CHANEY ELECTRONICS, INC.

2023-2025 Best Electronic Kits   Made in the U.S.A.   50+ Years of Quality Kits - Catalog #67

Cosmic Poppers Kit
C6893 - Page 30

Learn to Solder Robot Kit
C6845 - Page 14

Electronic Fireworks Kit
C6454 - Page 16

Great Instructions Easy to Learn

Alien Attack Game Kit
C6727 - Page 27

Flashing Alien Robot Kit
C6756 - Page 17

Learn To Solder Fish
C7603 & C7604 - Page 21

MOST ORDERS SHIPPED WITHIN 24 HOURS

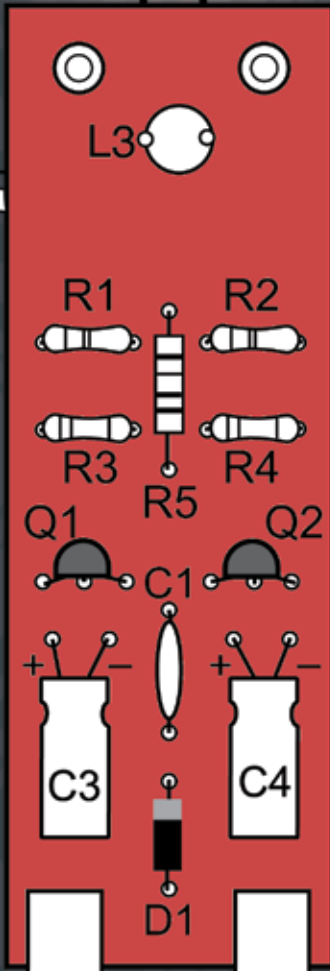Robot C6845

Welcome to Chaney Electronics, Inc.

Chaney Electronics, Inc. has been part of classroom curriculums for over 50 years.

Chaney Electronics, Inc. has made building kits and labs educational, affordable and fun! Each Chaney kit comes complete with all necessary components: a drilled PC board, a schematic, assembly instructions, theory of operation and troubleshooting tips.

While visiting our online store at www.ChaneyElectronics.com, you will notice we have merged with our sister company, The Electronic Goldmine. We believe partnering with The Electronic Goldmine will expand the range of components in building unique and custom STEM, robotic and electronic projects.

Thank you for your continued support of Chaney Electronics, Inc.

Popular Kits for Teachers & Students

C4736
C6891
C6445
C6778
C6955
C7012
C6795
C6825
C6774
C6359
C6474
C6972
C6491
C7601
C6984
C3806
C7098
C6927
C1225

Excellent instructions make learning to solder enjoyable.

Parts List

Resistor Codes

Step-by-Step Instructions

Schematic

Trouble Shooting

Quick Index

SKILL LEVELS

We provide Skill Levels so that you can decide whether a student is at the Skill Level required to build that kit.

For safety reasons, we recommend students Not Build AC Powered Kits unless they have had instruction in AC safety precautions.

✎	**Skill Level 1**	**Beginner**	No previous knowledge of electronics. Needs assistance from instructor.
✎✎	**Skill Level 2**	**Intermediate**	Student has built electronic kits before. Knows electrical safety precautions and solders well.
✎✎✎	**Skill Level 3**	**Advanced**	Student has built many kits and has a very good soldering technique.

34 in 1
Deluxe Exploration
ROBOTICS LAB

Super Value & Reusable!

Each experiment is designed to progress in an easy-to-follow and logical manner. Each one explores both meaningful and interesting topics!

Introduce your students to the fundamentals of robotics technology while building 28 different robots in one. The student starts by building a simple robot, and then disassembles it to progress to building more complex designs which are remote controlled with IR (infrared) vision and object avoidance. This lab is totally REUSABLE and will stimulate the student's minds in robotic technology.
Try it! You will love it!

LAB INCLUDES:

- High Quality Breadboard
- 3 Wheels, 2 Motors, 2 Belts, and Various Mechanical Parts
- Attractive Smoked Plexiglass Base
- All Necessary Electronic Parts
- Fully Illustrated Instructional Manual
- Relay Board (requires soldering)

