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# Electronic Eye for Visually Handicapped

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# **SENIOR DESIGN TECHNICAL REPORT**

for

Electronic Eye for Visually Handicapped  
title

in partial fulfillment of the requirements  
for the degree of  
**BACHELOR OF SCIENCE**



presented to the

**ELECTRICAL ENGINEERING TECHNOLOGY FACULTY  
INDIANA UNIVERSITY-PURDUE UNIVERSITY AT FORT WAYNE**

April 16, 1984

date

by

Charles E. Berkeley

GRADE: \_\_\_\_\_

APPROVED: \_\_\_\_\_

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## Abstract

The Electronic Eye is an optical scanning device designed as a visual aid for the visually handicapped person. The device scans text and outputs an image of the text on a video monitor. The image can then be enhanced on the screen to aid partially blind persons. The text image can also be transformed to speech via a speech synthesizer to aid the totally blind person.

This report describes the techniques used to create an image of written or typed text and display it on a video monitor.