

Controller Boards / Interface Products (Animatronics / Robotics)			
Controller Products	Wizard - 12 Control Board Manual / Programmable Single Servo	AutoTalk - Control Board E2 Sound to Servo Motion	
Wizard - 1 Control Board 4 - Servo / Digital Control	Wizard - 13 Control Board Digital / Analog Controller	R/C Servo to Analog Converter Servo PWM to 0-10 Vdc variable output	
Wizard - 2 Control Board 4 / 8 / Servo / Digital Control	Wizard - 14 Control Board 6 - Channel DC Motor Controller	Mini Switched Servo Controller 1 - Servo Ch - Switch Controlled - A/B	
Wizard - 3 Control Board 8 - Servo / Digital Control	Wizard - 15 Control Board Input / Output I/O Router Controller	Mini Single Servo Tester 1 - Servo Motion Test - Manual / Auto	
Wizard - 4 Control Board 4 - User Programmable Relays	Animate Control Board Sound / 4 - Servo / Digital	Adjustable Solenoid Valve Driver Adjustable ON / OFF output	
Wizard - 5 Control Board Sound / Servo / Digital Control	Programmable Single Relay -M .1 - User Programmable Silent Relay	IR Module Controller 8 - Ch On / Off Auto IR Control	
Wizard - 6 Control Board 3 - Servo Random Motion Control	Programmable Single Relay - B 1 - Programmable Relay - Large Load	Sequence Relay Control Module 6 - Relays- Sequenced On / Off 1-6	
Wizard - 7 Control Board Servo to DC Motor / Relay Control	Puppet - 1 Control Board 1 - Servo Control / Programmable	Random Relay Control Module 6 - Relays- Randomly Switched On/Off	
Wizard - 8 Control Board Single Relay and Digital Sound IC	Puppet - 2 Control Board 1 - Servo / Digital Control	Digital Clock Controller 24 Hr / 365 Day - Wizard Controller	
Wizard - 9 Control Board Programmable Duo Relays (2)	Puppeteer - 3 Joystick Board 2 - Servo / Digital / Joystick / Auto	Costume Servo Controller 1 - Servo Ch - Switch / Automated	
Wizard - 10 Control Board 8- Sounds FX to 1-8 Ch outputs	0-10 Vdc Analog Servo Control 0-10 Vdc Variable Input / 1- Ch Servo	EEPROM Master Copier EEPROM - Memory Chip Duplication	
Wizard - 11 Control Board 6-Servo,2-Digital-AutoTalk,2-Relay	Servo Motor Controller Board R/C Servo Motor - Direction / Speed	PIR Sensor with Relay PCB PIR Activated Mini Relay	

NOTE:
Pricing Subject to Change
Product styles, merchandise may vary from original overview shown.

Wizard - 1 Board 4 - Servo / Digital Controller

Hardware Description



Board Size: 4-1/4" L x 2-7/8"
Wizard Board is pre-assembled and tested.
Controller has 7-bit Resolution.

Wizard - 1 Board Controller (I)

The Wizard - 1 Board is a small 9 Volt dc powered interface board that will record and playback up to **5 minutes** of servo motion for 4 standard 5 Vdc hobby R/C type servos and control 4 digital switched ON and OFF outputs at +4.5 Vdc (100 mA) per channel.

The Wizard - 1 board incorporates many features such as looping playback servo motion with variable delay between loops. An auto start-up on power option and on board connector for remote activation switching such as a PIR sensor, contact switch or mat pressure pad to initiate playback.

Recording sessions are built up on a channel by channel process - no complex programming is required. During recording, all previously recorded channels are re-played to aid synchronization the current channel being programmed. Programming is easily done, with a set of push button keys and control potentiometer built onto the board.

No host computer or other programming device is needed to operate the board, Board has 7-bit Resolution.

Power supply, Servos, not included. (9 Volt dc @ 2 Amp power supply needed

Product Description	Catalog No.	Price US \$
Wizard - 1 Board Controller	WAC-0001	\$ 175.00
Regulated Wall Power Supply (9 Vdc @ 2 Amp)	PSA-0090	\$ 30.00

Product Accessories	Catalog No.	Price US \$
Switching Relay Module -1	RRM-0200	\$ 65.95
Digital Sound Board - Pro Version	PSM-0350	\$ 99.00
EEprom Copy Board	EPC-0100	\$100.00

Wizard - 2 Board 4 / 8 - Servo / Digital Controller

Hardware Description



Board Size: 6-5/8" L x 4-1/2" W Wizard - 2 Board is pre-assembled and tested. Controller has 7-bit Resolution.

NOTE:

Regulated 9 Vdc @ 2 Amp and Regulated 5 Vdc @ 2 Amp power supplies recommended

Wizard - 2 Board Controller (II)

The Wizard - 2 Board will record / playback up to **5 minutes** of action for up to 4 -R/C type servos and 4 - digital outputs or can be selected to operate 8 digital outputs with on board relays or direct digital signal output connection pads each with 5 minutes also per channel of recording time. The board also incorporates features such as looping playback action with variable delay between start-up on power up and sensor input. A terminal connection block for remote switch, pressure pad or synch signal from other device to initiate playback sequences is built on board also.

Recording sessions are built up on a track-by-track basis - no programming is required. During recording, all previously recorded tracks are re-played to aid synchronization.

FEATURES:

- 4 Servo output channels, each capable of recording and playback of up to 5 minutes of action. - 8 Digital channels - 0/4V dc at 100 mA outputs each capable of recording and playback of up to 20 minutes of action - 8 on board Relays (2 Amp @ 30 Vdc) - Relay wire terminal connection blocks. - 8 direct digital control signals with connection pads. - Potentiometer to adjust the servo positions during recording or to determine the time delay between play loops during automatic loop play - adjustable between 0 and 65 seconds. - NEXT, PLAY and RECORD buttons. - Record enable / disable jumper - AUTO-PLAY and LOOP-PLAY switches - Status LED's, Board has 7-bit Resolution. - Many more unique features. Unit comes with user manual and assembled board. (Servos and 9Vdc, 5Vdc, power supplies not included)

Product Description	Catalog No.	Price US \$
Wizard - 2 Board Controller	WAC-0020	\$ 230.00
Regulated Power Supply - 9 Vdc @ 2 Amp Wall type	PSA-0090	\$ 30.00
Regulated Power Supply - 5 Vdc @ 2 Amp Wall type	PSA-0050	\$ 27.00
EEprom Copy Board	EPC-0100	\$100.00

Wizard - 3 Board 8 - Servo / Digital Controller

Hardware Description



Board Size: 6-5/8" L x 4-1/2" W Wizard - 3 Board is pre-assembled and tested. Controller has 7-bit Resolution.

