BRAVO 900

BC Bravo 900 is the most complete product for the maintenance of moped and motorcycle batteries, featuring a multi-language LCD display, digital voltmeter and dual function of battery charger and tester of the battery and the vehicle's charging system.
BC Bravo 900 is ideal for the recovery, charge, desulfation, maintenance and analysis of all 12V batteries and it can be left always connected to the battery, with no risk and no need to disconnect the battery from the vehicle, keeping it fully charged during long periods of inactivity (even months).

The battery charger delivers a maximum current of 0.9 Amps and runs a fully automatic 8-cycles charging algorithm, to recover deeply discharged batteries (from 1.25 volts) and to recharge, desulfate and maintain all 12V batteries (traditional, gel, sealed...) from 1.2 to 45 Ah (up to 100 Ah for maintenance).
The automatic testing procedure, guided step-by-step by the instructions on the LCD display, includes an analysis of the battery State of Charge, a battery Cranking Power test and a test of the vehicle's charging system (alternator/regulator).

BC Bravo 900 does not produce sparks and it is protected against short circuit, reverse polarity, overcharging and overheating.
The package includes a waterproof battery cable with eyelets (code STD2V), which can be left always installed on the vehicle, and a battery cable with insulated clamps (code 30AMPPZ). A universal 12/18 mm adapter (code ACC612V - optional) is available to recharge the battery from the cigarette lighter. The warranty is extended to 3 years.

MULTI-LANGUAGE SOFTWARE

Automatic Test Procedure:
1. Battery SOC Test at rest
2. Battery Cranking Power Test
3. Alternator/Regulator Test

TECHNICAL DATA	BC BRAVO 900
Input Voltage	220÷240 Vac, 50÷60 Hz
Charge Voltage	13.8 V / 14.4 V - nominal 12 V
Charge Current	0.9 A max
Charging Algorithm	8 cycles, automatic (Initialization, Recovery, Soft Charge, Bulk Charge, Desulfation, Battery Analysis, Maintenance and Equalization)
Types of Batteries	12 V Lead Acid (Traditional/Wet, Gel, MF, VRLA, AGM, Ca/Ca, etc.)
Battery Capacity	From 1.2 Ah to 45 Ah (Charge), up to 100 Ah (Maintenance)
Operating Temperature	from -20° to +50°C
IP Class	Weatherproof - Protection against water splash IP44. Suitable for outdoor use
Selectable Languages	Italian, English, French, German and Spanish (starting from December 2013)

Featuring wall mounting system with fast dismounting

8 CYCLES CHARGING TECHNOLOGY

BC BRAVO 900 is a digital battery charger managed by a **latest-generation microprocessor**, which is in charge of monitoring the battery parameters in real time and to execute a **new multi -cycle charging algorithm**:
1. **Initialization**: the device checks if one or more cells are shorted, in order to verify that the battery is in a proper condition to be recharged/recovered.
2. **Recovery**: if the battery is deep discharged (battery voltage starting from 1.25 V), the device tries to recover it, taking it back to a higher voltage.
3. **Soft Charge**: if the battery is in a condition of significant undercharge, the device provides a light pulsing current to the battery, to overcome this critical phase.
4. **Bulk Charge**: the device provides full current to the battery, recovering about 85-90% of the battery capacity.
5. **Desulfation / Absorption**: the device provides a "controlled overcharge" to recover the remaining 10-15% of the battery capacity, through the desulfation/recovery the lead-acid cells (for low or medium sulfation).
6. **Battery Analysis - End Cycle Test**: the device stops providing current to the battery for a short time, in order to verify whether the battery is able to retain the charge received. This test is periodically repeated during the Maintenance.
7. **Maintenance**: the device keeps the battery in the best charge conditions for very long periods (even months) during which your vehicle is left unused, without any possible drawback (battery overcharge, battery overheating, water and/or electrolyte loss, etc).
8. **Equalization**: every 30 days during long term maintenance, the device executes an equalization charge in order to balance the battery lead-acid cells, avoiding electrolyte stratification within the cells.

SAFETY AND PROTECTIONS

BC BRAVO 900 features a series of **8 protections and active guard mechanisms** that make it easy to install and to use, without any risks even for users without expertise:
- **No interferences the vehicle's on board electronics** (control unit, ABS, GPS...)
- Protection from output lines short circuit, even for an indefinite time: **no sparks**!
- Protection from battery polarity inversion
- Protection from battery overcharge/overheating
- Thermal protection from overtemperature
- No need to disconnect the battery from your vehicle
- Very few gas development during the charge: no need to remove the battery plugs

Laboratory Tests ensure the manufacturing of products in conformity to the regulations in force on safety and electro-magnetic compatibility. Norms and Regulations: EN55014-1, EN55014-2, EN60335-1, EN60335-2-29, EN61000-3-2, EN61000-3-3.

BATTERY TYPES AND CAPACITY

BC BRAVO 900 is specifically designed for charging and maintaining **all 12V lead-acid batteries** currently available on the market (traditional, VRLA, MF, AGM, GEL, Ca/Ca, etc). BC BRAVO 900 is addressed to recharge batteries with a capacity **from 1.2 to 45 Ah (up to 100 Ah for Maintenance only)**.

EQUIPMENT & ADD-ONS

The package includes:
- the battery charger and tester **BC BRAVO 900** for long term battery maintenance, provided with a 220V power cable (2 meters long) and a battery output cable;
- **STD2V** waterproof battery cable with eyelets, which can be left always installed on board;
- **30AMPPZ** battery cable with clamps;
- according to the selected kit, the universal 12/18mm cigar socket adapter (cod. **ACC612V**) may be included;
- a copy of the User Manual.

LANGUAGE SELECTION

You can select the display language for BC BRAVO between Italian, French, English, German and Spanish. To access the Language Selection menu, please follow the following procedure:
- Keeping BC BRAVO disconnected from the power outlet and the battery, connect the adapter with clamps to the charger and put in contact the red clamp with the black clamp (creating a short circuit).
- Connect BC BRAVO to the power outlet, still holding the clamps shorted. Every time the device is disconnected and reconnected to the power supply, the language changes, according to the following sequence:

Lingua: ITALIANO -> Langue: FRANÇAIS -> Language: ENGLISH -> Sprache: DEUTSCH -> Idioma: ESPAÑOL
The selected option is kept in memory for future usage.