## **ABSTRACT**

Currently the use of electronic devices such as laptops tend to not pay attention to the time limit in charging the battery. The users often leave their laptop batteries on charge all the time even though the laptop battery is fully charged (over charging). This sort of thing is not done continuously since battery life will not last long when used due to over charging.

In this final project discussed the design and realization of a tool that has a function to disconnect the power supply from the laptop to a laptop adapter when the battery is in the laptop is fully detected.

The instrument is in the Final Task works well when used on a laptop device with the condition die. Auto Cut-Off's Tool cut off the electricity to the laptop's battery when the voltage V- smaller than the voltage V+ in Comparator so that no electric current flowing to laptop batteries. Output voltage equal to the voltage on the instrument issued by the adapter taker 19.4 Volt DC.

Keyword: Charge, Over Charging, Adaptor, Swicth, Battery