Regulated 9 Vdc @ 2 Amp and Regulated 5 Vdc @ 2 Amp power supplies recommended

Wizard - III Board Controller (III)

The Wizard - 3 Board will record and playback up to **13 minutes** of action for up to **8** R/C type servos and 8 digital outputs

8 - Servo channels

8 - Digital outputs

Digital Outputs (100 mA @ 4.0 Vdc)

Two selectable 30V @ 2 Amp relays on-board.

On-board programming keys and servo controller potentiometer.

Servo recording sessions are built up on a track-by-track basis - no computer programming is required. During recording, all previously recorded tracks are re-played to aid synchronization. Board has 7-bit Resolution.

(9 Vdc @ 2 Amp and 5 Vdc @ 2 Amp power supplies recommended)

Regulated Power Supplies (5 and 9 Vdc) and Servos, not included.

Product Description	Catalog No.	Price US \$
Wizard Board - 3 Controller	WAC-0030	\$ 245.00
Regulated Power Supply - 9 Vdc @ 2 Amp Wall type	PSA-0090	\$ 30.00
Regulated Power Supply - 5 Vdc @ 2 Amp Wall type	PSA-0050	\$ 27.00

Wizard - 4 Controller Board Programmable 4-Channel Relay Control

Hardware Description

Wizard - 4 Controller Board (IV) (Programmable 4-Channel Relay Module)



Controller is pre-assembled and tested. Controller has 7-bit Resolution. Board Size: 4" L x 4" W x 1/2" H The Wizard- 4 Controller Board or Programmable 4 - Channel Relay module will record and playback up to **25 minutes** of controlled ON and OFF action for 1 - 4 Outputs Relays.

The board incorporates such features as looping playback, variable delay between programmed routines, auto loop, auto start-up on power up, a connection terminal for remote switch activation by manual switch, PIR sensor, pressure pad, etc, to activate playback.

Recording sessions are built up on a channel-by-channel basis - no complex programming needed, or connection to a host computer to program routines. Board has many other features including on-board programing and function selection switches, Sync output, EEPROM protection, direct digital output pins, optional user selected jumper relay activation or power down setting.

The relay contacts are rated at 30 Volt DC @ 2 Amps.

Quick wire terminal blocks are built on-board for each relay, with a common connector jumper option.

Programming is stored in EEPROM

Board has 7-bit Resolution.

Board is powered by a 9 Volt regulated power supply connected to the on-board 2.1mm socket.

Supplied built and tested.

(Regulated 9 Volts dc power supply not included)

Product Description	Catalog No.	Price US \$
Programmable - 4 Channel Relay Module	WAC-0040	\$ 170.00
Regulated Power Supply - 9 Vdc @ 2 Amp Wall type	PSA-0090	\$ 30.00

Wizard - 5 Board Servos / Sound / Digital Controller

Super Animatronic Board

2- servos, 2- Relays, Digital Out, Sound Chip and Sound to Motion, all on one controller board

Enhanced Sound now with 4 minute sound chip on board



Board Size: 6"L x 4"W x 1"H

Controller has 7-bit Resolution. Wizard - 5 Board is pre-assembled and tested.

Recommended 9 Vdc @ 2 Amp power supply

Hardware Description

Wizard - 5 Board Controller (V) Servo / Sound / Digital / Sound to motion all on one board

The **Wizard - 5 Board** will record and playback up to **5 minutes** of action for up to **2 servos** and **2 digital outputs** (on-board relays). It also incorporates a **4-minute audio recording and playback sound chip** with the ability to control one servo channel either from recorded moves or from an audio signal, direct or from on-board sound chip.

The card includes features such as looping action with variable delay between loops, auto start-up on power up and a connection interface for a PIR, remote switch or pressure pad to initiate playback.

Recording sessions are built up on a track-by-track basis- no complex programming is required and no computer is needed. During recording, all previously recorded tracks are re-played to aid synchronization.

Wizard - 5 Board Features

- 2- Digital channels- either 0/4V @ 10mA outputs or relay rated 30V @ 2A.
- 2- Servo channels one channel may be automatically controlled from an audio signal either from the line input or from the on-board sound chip.
- 4 minute, high quality sound chip- digital recording selected from either from the line input (ie from a sound card and wav files) or from microphone input. Potentiometer to adjust the servo position and the time delay between loops in loop-play. Digital ON-OFF, NEXT, PLAY and RECORD buttons. Record enable/disable jumper, EEprom protect jumper. AUTO-PLAY and

LOOP-PLAY switches. Sync output for multi-board operation. Remote start option- for switches, sensors / PIRs, etc. Maximum and minimum set points to the audio servo channel, and many more features.

Power supply. Servos, not included.

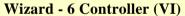
(9 Volt dc @ 2 Amp power supply needed)

Product Description	Catalog No.	Price US \$
Wizard Board - 5 Controller	WAC-0050	\$ 190.00
Regulated Power Supply - 9 Vdc @ 2 Amp Wall type	PSA-0090	\$ 30.00

Wizard - 6 Board

- 2 Ch Random Servo Control
- 1 Ch Pulse Servo Control

Hardware Description



2 - Channel Random, 1- Channel Pulse Servo Control

The Wizard - 6 Controller is a Random and Pulse motion Servo Controller.

The controller board will operate two servo channels each with there own unique random servo motion outputs and one channel with variable speed and time pulse motion servo output.

The controller allows for setting the range of each servo's travel motion limits, along with adjustable servo speeds and random time rate features.

This controller is excellent for creating random moving eyes (Left / Right - Up / Down) and head motions, eyelid blinks or in other effects where automated random servo motion is needed using a self-contained servo motion driver board. No programming is required.

Board operates from a regulated 9 VDC @ 2 Amp power supply.

(Power supply, servos not included)



Board Size: 3-4/8" L x 1-3/4" W x 1/2" H Board is pre-assembled and tested.

Product Description	Catalog No.	Price US \$
Wizard - 6 Board	WAC-0060	\$ 85.00
Regulated Power Supply - 9 Vdc @ 2 Amp Wall type	PSA-0090	\$ 30.00

Wizard - 7 Board DC Motor / 2- Relay Interface

Hardware Description



Board Size: 4-1/4" L x 3-7/8" W x 1-1/2" H

Wizard -7 Board (VII)

The Wizard - 7 is a 3- channel interface board that will operate a standard 12 Vdc motor in clockwise and counter clockwise rotation with speed control and activate 2 on - board relays when connected to a standard servo controller board or R/C receiver. This interface connects to any of the Wizard, Puppet boards or a R/C receiver and uses a servo output to operate in automated mode.

