UNIVERSITY COLLEGE SEDAYA INTERNATIONAL
SCHOOL OF ENGINEERING
FINAL YEAR PROJECT
FINAL REPORT

TELEVISION SOUND LEVEL CONTROL

STUDENT’S NAME: DONNY CHEW SENG PEY
STUDENT’S ID: 99309751 (UCSI). 04951508 (UNN)
MAJOR: B. ENG. (HONS) ELECTRICAL & ELECTRONIC ENGINEERING
FIRST SUPERVISOR’S NAME: MS. SHAMINI
SECOND SUPERVISOR’S NAME: DR. KHEDR M. M. ABOHASSAN
PROJECT’S COORDINATOR: DR. KHEDR M. M. ABOHASSAN

JANUARY – AUGUST 2005
Abstract

This report briefly discusses the project namely “Television Sound Level Control. It is generalized under the name of Automatic Volume Control (AVC). The main objective of this project is to provide the hypothetical reader with a deep insight of the design of AVC circuits. The fundamental of theory and operation involved behind the idea of AVC circuit is discussed. Generally, AVC device eliminates the annoying difference in loudness between speech and music on TV. It is not only breakthrough for TV, AVC regulates for volume discrepancies on any audio level, such as radio, computer, MP3 player, especially with music. Sometimes, noticed that there is a sudden booming sound blares on between advertisement and TV programs with enough volume to blow the hair back. It is a real hassle to scramble for the remote every time a loud commercial comes on. AVC has put an end to this problem by adjusting the audio preference and it will always maintain the volume level. AVC is sophisticated device and easy to install and use. It will keep the volume level steady and won’t be bothered by annoying volume peaks.

The study and describe the characteristics and performance of AVC by using dynamic range compression is developed by using MATLAB. The model developed is used as speech enhancement systems for the hearing impaired. Compression reduces the dynamic range of a signal to a smaller range and make loud sounds quieter, and the quiet sounds louder. It is used extensively in audio recording and noise reduction.