

HIGHER TECHNICAL INSTITUTE

ELECTRICAL ENGINEERING DEPARTMENT  
DIPLOMA PROJECT

CAR AMPLIFIER MONITORING FACILITY

CAR POWER AMPLIFIER TEST

E.1245

ORPHANIDES PETROS

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## OBJECTIVES:

1:To check whether the specifications of car audio power amplifiers quoted by the manufacturers are actually true .

2:To design a small unit which can be installed in a competition vehicle and which will be able to monitor the status of the power amplifiers in the vehicle .Basically it will monitor the temperature, the input voltage ,from the battery , and the input signal.

The aim of this project is to test the specifications of car audio power amplifiers and to find ways of monitoring an amplifier .Because of the large currents these amplifiers draw they need to be supplied with constant voltage , have the right temperature and the right input signal must be applied to the amplifier.

# CONTENTS

Chapter 1: Terms and definitions

Chapter 2 :Technical and listening tests of car amplifiers

Chapter 3a: Development of a voltage monitor system

Chapter 3b: Development of a temperature monitor system

Chapter 3c: Development of a input signal indicator