The on-board relays can be operated independently with latching on and off features or the two relays can be controlled together by moving an on-board jumper, allowing a single servo control channel to operate the relays as momentary on and off relays.

When this interface is connected to a Wizard, Puppet board the interface can be programmed for automated playback.

Vdc Motor driver is rated 12 Vdc @ 5 Amp continuous use. Relays are rated at 30 Vdc @ 2 Amp load each.

(Vdc motor and power supply not included) (Wizard board, R/C transmitter and receiver not included)

Product Description	Catalog No.	Price US \$
Wizard - 7 Board	WAC-0070	\$ 150.00

Wizard - 8 Board On-board Sound and Programmable Relay

Hardware Description



Board Size: 3-5/8" L x 3-7/8" W x 1/2" H Controller has 7-bit Resolution. Board is pre-assembled and tested.

Wizard - 8 Board - Programmable Relay and Sound (VIII)

The Wizard - 8 board provides a single channel, user programmable **5 - minute** digital output (relay) combined with a digital **4 - minute** duration user record IC sound chip. The supplied 4 - minute ISD sound chip has great frequency response up to 3.4 KHz and a audio sample rate of 8.0 KHz. Audio can be re-recorded up to 100,000 times and can be stored up to 100 years.

One - Digital channel - either 0/4.5V @ 50mA output or on-board relay rated 30V @ 2A with wire terminal strip.

One - 4 minute quality digital IC sound chip.

Digital recording to Sound IC chip is through a direct line input (Computer sound card or output port, CD player or any sound source output).

Potentiometer to adjust the time delay between loops in playback of recorded sound and relay action ON and Off.

Digital ON - OFF and GO programming buttons, AUTO - PLAY, PLAY - RECORD and SOUND - RELAY switches. No computer is needed for programming.

Sync output for multi-board and link to other Wizard board operation

REMote start option - for interfacing to sensors, switches, remote relays, pressure pads, PIR sensors, etc.

Board operates from regulated 9 VDC @ 1.0 Amp power supply. (Power supply, audio cable, remote audio amplifier and speakers not included.)

Product Description	Catalog No.	Price US \$
Wizard - 8 Board - Sound and Relay	WAC-0080	\$ 180.00
Regulated Power Supply - 9 Vdc @ 2 Amp Wall type	PSA-0090	\$ 30.00

Wizard - 9 Board Programmable Duo Relay Controller

Hardware Description



Board Size: 4" L x 3" W x 1/2"H Mechanical relay rated 30V @ 2Amps

Controller requires 9 Vdc power. Board is pre-assembled and tested.

Wizard - 9 Board - Programmable Duo Relay Controller

The Wizard 9 board will record and playback up to 25 minutes of action for up to 2 digital / relay outputs. The board also incorporates features such as looping action with variable delay between loops, auto start-up on power up and a connection interface for a PIR, remote switch or pressure pad to initiate playback.

Specifications:

2 Digital channels- either 0/5V @ 100mA outputs or mechanical relay rated 30V @ 2Amps to wire terminal blocks,.

On board Potentiometer to determine the time delay between play loops during automatic loop play- adjustable between 0 and 65 seconds.

Digital 1, Digital 2 on-off, NEXT, PLAY and RECORD buttons.

Record enable/disable jumper protection.

AUTO-PLAY and LOOP-PLAY switches

Sync output for multi board operation

REMote start option- for interfacing to pressure pads / PIRs switches, relays, manual start buttons, etc.

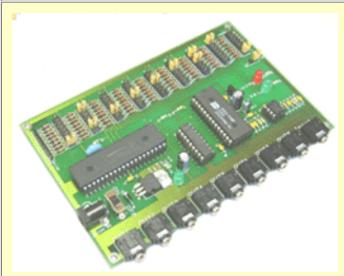
REM polarity select jumper- start on either +5v or 0V condition.

Board operates from 9 Vdc power supply

(9 Vdc Power Supply, not included.)

Product Description	Catalog No.	Price US \$
Wizard - 9 Board - Programmable Duo Relays	WAC-0090	\$ 160.00
Regulated Power Supply - 9 Vdc @ 2 Amp Wall type	PSA-0090	\$ 30.00

Wizard - 10 Sound & Switchers



The top right-hand bank of input pins are the Digital sound-channels 1-8 audio playback select pins, also included the random and sequential play options. The other 8 banks of pin-sets along the back edge are for selecting which sound track goes to which output- jack matrix. (remote amp and speaker) Pin-set 1 relates to sound track 1- if you want sound track 1 to play-back through outputs 2, 6 and 8 you would put a jumper over pins 2, 6 and 8 on pin-set 1. If you want to play sound -track 2 through outputs 1,3 and 5 then you would put jumpers over pins 1, 3 and 5 on pin-set 2 etc.

Hardware Description

Wizard - 10 Sound and 1-8 Ch output Board

Programmable board will switch 8 different digital recorded audio signals to 1-8 different output channels.

User can program board to switch 8 different audio signal to any of 1-8 output channels.

Any combination of audio out channels can be activated on and off. Controller is easy to program and setup.

Board comes with 4 minute Audio chip on board, but can be switched to 8 or 12 minute chip upgrade option. There is 1 audio jack input for recording 8 different sounds into the Digital sound chip directly by an audio source and 8 on board line output channels jacks to remote amps and speakers setups. There is the standard record/playback mode jumper selection along with led indicators. Board can even be set to play random or sequence sound playback when triggered

You can adjust the play-back output select jumpers at any time- they are read just before starting any new play-back.

When the audio is combined with any of the Wizard Relay boards, the system becomes an automated audio sound effects and switcher system.

(Audio source, speakers and amps not included) (9 Vdc Regulated Power supply not included)

(Wizard board, switches, wires, not included)

Product Description	Catalog No.	Price US \$
Wizard - 10 Controller	WAC-0100	\$ 215.00
Regulated Power Supply - 9 Vdc @ 2.5 Amp Wall type	PSA-0090	\$ 30.00
Switch, Relay Connection Adapter for Sound Board Header Pins Quick Solder Board Connector and 8" connector cable Quick Wire Terminal Connector and 8" connector cable	PSM-0600 PSM-0601 PSM-0605	\$ 12.50 \$ 19.00 \$ 29.75

Wizard - 11 Board

On-board Servos, Digital Sound, AutoTalk, 6-Servos, 2-Relays

Ultimate Animatronic Board

6- Servos, 2- Relays, 4- minute Digital Out, Sound Chip and Sound to Motion (AutoTalk) control, all on one single controller board.



