

Indiana University – Purdue University Fort Wayne Opus: Research & Creativity at IPFW

Computer and Electrical Engineering Technology &
Information Systems and Technology Senior Design
Projects

School of Engineering, Technology and Computer
Science Design Projects

4-24-1981

An Animal Shocker

Gerald M. Monterosso

Indiana University - Purdue University Fort Wayne

Follow this and additional works at: http://opus.ipfw.edu/etcs_seniorproj



Part of the [Computer Sciences Commons](#), and the [Engineering Commons](#)

Opus Citation

Gerald M. Monterosso (1981). An Animal Shocker.
http://opus.ipfw.edu/etcs_seniorproj/437

This Senior Design Project is brought to you for free and open access by the School of Engineering, Technology and Computer Science Design Projects at Opus: Research & Creativity at IPFW. It has been accepted for inclusion in Computer and Electrical Engineering Technology & Information Systems and Technology Senior Design Projects by an authorized administrator of Opus: Research & Creativity at IPFW. For more information, please contact admin@lib.ipfw.edu.

SENIOR DESIGN

TECHNICAL REPORT

for

An Animal Shocker
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 24, 1981

date

by

Gerald M. Monterosso

GRADE: _____

APPROVED: _____

Table of Contents

	Abstract.....	1
I	General Description.....	2
II	Back Ground.....	4
III	Design and Development.....	9
	A) The Power Supply.....	9
	B) The Current Regulator.....	10
	C) The Scanning Network.....	12
	D) The Integrator.....	15
	E) 30 Second Timer.....	15
IV	The Summary.....	16

Figures and Tables

Black Box representation of the Animal Shocker.....3
Block diagram of the Animal Shocker.....8
The Power Supply.....9
Cost Breakdown for The Power Supply.....10
The Current Regulator.....11
A Scanning Network.....12
Truth Table for the Scanning Network.....13
Truth Table to Convert Binary to Decimal.....14
The Intergrator Circuit.....15

ABSTRACT

This report discusses the feasibility of designing an Animal Shocker. The shocker shall be used in behavior modification experiments performed by the Psychology Department of IUPUI at Fort Wayne. The final circuit design and the estimated cost to build each section is shown.