

## ABSTRACT

In an age of technological developments such as these are a source of electrical energy is very important. This is because electricity has a variety of functions, for example for the mobile phone charger. But electricity is always synonymous with PLN, PLN due to an electricity producer in Indonesia. For it appears a cell phone charger thought using the bicycle dynamo.

This tool has a principle with drain voltage to the bicycle dynamo mobile phone battery charger with a change in the circuit. Charger built from the same factory with a charger that will be created that is performed by changing the electrical current from the AC is headed to DC are the battery. The resulting flow is stable even this charger for use Powerbank stationary bike so that when the battery was charged. For all voltage charger is governed by the ATmega8 and connect it to the relay circuit. When the voltage used spinning bicycle dynamo mobile phone charger and charger for Powerbank. Then when Powerbank full, so the charging voltage relay disable Powerbank disconnected. For Handhone battery charging time is set 30 minutes, both the output voltage of the armature and Powerbank.

The output of this processing is a mobile device charger that can mencharger mobile device by using a dynamo on a bicycle. This cell phone charger is not portable but can only function on the bike course. This charger is 210 mA current issued and voltage of 4,84 V with 1084 Rpm

**Keywords: Charger, LED, AC, DC, *Relay*, *ATmega8***