Board Size: 7-3/8" L x 4-1/8" W x 1/2" H Board is pre-assembled and tested. Controller has 7-bit Resolution.

The Wizard -11 requires duo power supplies 9 VDC @ 1.0 Amp power supply 6 VDC @ 5.0 Amp power supply

Hardware Description

Wizard - 11 Board - Programmable Servos Sound and AutoTalk Controller (XI)

The **Wizard - 11 Board** will record and playback up to **6 minutes** of action for up to **6 servos** and **2 digital outputs** (on-board relays). It also incorporates a **4-minute audio recording and playback sound chip** with the ability to control one servo channel (AutoTalk) either from recorded moves or from an audio signal, direct or from on-board sound chip. The card includes features such as looping action with variable delay between loops, auto start-up on power up and a connection interface for a PIR, remote switch or pressure pad to initiate playback.

Recording sessions are built up on a track-by-track basis- no complex programming is required and no computer is needed. During recording, all previously recorded tracks are re-played to aid synchronization.

Wizard - 11 Board Features

2- Digital channels- either 0/4V @ 10mA outputs or relay rated 30V @ 2A .

6- Servo channels – one channel may be automatically controlled from an audio signal either from the line input or from the on-board sound chip. 4 minute, high quality sound chip- digital recording selected from either from the line input (ie from a sound card and wav files) or from microphone input. Potentiometer to adjust the servo position and the time delay between loops in loop-play. Digital ON-OFF, NEXT, PLAY and RECORD buttons. Record enable/disable jumper, EEprom protect jumper. AUTO-PLAY and LOOP-PLAY switches. Sync output for multi-board operation. Remote start option- for switches, sensors / PIRs, etc. Maximum and minimum set points to the audio servo

NOTE: The Wizard -11 requires twin power supplies.

(Power supplies, audio cable, remote audio amplifier servos not included.)

Product Description	Catalog No.	Price US \$
Wizard - 11 Board - Sound and Relay	WAC-0110	\$ 255.00
Regulated Power Supply - 6 Vdc @ 5.5 Amp Wall type	PSA-0060	\$ 46.95
Regulated Power Supply - 9 Vdc @ 2.5 Amp Wall type	PSA-0090	\$ 30.00

Wizard - 12 Board Single Servo, Manual Controller with Programmable Limits

Hardware Description



Board Size: 2" L x 1-1/4" W x 1/2" H Controller has 7-bit Resolution. Board is pre-assembled and tested.

Wizard - 12 Board - Single Servo Manual Controller with Programmable Servo Travel Limits (XII)

Manual operated servo driver board will move a R/C servo in response to hand held remote slide or rotary position potentiometer input.

Specifications:

1 - channel manual servo control.

Servo output 1 to 2msec pulses.

Servo Travel A-B limits can be easily set.

Servo quick pin header connection.

Wire terminal block for remote potentiometer control.

Servo Travel 0 - 90 Degrees.

Ouick Power connection

Operates from 7-12 Vdc @ 1 Amp power supply

Note: Controller board requires Potentiometer for operation.

(Board uses a 5 - 10K ohm potentiometer)

(Power Supply, not included.)

(Remote potentiometer not included)

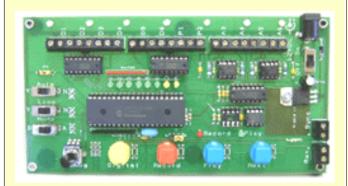
(R/C servo not included)

Product Description	Catalog No.	Price US \$
Wizard - 12 Board - Single Servo Programmable / Manual	WAC-0120	\$ 70.00
Manual Slide Remote Control Potentiometer	MSP-0001	\$ 12.00
Manual Rotary Remote Control Potentiometer	MSP-0002	\$ 8.75
Micro Joystick Module	MJM-0080	\$ 12.25
Regulated Power Supply - 9 Vdc @ 2 Amp Wall type	PSA-0090	\$ 30.00

Wizard - 13 Board Digital / Analog Board

Hardware Description

Wizard - 13 Board - Digital / Analog Controller



Board Size: 167 x 86mm

Controller requires 12 Vdc at 1 Amp power Supply Board is pre-assembled and tested. The Wizard 13 board provides up to 6 minutes of recording and playback time for up to 6 digital outputs, 2 PWM and 4 DAC outputs.

The Wizard 13 incorporates looping play with variable delay between loops and Voltage outputs selectable between 0 - 5V and 0 -10V.

Specifications:

Connections

Power supply- 12V DC at up to 1 amp (current requirement depends on loads). 2.1mm socket, centre positive.

Outputs: Data is logged and updated during playback every 50msecs **Digital**: Six buffered digital outputs, 0/5V DC at up to 100mA each. Connections via 2-way terminal blocks

PWM: Two channels of buffered PWM, 0/5V DC at up to 100mA each. PWM frequency is 15.6kHz with 8-bit resolution. Connection via 2-way terminal block.

DAC: Four channels of variable voltage at up to 25mA each. Range jumper to select either 0-5V or 0-10V Dc range both with 8-bit resolution

AUTO-PLAY and LOOP-PLAY switches

Sync output for multi board operation

REMote start option- for interfacing to pressure pads / PIRs switches, relays, manual start buttons, etc.

Board operates from 12 Vdc at 1 Amp power supply (12 Vdc Power Supply, not included.)

Product Description	Catalog No.	Price US \$
Wizard - 13 Board - Digital / Analog Controller	WAC-0130	\$ 185.00
Regulated Power Supply - 12 Vdc @ 2 Amp Wall type	PSA-0012	\$ 48.00

Wizard - 14 Board 6 - Channel DC Motor Controller

Hardware Description



Board Size: 135 x 85mm

Controller requires 6 Vdc at 6 Amp power Supply Board is pre-assembled and tested.

Wizard - 14 Board - 6 Channel DC Motor Controller

The Wizard 14 allows the forward - reverse programmable control of up to 6 small 3-4.5V DC motors. The board incorporates loop play with variable time delay and auto play back at power up. Up to 6 minutes of motor action may be recorded. Actions are recorded in real time and a recording session built up on a channel by channel basis.

