CONGRATULATIONS:
You have purchased a carefully Swiss engineered, top quality product. Your engine starter is designed to give you the quality and convenience you expect in a jump starter. We have taken numerous measures in quality control and in our manufacturing processes to ensure that our product arrives in top condition, and that it will perform to your satisfaction.

IMPORTANT NOTE : BEFORE FIRST USE CHARGE THE JUMP STARTER WITH THE SUPPLIED CHARGER FOR AT LEAST 12 HOURS.

1 - IMPORTANT SAFETY INSTRUCTIONS

1. Wear goggles during each use.
2. Use of an attachment not recommended or sold by the jump starter's manufacturer, may result in a risk of damage to the unit, or injury to personnel.
3. When using the charger or charging cable, pull on the plug and never on the wire when disconnecting.
4. Do not recharge the jump starter with a damaged plug or cord. Replace the broken part immediately (see point 2).
5. The jump starter can be used under any weather condition (rain, snow, hot or cold weather).
6. Do not submerge in water.
7. Never bring the red and the black clamp into contact or allow them to contact the same piece of metal to avoid any short-circuit.
8. Do not operate in an explosive environment and / or with flammables such as gasoline, gas etc.
9. Do not try to repair the jump starter yourself when defective, but have it repaired always by your distributor (otherwise warranty will not be given).
10. Never leave the jump starter too long without recharging it. Severe damages caused by this are probably not repairable.

IMPORTANT: When the engine starter is not in use, recharge it every 3 months with the supplied accessories. However it's recommended to always keep it connected to the automatic charger.

2 - TECHNICAL SPECIFICATIONS

1. Type of battery: sealed, non-spillable, lead acid battery with solid electrolyte (AGM) according the I.A.T.A standards.
2. Automatic charger with smart circuit which allows leaving the unit in charge continuously without damage.
3. 12V exit (cigar lighter socket), protected with an automatic reset breaker of 20A, to be connected to all sorts of 12V accessories or to charge the jump starter (**Caution: 24V exit for the 24V model**)
4. Fully isolated clamps and copper cables (super flexible).
5. Test button and leds, or digital or analogue display, to check the charge of the battery from 25% to 100%. For a complete test, press test button for 10 seconds.
6. Surge protection.

3 - SAFETY FEATURES

1. To avoid any short-circuit and to protect the clamps, which have a positive (=red) and negative (=black) current, clamps must always be stored in the specially designed holders when not in use.
2. The cable holders on the case are to store the cables.
3. Thanks to its 12V sealed, non-spillable lead acid battery, the jump starter may be used and stored in any position and is state of the art technology.
4. If you have a 12/24V unit, make always sure that the switch commutator is on "**OFF**" or that the connector is unplugged (depending on model) when not in use (before and after use), in this case it is normal that no voltage appears or that the LED's don't light up. If you keep it in charge, put the commutator in 12V position, or plug the connector in the 12V socket.

4 - CHARGE LEVEL

Version with control lights (LED's) 12V, 12/24 and 24V:
1. Check power level of the jump starter by pressing the test switch for 10 seconds, if you have a 12/24V unit first plug the connector in the suitable socket (if it is unplugged the LED's will not light up). When 4 leds come on (3 red and one green) your jump starter is ready for use. When 3 Leds or less come on, the jump starter needs to be immediately recharged according to the directions mentioned in the section 5.
2. Press test button for 10 seconds. If all 5 LED's stay on, your jump starter is fully charged (the fifth led goes out when you disconnect the unit from the charger).

Version with digital or analogic display 12V, 12/24V and 24V :
1. Check power level of the jump starter by pressing the test switch for 10 seconds, if you have a 12/24V unit choose the suitable voltage with the switch commutator. If the voltage is lower than 12V (or 24V), the jump starter needs to be immediately recharged according to the directions mentioned in the section 5.
2. Check power level of the jump starter by pressing the test switch for 10 seconds. If the voltage is between 12.2V and 13.2V (or Hi) or between 24.4V and 26.4V (or Hi), the jump starter is ready for use.

5 - WAYS TO RECHARGE THE JUMP STARTER

1. With the supplied automatic charger, plugged in a 230V outlet (other voltages also available depending on your country). If you use a 12/24V unit, **switch the commutator on 12V position or plug the connector in the 12V socket** (depending on model) for charging. Caution, do not choose the 24V position while charging. Check that the charger 12V-4A or 24V-2A is on by pressing the switch on the right.
2. While driving by using the supplied charging cable connected to the cigar lighter socket of the vehicle. (The vehicle should be started before plugging the cable in the cigar lighter socket). Charging will take 4 to 5 hours.
3. Once the vehicle is started, leave the clamps connected to the vehicle for 3 to 5 minutes so that the dynamo of your vehicle can recharge the jump starter.

CAUTION, for trucks, once started, disconnect IMMEDIATELY the clamps from the battery. Danger of explosion.

Charging times depending on model and charger:

12V appliance with automatic charger LESA.5A 0.6A	28H maxi.
12V appliance with automatic charger LESA.6A 1.5A	12H maxi.
12V, 12/24V appliance with 2 batteries and automatic charger LESA.6A 1.5A	22H maxi.
12V, 12/24V appliance with 2 batteries and automatic charger 12V-4A	08H maxi.
24V appliance with 2 batteries and automatic charger 24V-2A	16H maxi.

When the red light of the charger is extinguished or becomes green (LESA.5A, LESA.6A), or when all LED's are flashing (12V-4A, 24V-2A) the battery is fully charged.
These data are noncontractual and can be subjected to changes, please for more information take contact with your retailer.

