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Emergency Survival Kit

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Problem

People often go out on trips to remote areas in their vehicles. However, emergencies can happen at any time and there is a risk that their vehicle battery would die making it unable to start the vehicle. Additionally there is a need for power to power up their appliances such as torches and mobile phones.

Solution

An emergency kit to assist in these situations.

Our device will have following functions:

- The ability to jump start a vehicle
- Provide backup AC 230V
- Provide backup DC 12V and 5V

Our product is portable and can be easily taken on journeys.

Additionally, it is safe and easy to use by anyone irrespective of technical expertise.

Our device will provide drivers and their families peace of mind when travelling to remote areas.

This device will be a one device solution in times of emergencies on the road.

Working Principle

Our system consists of the following elements.

- Capacitors to be able to start the engine of the vehicle
- A battery to charge up the capacitors
- A circuit to charge up the battery
- An inverter to convert the battery's DC to 230V AC
- Circuits to provide 5V DC and 12V DC via USB ports to charge phones and tablets