Specifications:

Motors Connections via 2-way terminal blocks for up to 6 small DC motors with current requirements of up to 250mA each.

Programmable on board Clockwise (CW) and Counter - Clockwise (CCW) motor control.

Record enable/disable jumper protection.

AUTO-PLAY and LOOP-PLAY switches

Sync output for multi board operation

REMote start option- for interfacing to pressure pads / PIRs switches,

relays, manual start buttons, etc.

Board operates from 6 Vdc at 6 Amp power supply

(6 Vdc Power Supply, not included.)

Product Description	Catalog No.	Price US \$
Wizard - 14 Board - 6 Channel DC Motor Controller	WAC-0140	\$ 190.00
Regulated Power Supply - 6 Vdc @ 6 Amp Wall type	PSA-0060	\$ 30.00

Wizard - 15 Board Input - Output I/O Router Board



Board Size: 100 x 150mm

Controller requires
9 Vdc at 500mA power Supply
Board is pre-assembled and tested.

Hardware Description

Wizard - 15 Board - Input - Output I/O Router Board

The Wizard 15 I/O router board provides a convenient way of matching up to 8 inputs with up to 8 outputs at 5V TTL levels. The board can accommodate normally high or low inputs and outputs and one single input may be routed to any or all of the output lines. A small led by each output indicates the current status.

Specifications:

Power Supply: 2.1mm connector, centre positive. 9V DC at 500mA Inputs: 8 inputs via 2-way terminal blocks. The "-" connection is to the board ground. Each of the + connections is pulled to +5v by a 10k resistor. Inputs may be volt-free or 5V TTL.

Outputs: 8 outputs via 2-way terminal blocks and a 2x8 pin header connector. Each output is capable of sinking or sourcing up to 25mA.

On board wire header connections

Board operates from 9 Vdc power supply (9 Vdc Power Supply, not included.)

Product Description	Catalog No.	Price US \$
Wizard - 15 Board - I/O Router Board	WAC-0090	\$ 200.00
Regulated Power Supply - 9 Vdc @ 2 Amp Wall type	PSA-0090	\$ 30.00

Auto Talk Controller - E2 Sound to Servo Motion Control

Hardware Description



Board Size: 2-3/4" L x 2-1/2" W Board is pre-assembled and tested.

AutoTalk Controller (AutoTalk - E2)

The AutoTalk -E2 board is similar in function with all the exact features of the original AutoTalk board developed several years ago for professional animatronic clients, in that it moves an R/C type servo in response to either an audio input signal from any standard CD player, tape recorder, sound source, but now has jumper setting for greater sensitivity in using the board from a sound source with low signal input, such as found on a digital sound chips or direct connected microphone. The board has an on-board voltage regulator for using a variety of voltage sources including the use of a battery for remote applications, a quick connector for connecting power, LED power status indicator and enhanced output to operate a standard R/C servo with greater response. The controller includes the function to set both the servo end travel points, an important feature when working with various mouth jaw sizes, the servo arm direction of travel can also be quickly changed by an on-board jumper and the sensitivity of the audio input signal through the improved on-board gain control have also been enhanced for greater response.

(9 Vdc Power supply, servos, sound source not include)

Product Description	Catalog No.	Price US \$
Auto Talk Controller E2 (AutoTalk)	APC-0002	\$ 75.00
Regulated Power Supply - 9 Vdc @ 2 Amp Wall type	PSA-0090	\$ 30.00

Programmable Single Channel Relay - A Module

Hardware Description



Controller is pre-assembled and tested. Board Size: 1-7/8" L x 1" W x 5/8" H

Programmable Single Relay - A Module

The Programmable Single Relay Module has sufficient memory to record up to **4.5 hours** of Relay ON/OFF programmed actions.

Programming is easily done on-board with a set of jumpers.

Playback can be initiated by remote switch, or set for repeat looping playback.

The relay contacts are rated at **24 Volt DC** @ **0.5 Amps** and have no relay closure sound when activating.

Programming routine is stored in EEPROM.

The module draws only 4 mA and 15 mA with the relay energized.

The Programmable Single Relay Module is small only 1-7/8" L x 1" W x 5/8" H (9 -Vdc battery size)

Uses a 9 Volt battery or 9 Volt dc AC wall adapter.

Supplied built and tested. (9 volt power supply not included)

Great for triggering sound boards, animatronics use.

Product Description	Catalog No.	Price US \$
Programmable Single Relay Module - A	PSR-2030	\$ 55.00
Optional Remote Programming Switch	RMS-0200	\$ 5.75

Programmable Single Channel Relay - B Module

Hardware Description



Controller is pre-assembled and tested. Board Size 3" L x 1-1/2" W x 9/8" H

Programmable Single Relay - B Module

The Programmable Single Relay - B Module is similar to the <u>Relay - A module</u> with memory to record up to **4.5 hours** of Relay ON / OFF programmed actions, but has a bigger relay on-board to handle **larger loads** (**24 Vdc @ 2 amp**), power On / Off switch, status LED's and on-board solder pads for permanent wiring directly to board.

Programming is easily done on-board with a set of jumpers. Playback can be initiated by remote switch, or set for repeat looping playback. Programming routine is stored in EEPROM.

Uses a 9 Volt battery or 9 Volt dc AC wall adapter.

Supplied built and tested. (9 volt power supply not included)

Great for the Animatronics and Haunted Industry. Very versatile relay board.

Product Description	Catalog No.	Price US \$
Programmable Single Relay Module - B	PSR-2035	\$ 65.00
Optional Remote Programming Switch	RMS-0200	\$10.00

Animate Controller Sound / Servo / Digital Control

Hardware Description



Board Size: 5" L x 4-3/16" W Power: 9 Volt dc @ 2 Amp. Controller has 7-bit Resolution.

Animate Board is pre-assembled and tested.

Animate Controller

The **ANIMATE BOARD** is a 9 Volt dc powered full feature Sound, Motion and Switched ON / OFF output control interface board.

The controller has on-board sound recording and playback in to a **20 second sound** chip with microphone and speaker output and up to **40 seconds** of recorded and playback **motion** saved to a EEPROM for 4 standard +5 Vdc servos and control of 4 digital switched ON and OFF outputs at + 4.5 Vdc (100 mA) per channel action.

The Animate board incorporates many features such as looping playback servo motion with variable delay between loops. An auto start-up on power option and on board connector for remote activation switching such as a PIR sensor, contact switch or mat pressure pad to initiate servo playback and on- board sound output.

