks.

- The battery charger has components such as switches and relays that may create sparks. If the product is used in a garage or similar places, position it adequately far from the battery; it should not be inside the vehicle or the engine compartment.
- To avoid creating sparks, make sure that the clamps cannot get detached from the battery terminals when the battery is being charged.
- Never let the cable clamps touch each other.
- It is strictly forbidden to reverse polarity when you connect the clamps to the battery.



Make sure that the plug is unplugged from the socket before connecting or disconnecting the cable clamps.



Provide adequate ventilation during charging



- Always wear safety goggles closed at the sides, acid-proof safety gloves, and acid-proof clothing.

- Never use the battery charger with damaged cables or whenever the charger has been subjected to impact or damaged.

- Never dismantle the battery charger: take it to an authorized service centre.

- Supply cable must be replaced by qualified people.

- Never position the battery charger on flammable surfaces.

- Never place the battery charger and its cables in the water or on wet surfaces.

- Position the battery charger with adequate ventilation; never cover it with other objects or close it inside containers or closed shelves.

Assembly and electrical connection Fig.3



- Put together the separate parts contained in the package.
- Make sure that there is a fuse or automatic circuit breaker for the electric line, suitable for the device max input.

- The device must be connected only to a supply system, with an earthed ‘neutral’ lead.

- Supply plug: If the device does not have a plug, connect a standardised plug of suitable capacity to the power supply cable, (2P+E for 1Ph).

Battery charger description

Controls and indications Fig.1

- A) ON/OFF switch.
- B) BATTERY CHARGER/BOOST START switch.
- C) 12/24V selection button.
12/24V output terminals.
- D) Output amps adjustment (charging current).
- H) Fuse.

Battery charger connection



Before starting the battery charger, make sure that the battery voltage selected is the right one. Incorrect battery voltage can damage objects and injure people.



To protect the electronic components on the vehicle, carefully read the instructions by the car manufacturer and the battery manufacturer before charging a battery or using the Quick start procedure.

- Connect red charging clamp to positive (+) battery terminal and black charging clamp (-) to negative battery terminal.

- If the battery is installed on a motor vehicle, first connect the clamp to the battery terminal that is not connected to the bodywork. Afterwards, connect the second clamp to the bodywork at a point far from both the battery and the petrol pipes.

- **To stop charging the battery.** In the following order, cut off the power supply, remove the clamp from the bodywork or the negative (-) terminal, and remove the clamp from the positive (+) terminal.

Charging a battery

Mod.1, 2, 3, 4

- Ensure that switch [A] is in 0/OFF position (Mod.1,3) or that the battery charger is disconnected from the electric current net. (Mod.2, 4).
- Select the battery voltage [C]
- Select the "BATTERY CHARGER" function [B]
- Select the charging current (output amps adjustment) [D] (Mod.1,3) Turn switch [A] to 1/ON.
- (Mod.2,4) Connect the battery charger to main supply
- ❗ (Mod.1,3) If the overload cutout is tripped, the ON/OFF [A] light will go out.



- The ammeter may not indicate any value if the charger is set to Min and is connected to a well charged battery
- During charging of the battery, the rate of charge, shown on the ammeter will slowly fall until it remains at a steady value (never zero), indicating that the battery is charged.
- The charging current absorbed by a battery recharging depends on the state of the battery itself. For models with charge settings, select the charging current nearest to 10% of the capacity of the battery for charging. (ex. I=4 Amps. for a battery of 40 Amp/h.). Make sure that the battery capacity (Ah) is not less than that indicated on the battery charger (C-Min).
- Once a battery is charged and bubbles form in the liquid electrolyte, it is advisable to end the charging so that the battery does not get damaged.

Charging sealed MF, GEL, AGM batteries

You cannot reach the liquid electrolyte in a sealed battery. Do not overcharge batteries and so you will protect the battery life.

Slow charge; frequently check voltage at the battery terminals by means of a regular tester.

Stop charging when voltage reaches 14.4 Volt for 12-Volt batteries; 7.2 Volt for 6-Volt batteries; 28.8 Volt for 24-Volt batteries.

- ❗ The battery charger is not fitted with an automatic charge stop and must be disconnected once charge is completed so as not to damage the battery.

Simultaneous charging of a number of batteries. Fig.4

Clearly, charging time increases in proportion to the sum of the capacities of the batteries being charged.

Do not charge at the same time different types of batteries, batteries of different capacities (Ah), or at different charge levels.

Starter connection: sequence of operations



IMPORTANT for STARTING:

- ❗ Before starting the battery charger, make sure that the battery voltage selected is the right one. Incorrect battery voltage can damage objects and injure people.
- ❗ To protect the electronic components on the vehicle, carefully read the instructions by the car manufacturer and the battery manufacturer before charging a battery or using the Quick start procedure.

- To protect the vehicle electronics:
 - ✓ Do not use the quick start procedure if the battery is sulphated or faulty.
 - ✓ Do not use the quick start procedure if the battery is not connected to the vehicle: The presence of the battery is essential to eliminate any overvoltage that may be created as the result of energy accumulated in the connecting cables at the quick start phase.
- To facilitate a quick start, it is advisable to make a quick charge of 10-15 minutes.
- Observe the quick start / pause cycles on the rating plate or in the technical data so that the battery charger does not overheat: For example, 5" ON / 10" OFF 5 Cycle.
- Do not repeatedly try quick starts if the motor does not start: This may damage the battery or the vehicle electric system.

Mod.3, 4

- Ensure that switch [A] is in 0/OFF position (Mod.3) or that the battery charger is disconnected from the electric current net. (Mod. 4).
- Select the battery voltage [C]
- Turn switch [B] to START; [D] switch setting has no influence. (Mod.3) Turn switch [A] to 1/ON.
- (Mod.4) Connect the battery charger to main supply
- Turn the vehicle ignition key.

Safety fuse that protects against short circuits and reverse polarity. [H]

This fuse interrupts the electric circuit every time there is surcharge caused by a short circuit at the clamps or the battery cells, or by reverse polarity at the battery terminals (+; -).

However, there may be other irregular situations that the fuse cannot protect against. (For instance, a battery with a very low charge connected and the polarity is reversed).

- ❗ Always make sure that the polarity is correct so as not to injure people or damage things.
- ❗ Disconnect the battery charger from the mains before replacing fuses.
- ❗ The appliance is equipped with a thermostatic cut-out with automatic reset which is tripped in case of thermal overload to protect the device against any overheating.