

## **ABSTRACT**

Ocean wave is a form of energy that could be acquired quite easily especially in Indonesia, a country that consists of a lot of sea area. There's a lot of useful things that came with this situation, one of them is the use of ocean wave as power plant. This power plant is very useful especially in areas where there are no electricity yet but has huge ocean waves. This ocean wave powered power plant has a few main components which are the generator, the battery and the converter. The generator acts as the first step in generating the electricity. The generator will spin because it is connected to the propeller that spin because of the ocean waves force. The generator that connected to the propeller then will convert the kinetic energy into electricity. The AC current from the generator is Diode to the DC current by the converter so the energy could be stored in the powerbank. Powerbank acts as a saving and storing place for the energy that has been converted from AC to DC current. From the result of testing the propeller can rotate an release AC current, after that the diode that work as the converter will convert AC current to DC which is than channeled to the DC Step-up for charge mobile phone, powerbank and fan portable.

Keywords: Wave, Current, AC, DC, Powerbank, Diode.