Recording sessions are built up on a channel by channel process - no complex programming is required.

During recording, all previously recorded channels are re-played to aid synchronization the current channel being programmed. Programming is easily done, with a set of push button keys and control potentiometer built onto the board. Speaker connection terminal allow the addition of an 8-16 ohm speaker which can be driven directly from the Animate board. Motion, Sound and Switched ON / OFF outputs are all controlled from a single board. Connection pins on-board for servos, output hookups.

(9 Volt dc - 2 Amp Power Supply, Servos and Speaker not included)

Product Description	Catalog No.	Price US \$
Animate Controller	ATC-0001	\$ 125.00
Regulated Power Supply - 9 Vdc -2 Amp Wall type	PSA-0090	\$ 30.00

Puppet - 1 Control



Board Size: 2-3/4" L x 1-1/3" W Controller has 7-bit Resolution. Power Requirements: 5 Volt dc @1 Amp Controller is pre-assembled and tested.

Description

Puppet - 1 Control

Small controller for single servo control with up to **4 minutes** recording time, loop playback with variable time delay between loops, auto start-up and easy recording features. Several modules may be daisy chained together and controlled from one master module.

The Puppet servo controller includes the following features:

- Single channel servo control
- Up to 4 minutes recording time
- Small modification to board, allows a servo to be controlled by a hand push button switch, great for Costume Animatronic Head control.
- Full 180 degree rotation pulse train (for servos that can physically rotate 180 deg)
- Looping play with adjustable time delay between loops Record edit function
- Synchronization pulse for multiple unit operation

(5 Volt dc power supply and Servo not included)

Product Description	Catalog No.	Price US \$
Puppet - 1 Controller	PCA-0010	\$ 70.00
Power Supply - 5 Vdc Regulated Wall type	PSA-0050	\$ 27.00

Puppeteer Controller (Puppet -2) Servo / Digital Control



Board Size: 2-3/4" L x 1-1/3" W Controller has 7-bit Resolution. Power Requirements: 5Vdc @ 1 Amp Assembled and Tested

Hardware Description

Puppeteer Controller (Puppet-II Board)

Small controller for single servo control with up to **4 minutes** recording time, loop playback with variable time delay between loops, auto start-up and easy recording features. Several modules may be daisy chained together and controlled from one master module.

The Puppet Controller has an additional digital channel with a 1A @ 24 Vdc rated relay.

Record your servo channel first and then superimpose the digital channel whilst the servo is playing

The Puppet servo controller includes the following features:

- Single channel servo control
- Up to 4 minutes recording time
- Full 180 degree rotation pulse train (for servos that can physically rotate 180 degrees)
- Looping play with adjustable time delay between loops Record edit function
- Synchronization pulse for multiple unit operation

(5 Volt dc power supply and Servo not included)

Product Description	Catalog No.	Price US \$
Puppet - 2 Controller	PCA-0001	\$ 80.00
Power Supply - 5 Vdc Regulated Wall type	PSA-0050	\$ 27.00

Joystick Servo Controller Servos / Digital / Manual / Automated Control





Hardware Description

Joystick Servo Controller Newly Enhanced

The Joystick Servo Controller is a dual channel servo controller capable of direct manual servo, relay control and with recording option of up to **13 minutes** of servo and relay action, interfaced to a standard game joystick. The board features loop playing with variable delay, synchronized playback, can be linked with several other boards for multiple servo applications, has servo movement limit setting and a single relay channel output.

Joystick forward and backwards controls servo one motions. Joystick left and right controls servo two motions.

Thumb button = playback / recording

Trigger button = relay ON/Off control.

Pressing down and holding the Thumb button will activate the record option where joystick / servo motion is recorded to an on-board EEPROM for playback up to 13 minutes.

Playback motion can be later activate by pressing the finger button, anytime, even between manually servo control.

Board power is provided by plug-in wall unit, or optional mobile power supply and will operate both joysticks and servos.

NOTE: Analog Joystick with DB-15 connector required. Will not work with USB type joysticks.

(9 Volt dc Power supply, Servos and Joystick not included)

Board Size: 3-1/4" L x 2-5/8" W Controller has 7-bit Resolution. Power: 9 Volt dc @ 2 Amp.

Controller is pre-assembled and tested.

Product Description	Catalog No.	Price US \$
Joystick Servo Controller	JSC-0510	\$180.00
Regulated Power Supply - 9 Vdc @ 2 Amp Wall type	PSA-0090	\$ 30.00

1- Ch Switched Servo Controller

Hardware Description



Circuit board size:
2" L x 1-3/8" W x 1/2" H
Assembled and Tested

1 - Channel Switched Servo Controller

(Newly Enhanced)

Mini control board for manual operation of a single R/C type servo by remote switch, relay, or external automated controller signal pulse. (Servo travel positions A to B or B to A, under manual switch, relay, wireless control operation)

Controller includes the following features:

- Single channel servo control.
- On-board connection for remote switch or relay.
- On-board Servo and Power Connection terminals.
- On-board travel adjustment potentiometers.

(A through B positions)

- Potentiometers allow servo arm to be positioned with Start and Stop at any position between A and B travel.
- Servo Travel Position A to B B to A control.
- 5 Vdc operation Wall power or Mobile Battery
- Small PCB Board
- Can be operated by a remote relay.

(5 Volt dc Power supply, hand switch button unit and servo not included)

Hand / Palm switch units can be custom designed to fit your unique needs. Call Blue Point Engineering for more information on a custom design.

Product Description	Catalog No.	Price US \$
1 - Channel Switched Servo Controller	SMS-0200	\$ 75.00
Mini Switch hand control module	SMS-0210	\$ 20.00

0 - 10 VDC Analog Servo Controller

Hardware Description



0 - 10 Vdc Analog Servo Controller

This analog servo controller board provides a single channel capability of converting a positive 0 -10 Vdc adjustable control voltage input into a output suitable for driving a standard hobby R/C servo from 0 to 90 degrees in motion.

Specifications:

Servo connection pin header for quick connection.

1 - Channel Analog 0 -10 Vdc DC input.

VDC terminal block for wire connection.

Power jack for quick connection of 5 Vdc supply.

Servo output 1 to 2msec pulses.

Servo Travel 0 - 90 Degrees.

On-Board travel position trim adjustment potentiometer.

