5. SPECIFICATIONS

Input ..... 12V DC 10A, 5V DC 2A

Working temperature ..... -40°C to 65°C (-40°F to 150°F)

Starting current

DSR108 ..... 450A
DSR109 ..... 800A

Recharge time from battery

DSR108 ..... 90 seconds
DSR109 ..... 150 seconds

Recharge time from 12V socket

DSR108 ..... 200 seconds
DSR109 ..... 400 seconds

Recharge time from USB

DSR108 ..... 20-40 minutes
DSR109 ..... 40-60 minutes

6. REPLACEMENT PARTS

12V DC cig charging cable 3899003573Z

7. FREQUENTLY ASKED QUESTIONS

Q: Is this ProBooster safe for the ECU and car's computer?

A: Unlike traditional jump starters, this ProBooster uses ultracapacitors instead of a battery. The voltage of capacitors is restricted to a range which is safe for all kinds of ECU. Therefore, there is no risk from overvoltage.

Capacitors have a very small capacity, about 0.2-0.4Ah. They will fully recharge from the alternator within couple seconds once the vehicle is started. Disconnecting the ProBooster will not cause any load dump, so there is no voltage spike produced.

Q. Will the transfer of residual energy to the ProBooster damage the weak battery?

A. No. This ProBooster draws only 0.2-0.4Ah energy from the battery. A weak car battery normally has a capacity of 10-30Ah and can recharge the ProBooster many times without any adverse effects.

Q. How many jump starts can a fully recharged ProBooster perform?

A. This ProBooster is designed to start only once when fully recharged. It recharges itself after each use, which takes only about 100 seconds. Therefore, it can jump start many times as needed, successively.

Q. How long can the ProBooster hold a charge?

A. This ProBooster will self-discharge to 0 in a few days, but it can be instantly recharged from a weak battery within 100 seconds and ready for use.

Q. What is the life span of this ProBooster?

A. This ProBooster can be used more than 10,000 times before noticeable loss of performance. Ultracapacitors remain operable for more than 10 years.

Q. What is the effect of low temperature on this ProBooster?

A. The ultracapacitors in the ProBooster keep the same starting current, even at extreme cold weather—down to -30°C.

	20°C	0°C	-10°C	-20°C	-30°C	-40°C
Lead-Acid	300Amp	180Amp	120Amp	100Amp	50Amp	30Amp
Lithium-Ion	300Amp	190Amp	120Amp	80Amp	60Amp	40Amp
Ultracapacitor	300Amp	300Amp	300Amp	300Amp	280Amp	250Amp

Q. Is my ultracapacitor ProBooster safe?

A. It is extremely safe. Ultracapacitor technology is one of the foremost advantages over the battery-based jump starters. Ultracapacitors are specially designed to receive and release a large electrical current of instant power.

This ProBooster is also equipped with short circuit/reverse polarity protection. Therefore, short circuit due to unintended use will not damage the ultracpacitors. They will not overheat and cause fire or explosion.

NOTE: Reverse polarity and short circuit protection is disabled during Override Mode.

Q. Does the ProBooster need to be regularly recharged?

A. No. The ProBooster relies on the instant recharging of ultracapacitors rather than stored electric energy. Therefore, it does not need regular recharge and can be stored for years. It's totally maintenance free!

Q. What is OVERRIDE mode?

A. The ECU of some cars does not allow engine to start if battery's voltage is lower than 8V. In this situation, the positive lead needs to be disconnected from the car battery, and instead connected directly to the ProBooster. Then the ECU can detect the high voltage provided by the ProBooster.

WARNING: CAREFULLY READ USER'S MANUAL BEFORE USING OVERRIDE MODE.

Q. What is GLOW?

A. In cold weather, the glow plugs in most diesel vehicles will energize first to heat up the engine chamber before the engine start, as indicated by the GLOW sign on the dashboard. The process needs a current of 40-60Amp and takes about 4-6 seconds. In this case, after the ProBooster is fully recharged and connected, press the GLOW button, and then turn on the ignition.

Q. What size of engines can be used with this ProBooster?

A. Success of a jump start depends on many factors such as battery condition, temperature, age of the car, etc.

Here is general guide of ProBooster choice for different engine size:

		GASOLINE		DIESEL		
Model	Cranking Current	Warm No Battery	Cold No Battery	Warm No Battery	Cold Weak Battery	Cold No Battery
DSR108	450Amp	>6.0L	>5.0L	>3.0L	>3.0L	>1.6L
DSR109	800Amp	>8.0L	>6.0L	>5.0L	>4.0L	>3.0L

8. BEFORE RETURNING FOR REPAIRS

For more information about troubleshooting, contact customer service for assistance:

services@schumacherelectric.com
www.batterychargers.com
or call 1-800-621-5485
Monday-Friday 7:00AM to 5:00PM CST

For **REPAIR OR RETURN**, contact Customer Service at 1-800-621-5485.
DO NOT SHIP UNIT until you receive a **RETURN MERCHANDISE AUTHORIZATION (RMA)** number from Customer Service at Schumacher Electric Corporation.