When the Jump starter is not in use, always keep it connected to the supplied automatic charger!

6 - OPERATING INSTRUCTIONS

USED AS AN EMERGENCY JUMP STARTER:

1. Always shield eyes.
2. If you have a 12/24V unit, make sure that the switch commutator is on "OFF" or that the connector is unplugged (depending on model).
3. Connect the positive (red) clamp to the positive terminal.
4. Connect the negative (black) clamp to the negative terminal of the engine or to the frame of the vehicle (ground). Make sure cables are not in the path of moving belts or fans, etc.
5. If you have a 12/24V unit, choose the voltage with the switch commutator or with the connector 12V or 24V. Stay clear of battery and engine starter while jump-starting and make sure that it cannot fall in the engine of the vehicle.
6. Once started, put the switch commutator on "OFF" or unplug the connector (12/24V unit), and **disconnect the black** (negative) **clamp first**.
7. Then disconnect the red (positive) clamp.
8. Store immediately both clamps in their respective placing.
9. Put the jump starter in charge with the supplied automatic charger.

IMPORTANT: Should the vehicle refuse to start within 10 seconds, have the jump starter cool down for 3 minutes before attempting to start the vehicle again. Otherwise severe damage to the unit may occur. (Start attempts always need to be very short).

NOTE: A defective battery may refuse to accept the current from the jump starter. This may be the reason that the vehicle refuses to start.

USED AS MEMORY SAVER FOR VEHICLES:

The jump starter can be an essential tool for all those who replace automobile batteries. Most vehicles have some type of electronic component with memory, such as radios, phones, clocks, computers, etc. However memories can be saved, if the supplied charging cable is plugged from the jump starter to the cigar lighter outlet on the vehicle. Like this, valuable information will not get lost.

IMPORTANT: For some car models ignition must be switched on, using ignition key.

MULTI PURPOSE POWER SUPPLY:

The jump starter is also suitable as a portable power source for all 12Vdc accessories equipped with a male cigar lighter plug. The 12V outlet has an automatic overload protection of 20A (Caution: 24V exit for the 24V model). When the jump starter is used with an inverter, it can operate appliances normally powered by 230V (optional).

USED AS PORTABLE WELDING MACHINE:

The jumpstarter 12/24V can also be used for indoors or outdoors welding without being plugged. It makes it possible to weld in 24V during 12 to 15 minutes (based on a fully charged unit) with the welding gun delivered in option, provided with tubular wire.
Caution: do always use a helmet and safety goggles for all work of welding

1. Check the charge level of the jumpstarter, it must be fully charged before use.
2. Select the **24V** voltage.
3. Connect the welding gun in the socket on the unit.
4. Connect the negative clamp to the ground.
5. Regulate the welding speed with the variator according to your comfort, and start welding by pressing the trigger of the gun.
6. Once the welding work achieved, unplug the gun and recharge **imperatively** the unit with the supplied automatic charger and put the commutator in 12V position, or plug the connector in the 12V socket.
7. Welding amperage 160A and decreasing.

WARRANTY

The warranty on the jump starter depends on the conditions granted by your retailer. The manufacturer shall have no liability whatsoever at any time for any personal injury or property damage or for any special, indirect or consequential damages at any time for any kind howsoever arising.

Please dispose of packaging for the product in a responsible manner. It is suitable for recycling. Help to protect the environment, take the packaging to the local amenity tip and place into the appropriate recycling bin.

Never dispose of electrical equipment or batteries in with your domestic waste. If your supplier offers a disposal facility, please use it or alternatively use your local amenity tip and dispose in a correct manner. This will allow recycling of raw materials and help protect the environment.

TROUBLE SHOOTING

PROBLEM	SOLUTION
• One or two LED's come on, charger is plugged on for 24 hours and there is no change in status of other Leds.	• Check if charger is charging. Charger should be warm. Also check if the fuse inside the cigar lighter plug of the charger is not defective.
• Charger works well but the jump starter is not being charged.	• Possible defective battery or faulty breaker. Try using a device (for example a 12V light) with a cigar lighter plug to see if it works. Should it work, breaker is OK and the battery is the problem.
• No LED's come on, but when the charger is plugged into the jump starter all the LED's come on.	• Defective battery. Cause: intense use, without allowing a cool down period; see also operating instructions.
• The jump starter is fully charged but has no power.	• Check where the cable is connected to the jaws on the jump starter's clamps and make sure they are properly connected to the battery terminal.
• When connecting a 12V accessory through the cigar lighter outlet on the jump starter, I heard a clicking sound.	• The plug on the accessory may be defective causing the automatic breaker to go off.

GENERAL QUESTIONS & ANSWERS

QUESTION	ANSWER
• How many jump-starts can a fully charged jump starter do before needing to be recharged?	• 1 to 30, depending on: temperature, general condition of vehicle, engine type and size.
• Can the jump starter's battery be replaced?	• Yes, contact your nearest distributor.
• Can the jump starter be recycled?	• Yes. The environment was one of our main concerns in the development of the jump starter. Most battery outlets can dispose of this product at its life's end.
• What is the ideal storage temperature of the jump starter?	• Room temperature. The jump starter will also operate at below zero temperatures; however its power will be less. Intense heat will activate self-discharge.
• I have a regular 10 amps battery charger, can I use it to recharge the jump starter.	• No, only the originally supplied fully automatic charger can be used.
• Is the jump starter foolproof?	• No, jump-starting instructions must be followed carefully.

MADE IN SWITZERLAND