(5 Vdc power supply not included)

(Variable 0 -10 Vdc supply not included)

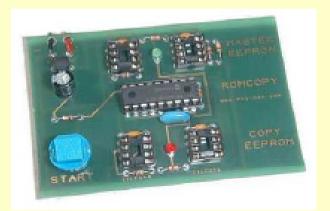
(R/C servo not included)

Small Board Size:

1-7/8" L x 1-9/16" W x 1/2" H

Product Description	Catalog No.	Price US \$
0 - 10 Vdc Analog Servo Control	ASD-5510	\$ 70.00

EEPROM Master Copier



Board is pre-assembled and tested.

Hardware Description

EEPROM Master Copier

EEPROM Master Copy will duplicate the data stored in the EEproms used in the Puppet Board, Animate Controller Board and Wizard Controller Boards.

Very simple to use- load the recorded EEprom into the master socket, load a blank EEprom into the slave socket and press Go.

Instruction guide, assembled card ready to use.

(9 Volt dc Battery not included)

Product Description	Catalog No.	Price US \$
EEPROM Master Copier	EPC-0100	\$100.00
EEPROM - 24LC256 chip	EPC-0200	\$ 12.25
EEPROM - 25LC640 chip	EPC-0300	\$ 12.25

R/C Servo to Analog Converter Module

Hardware Description

R/C-PWM to Analog Converter Module



Small Board Size: 3-5/8" L x 1-1/4" W x 3/4" H

This servo-analog converter board provides a two channel capability of converting standard R/C servo PWM pulses to 0-10 Vdc and/or 0-5 Vdc outputs suitable for driving standard lighting dimmer packs or any device that requires a 0-5 and/or 0-10 Vdc variable controlled analog signal input.

Specifications:

Servo input pin headers from R/C unit.

2 - Channel Analog 0-5 and/or 0-10 Vdc DC output is available from the 4 way terminal block for wire connection.

No external power supply is required, the module takes it's supply from the incoming servo drive connections.

Servo inputs: 1 to 2msec pulses.

1-msecs servo pulse gives 0 V DC output.

2-msecs servo pulse gives 5 and/or 10 VDC output.

0-5 and/or 0-10 Vdc DC Analog outputs in 80mV increments.

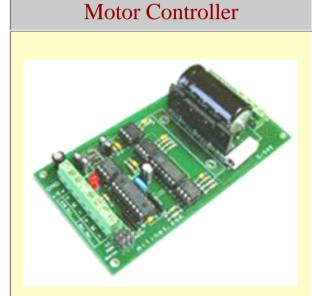
125 steps between 0 and 10 Vdc available.

Maximum drive current -10mA.

Small Board Size:

3-5/8" L x 1-1/4" W x 3/4" H

Product Description	Catalog No.	Price US \$
R/C Servo to Analog Converter Module	PWC-2202	\$ 75.00



Hardware Description

Motor Controller Board

Convert standard DC motors such as car windscreen motors into a powerful servo motor with this driver board.

Drive options include either standard R/C servo input signals (1-2msec pulse repeated every 20msecs) or 0 - 5V input.

Board may be configured for servo action or variable speed reversing DC motor

drive.

Supports motors fron 9-24 Vdc up to 5A continuous current.

Requires motor supply and 5V DC for the electronics (must be separate supplies or well isolated from each other!)

(power supply not included)

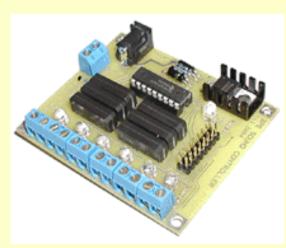
(DC motor, potentiometer, servo wires not included)

Size: 4-3/4" L x 2-1/2" W x 1-3/16" H

Product Description	Catalog No.	Price US \$
Servo Motor Controller Board	SBM-4500	\$ 175.00

Random 6 - Relay Control Module 6 - Random Reed Relay Outputs

Hardware Description



Board Size: 3" L x 2-1/2" W x 1/2 H Board is pre-assembled and tested.

Random 6 - Relay Control Module

Unique microprocesson on - board will operate mini reed relays in random patterns as remote switch / relay input is activated momentary on.

Random pattern has 1- 6 possible channel selections each time remote input switch / relay is activated

Relays are rated 1 Vdc @ 0.5 Amp

On-board LED status indicated which relay channel is active.

Quick wire terminal blocks for hook-up to relays and wire terminal block for remote switch, relay input.

Board has ribbon cable connection for use with Sound Board Pro module.

On and Off Power switch connection with power jack and LED power indicator.

Reed Relays are momentary closure when activated.

Module operates from 9-12 Vdc regulated power supply.

(Remote Switch or Relay not include)

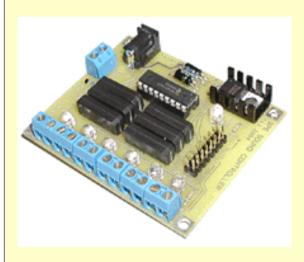
(Sound Board Pro ribbon cable not include)

(Power supply not include)

Product Description	Catalog No.	Price US \$
Random Relay Control Module	RRM-4000	\$ 195.00
Regulated Power Supply - 9 Vdc @ 2 Amp Wall type	PSA-0090	\$ 30.00

Sequence 6 -Relay Control Module 6 - Sequential Reed Relay Outputs

Hardware Description



Board Size: 3" L x 2-1/2" W x 1/2 H Board is pre-assembled and tested.

Sequence 6 - Relay Control Module

Unique microprocesson on - board will operate 6 - mini reed relays in sequence starting at relay -1 as remote switch / relay input is activated momentary on and move up each channel as remote switch is activated

Once sequence reaches channel - 6 cycle restarts back to channel -1.

Relays are rated 1 Vdc @ 0.5 Amp

On-board LED status indicated which relay channel is active.

Quick wire terminal blocks for hook-up to relays and wire terminal block for remote switch, relay input.

Board has ribbon cable connection for use with Sound Board Pro module.

On and Off Power switch connection with power jack and LED power indicator.

Reed Relays are momentary closure when activated.

Module operates from 9-12 Vdc regulated power supply.

(Remote Switch or Relay not include)

(Sound Board Pro ribbon cable not include)

(Power supply not include)

Product Description	Catalog No.	Price US \$
Sequence Relay Control Module	SRM-4005	\$ 195.00
Regulated Power Supply - 9 Vdc @ 2 Amp Wall type	PSA-0090	\$ 30.00

Mini Servo Tester

Hardware Description

Mini Single Servo Tester

This small board will be found invaluable for projects and models using R/C type servos.

Test and calibrate hobbyist "R/C - Radio Control" type servos.

