



Please read these instructions carefully before beginning the assembly. Failure to understand and follow assembly instructions may result in injury to technician and/or end user and may void the warranty. If you have any questions call Sunrise Medical Technical Support at +1 (800) 333-4000.

### Important Safety Instructions

1. **SAVE THESE INSTRUCTIONS:** this instruction sheet contains important safety and operating instructions for the battery charger.
2. Before using the battery charger, read all instructions and warnings on the battery charger, battery, and device using battery.

### CAUTION

1. To reduce risk of injury, charge only R90 rechargeable batteries. Other batteries may burst causing injury to the user or others.
2. For connection to a supply not in the U.S., use an attachment plug adapter of the proper configuration for the power outlet, if needed.

### WARNING

1. People with physical disabilities, people with impaired sensory capabilities or mental acuity, and people who lack experience or knowledge should not use this product unless they can do so safely under the supervision and guidance of a third party who is responsible for their own safety (this includes children).
2. Children should not play with this product, and should be supervised and guided during its use.
3. If the power cord is damaged, it must be replaced by the manufacturer, a service center, or a qualified repair person in order to avoid hazards.
4. Batteries can emit explosive gases during normal charging. Avoid sparks in the immediate area and always provide proper ventilation during charging.
5. Never try to charge non-rechargeable batteries.
6. Never place the charger in direct sunlight when charging.
7. Disconnect the power supply before making or breaking the connections to the battery.
8. Do not use the charger while the equipment is operating.
9. Do not use the four holes in the plastic case. (see Fig. 1)



### A. Maintenance

1. Avoid prolonged exposure to direct sunlight to prevent the plastic from degrading over time and lowering the IP protection level.
2. If the exterior is dirty or moldy, wipe it with wet wipes or a soft dry cloth. Do not use solvent-based chemical cleaners.
3. Do not use excessive force to pull or squeeze the charging cord. The power cord is the same as any other metal wire or cable. Repeatedly twisting or bending the same spot can break or damage it.

### B. Use instructions

1. Before use, please ensure that the power supply voltage is the same as the charging specification.
2. Before connecting the charger to the battery, connect the charger to a municipal power outlet.
3. If the fault indicator light comes on during charging, there are three possible causes as follows:
  - a. Charger temperature is too high.
  - b. Battery is connected in reverse.
  - c. Battery capacity is too large, so timing has not shifted to other phase.
4. After the battery is fully charged, disconnect the AC power plug and then remove the battery.
5. When the battery is connected but there is no charging action (battery <20V), press the "Refresh" button to restart the battery (T1 LED flashes).

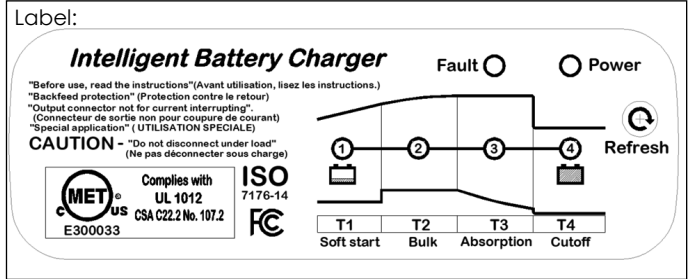
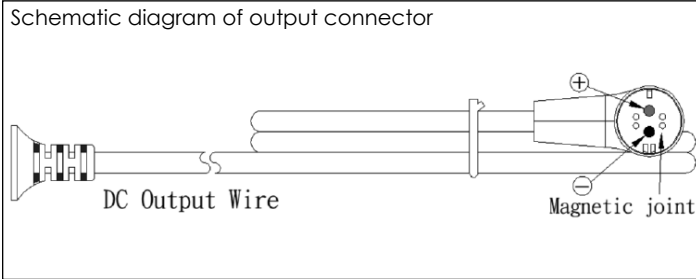


### DEALER/TECHNICIAN WARNING

Attention dealers and qualified technicians, do not operate or service this device without first reading the owners manual. If you do not understand the instructions and warnings in the owners manual please contact the Sunrise Medical Technical Service Department before operating and/or servicing the Empulse device. Failure to do so may result in damage and/or injury.

Find more information and important warnings see the device owner's manual or at: [www.SunriseMedical.com](http://www.SunriseMedical.com).

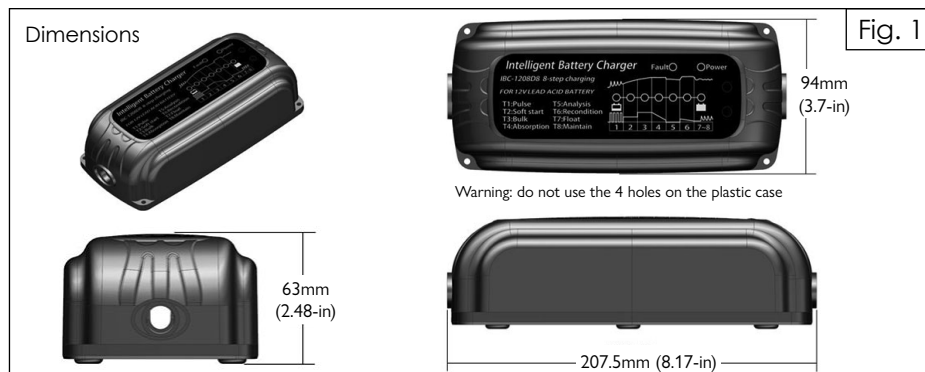
Sunrise Medical 2842 N. Business Park Ave Fresno, CA 93727 USA



**Specification table:**

		Japan	North America	EU Type I (Australia)	EU Type F *	EU Type G *	EU Type J *
Model Number (located on label on bottom of charger)	Charger with cable	255176	252412	255051	252413	252530	252531
	Cable				256015	256016	256017
Factory Model		IBC-100 27LZ	IBC-100 27LA	IBC-100 27LI	IBC-100 27LF	IBC-100 27LG	IBC-100 27LJ
Battery Type/Battery Capacity		Lithium ternary (Li-ion)/Lithium-polymer (Li-PO) 10 Cell / 2.5-5 Ah					
Input	Voltage (Vac) Current	100-120 2.6 A	100-120 2.6 A	200-240 1.3 A	200-240 1.3 A	200-240 1.3 A	200-240 1.3 A
	Frequency	50-60 Hz					
Output	Voltage	42 V					
	Current (Max.)	2.7 A					
	Efficiency	> 86.5%					
Charging Cycle	Charging mode	4-stage, fully-automatic charging cycle					
	Soft Start (T1)	1.35A (< 3.3V/cell @ 6 hours)					
	Bulk (T2)	2.7A (< 3.6V/cell @ 20hours)					
	Absorption (T3)	42V (> 15% current @ 10 hours)					
	Cutoff (T4)	0.14A (< 5% current)					
	Recharge	38V (< 3.8V/cell)					
Display		Charging stage LEDs, Power LED, Fault LED					
Thermal protection		>105 °C Cut-off; <90 °C Re-charge					
Storage Instructions		Do not store the charger in direct sunlight or a humid place. Storage temperature and humidity -10~+40 °C , 10~80% RH					
Dimensions (Fig. 1)		208 x 94 x 63 mm (L x W x H)					
Weight		0.9 Kg					

\* EU chargers (type F, G, and J) have interchangeable cables.



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