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DEDICATION

To my:

Parents

&

Brother

&

Sisters

&

Kinsfolk

&

Friends

ABSTRACT

The huge capering technology that was happens in twenty century which coverage most life sides especially in safety and security system field so they developed very quickly from using the primary devices to developed ones.

In this is project electronic mechanism was used to detect motion in interrogation zone by using electronic circuit which contains transmitting antenna and another one for receiving the ultrasonic waves. The transmitting antenna send ultrasonic waves to the interrogation zone (which motion detection need on it) if interrogation zone was contain object moving that will cause reflection back of some of the transmitted ultrasonic waves to the receiving antenna which transmitted an electrical signal to the personal computer devise via parallel port. After that the personal computer program tests if there is an electrical signal or not in parallel port by using a program written by c language. If there is an electrical signal it will send a control word via parallel port to activate the devices connected to the parallel port (Lamp, Buzzer device).

المستخلص

الطفرة التكنولوجية الهائلة التى حدثت فى القرن العشرين شملت معظم مناحى الحياة وخصوصا فى مجال أنظمة الأمن والسلامة والتى تطورت بصورة هائلة فى الوسائل المستخدمة من وسائل بدائية الى وسائل غاية فى التقدم .

هذا المشروع تناول ألية إلكترونية لكشف وجود حركة فى مكان ما وذلك باستخدام دائرة تحتوى على هوائى ارسال وأخر لاستقبال الموجات فوق الصوتية. حيث أن هوائى الإرسال يقوم بإرسال موجات فوق الصوتية للمنطقة المستهدفة (المراد الكشف عن وجود حركة فيها) فإذا كانت تحتوى على جسم متحرك فسيتسبب ذلك بإرتداد جزء من الموجات الفوق الصوتية المرسلة الى هوائى الإستقبال الذى يقوم بارسال إشارة كهربائية لجهاز الحاسب الألى عبر منفذ التوازى. بعد ذلك يقوم جهاز الحاسب الألى باختبار وجود الإشارة الكهربائية على منفذ التوازى من عدمها باستخدام برنامج مكتوب بلغة السى فإذا وجدت الإشارة الكهربائية فإنه يقوم بارسال كلمة تحكم عبر منفذ التوازى لتقوم بتنشيط الأجهزة المتصلة بمنفذ التوازى (بصيلة كهربائية ؛جهاز إنزار).

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List of Abbreviation

Abbreviation	Abbreviation Description
A/D	Analog to Digital converter.
AIR	Active Infra Red detector.
ASIC	Anti-Submarine Detection Investigation.
BIOS	Basic Input Output System.
CTS	Clear To Send.
D/A	Digital to Analog converter.
DC	Direct Current.
DCD	Data Carrier Detect.
DCE	Data Circuit terminating Equipment.
DOS	Disk Operation System.
DSR	Data Set Ready.
DTE	Data Terminal Equipment.
DTR	Data Transmitted Ready.
ECP	Extended Capabilities Port.
EIA	Electronic Industries Association.
EPP	Enhanced Parallel Port.
EPROM	Erases Programmable Read Only Memory.
GND	GrouND.
GPS	Global Position System.
GSM	Global System for Mobile communication.
I/O	Input / Output.
IC	Integrated Circuit.
IEEE	Institute of Electrical and Electronic Engineers.
IR	Infra Red.
IRQ	Interrupt RQuest.
LASER	Light Amplification and Stimulation Emission Radiation.
LED	Light Emitting Diode.
LIDER	LIght Detection And Ranging.
LPT	Line Printer Terminal.
NC	Normally Close.
NO	Normally Open.
PC	Personal Computer.
PIR	Passive Infra Red detector.
RADAR	RAdio Detection And Ranging.
RD	Receive Data.
RI	Ring Indicator.
RTS	Request To Send.

RXD	Receive Data.
SCSI	Small Computer System Interface.
SPP	Standard Parallel Port.
TD	Transmitted Data.
TR	TRansistor.
TXD	Transmit Data.
UART	Universal Asynchronous Receiver / Transmitter.
UPS	Uninterrupted Power Supply.
USB	Universal Serial Bus.
VM-125	Vellman Module number 125.
WPESS	Within Pulse Ectronic Sector Scanning.