- Manual and Automatic Modes
- Variable speed 90 degree sweep facility
- Stand alone servo sweep function for animations
- 0 and 90 degree calibration LED Light (1ms and 2ms pulse widths check)
- Calibration LED light every 15 degrees

In **Automatic mode**, Servo-Check produces a pulse stream that makes the servo traverse smoothly through 90 degree at a speed determined by the potentiometer setting (approx 0.5 to 5 secs / 90 degree).

Advanced users can add 2 standard 10k linear potentiometers to adjust the end stops for a simple, stand-alone animatronic controller module.

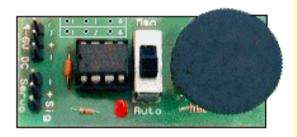
In **Manual mode**, the servo position is fully adjustable from 0 to 90 degrees by using the thumbwheel. Manual mode generates a standard servo pulse stream. The width of the pulses varies between 1.0msecs and 2.0 msecs depending on the position of the potentiometer. Turning the potentiometer fully to either end of its travel will cause the LED to light indicating that either a 1.0 or 2.0 pulse width which should correspond with a servo angle of either 0 or 90 degrees. Additionally, as the potentiometer is turned, the LED will light at positions corresponding to 15, 30, 45, 60 degrees and 75 degrees , thereby providing a field calibration setup.

Works from standard 5-6 VDC supply and includes 3-pin header for all standard servos.

Supplied built and tested, ready for immediate use. (5 Volt Power supply and Servo not included)

ľ	Product Description	Catalog No.	Price US \$
	Servo Tester	MST-0010	\$ 40.00
		<u> </u>	

Newly Enhanced



Board Size: 2-1/4" L x 7/8" W Power: 5 Volt dc @ 1 Amp.

Controller is pre-assembled and tested.

Solenoid / Air Valve Driver

Board Size: 2-5/8" L x 2-1/4" W

Hardware Description

Solenoid / Air Valve Driver

This small board will operate an electric solenoid, or air valve On and Off from very slow to extremely fast as needed. On board adjustment allow for speed, time On / Off settings.

Board output power control 12 - 24 Vdc, @ 10 Amp Max. Controller has Time and Dwell adjustable settings Can be configuration for Burst mode or Continuous mode output operations from remote switch, manual or relay setup. Jumper Setting for Auto Start up features. On - board wire terminals for trigger switch, power input, solenoid or valve load connection.

Great Haunted Prop Controller, Air Cannon Controller (Power supply, switch and solenoid / Valve not included)

Product Description	Catalog No.	Price US \$
Adjustable Solenoid / Air Valve Driver	SDB-0050	\$ 75.00

Digital Clock - Controller

Hardware Description

Digital Clock Controller



Board· Dimensions (approximate): 5.25" W x 3" L x 1" H.

Board is pre-assembled and tested.

365 Day 24 Hr Annual Event Timer with on board relay

Extremely versatile 24 Hour 365 Day Event Timer designed to support a wide range of applications. This controller can automatically start and loop any Wizard or Puppet controller during any time period/s programmed. Easy to program and set-up.

Features / Specifications

- · 12 to 24 volts DC operation
- · Standby current: 10mA (relay off) 50mA (relay on).
- · Battery charging current: 100mA.
- · Form "C" relays rated 10 amp @120VAC / 28VDC.
- · EE Prom memory protects against loss of programming due to power failure.
- · Accurate crystal controlled clock.
- · Momentary and/or Latching Events.
- · 50 individually programmed daily/weekly events.
- · Block programming capacity can accommodate a total of 350 events per week.
- · 10 programmable Holiday dates.
- · Alphanumeric LCD display simplifies programming.
- · Standard or Daylight Savings Time settings.
- · Lithium battery backup maintains clock

(Power supply, Wizard, Puppet Boards not included)

Product Description	Catalog No.	Price US \$
Digital Clock Control Board	DEC-0135	\$ 185.00
Non Regulated - 12 Vdc supply 1 Amp	PSA-0012	\$ 18.95

IR Module Controller





IR Module Controller

Works with any domestic TV. VCR IR controller, or Palm PDA hand held.

Simply train the decoder to respond to specific keys on your remote or PDA. 7 outputs selectable to be either momentary or toggle action.

May be re-programmed over and over again.

(9 Volt dc power supply required, not include)

Product Description	Catalog No.	Price US \$
IR Module Controller	IRM-0001	\$ 65.00



Costume Servo Controller

Hardware Description

Costume Servo Controller

Small controller board for manual operation of a single servo and control for playback and recording of user programmed automated servo control routine up to 4 minutes.

The costume controller includes the following features:

- Single channel servo control.
- Push button connection for manual control of servo
- Push button switch connection for programmed playback / Record sequence control of servo.
- Up to 4 minutes recording / playback time
- On-board connection for switches.
- Full 180 degree rotation pulse train. (for servos that can physically rotate 180 deg)
- Servo motion end limit adjustment potentiometers.
- Synchronization pulse for multiple unit operation
- 6Vdc to 9Vdc operation Wall power or Battery

On board Battery regulator for mobile use.

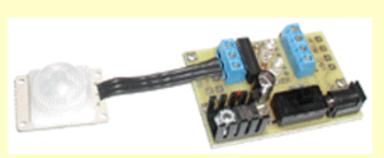
Can operate as a mobile setup for on stage shows or mobile operations.

(Power supply , hand switch button unit, servo not included)

Hand switch units can be custom designed to fit your unique needs. Call Blue Point Engineering for more information on a custom design unit.

Product Description	Catalog No.	Price US \$
Costume Servo Controller	CAC-0100	Contact BPE
Controller Two button hand control Unit	CAC-0110	Contact BPE

PIR Sensor Module



Board Size: 2-1/8" L x 1-3/4" W x 3/4" H Requires 5 Vdc regulated power supply

Item Description

PIR Sensor Module with Relay PCB

Complete PIR sensor module with switching relay, power connection, wire terminals for quick setup. Small board size. Connection terminal strip for power, relay output. LED's show board power, sensor status.

Sensor module can connect directly to all Wizard, Puppet, Sound Boards.

Board requires 5 Vdc regulated supply Detects motion up to 10ft. (PIR Sensor)

5 Vdc power supply not included Wizard, Puppet, Sound Boards not included.

Product Description	Catalog No.	Price US \$
PIR Sensor Module with relay PC Board	IRS-0200	\$ 75.00
Sensor Relay PC Board only - (Sensor Module not Included)	SRB-0310	\$ 55.00