Experiment 13: The IR-Eye Robot (Assembled)
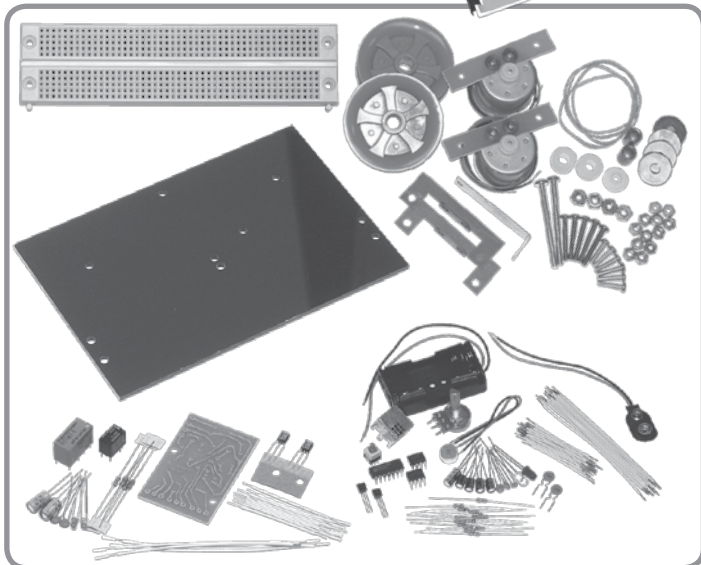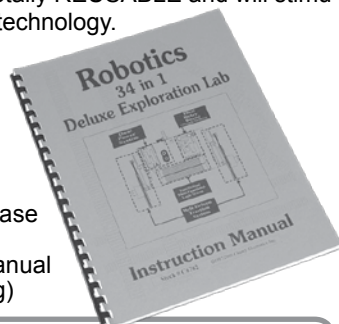
LEARN ABOUT:

Robot Motor Traction and Power System
Robotic Motion
Time Controlled Motion
Remote Controlled Motion
Robotic Vision (CDS & Infrared)
Sound Detection & Control
... and many more topics.

BUILD THE FOLLOWING ROBOTS:

Explorer I and II
The Unstoppable
The Independent Minded Robot
The Night Runner
The Day Runner
The IR (Eye) Robot
Obedient I (Remote Controlled Robot)
Obedient II (Remote Controlled Robot)
Robot Pet
Obstacle Avoiding Robot I
Obstacle Avoiding Robot II
Big Ears Robot
The Music Dancer Robot
... and many more.

C6762 $73.50

		34 in 1 Deluxe Exploration Robotics Lab Manual Contents:
		Instructional Lessons & Experiments
1	*Lesson 1*	**Introduction to Robotics**
2		Inventory & Parts Identification
3	*Lesson 2*	**The Chaney Robotics Lab**
4	*Experiment 1*	Assembling and Testing the Robot Motor System
5	*Experiment 2*	Assembling the Robot Base and Power System
6	*Experiment 3*	Assembling and Testing the Relay Control Board
7	*Experiment 4*	Robot Forward Motion
8	*Experiment 5*	Robot Backward Motion
9	*Experiment 6*	Robot Forward Right Turn
10	*Experiment 7*	Robot Backward Right Turn
11	*Experiment 8*	Robot Hard Right Turn
12	*Experiment 9*	Robot Forward Left Turn
13	*Experiment 10*	Robot Backward Left Turn
14	*Experiment 11*	Robot Hard Left Turn
15	*Experiment 12*	Time Controlled Motion I
16	*Experiment 13*	Time Controlled Motion II
17	*Experiment 14*	Time Controlled Hard Right Turn
18	*Experiment 15*	Time Controlled Hard Left Turn
19	*Experiment 16*	Explorer I Robot
20	*Experiment 17*	Explorer II Robot
21	*Experiment 18*	The Unstoppable Robot
22	*Experiment 19*	The Independent Minded Robot
23	*Experiment 20*	The Night Runner Robot
24	*Experiment 21*	The Day Runner Robot
25	*Experiment 22*	Infrared (IR) Vision
26	*Experiment 23*	The IR-Eye Robot
27	*Experiment 24*	Obedient I: IR Remote Controlled Robot
28	*Experiment 25*	Obedient II: IR Remote Controlled Robot
29	*Experiment 26*	Robot Pet
30	*Experiment 27*	IR Obstacle Avoiding Robot I
31	*Experiment 28*	IR Obstacle Avoiding Robot II
32	*Experiment 29*	Sound Detection (Robot Ears)
33	*Experiment 30*	Big Ears Robot
34	*Experiment 31*	The Music-Dancer Robot
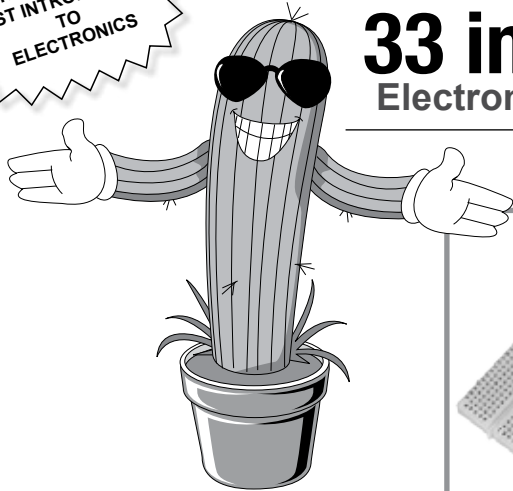
33 in 1
Electronic Exploration Lab

No Soldering Required & Reusable
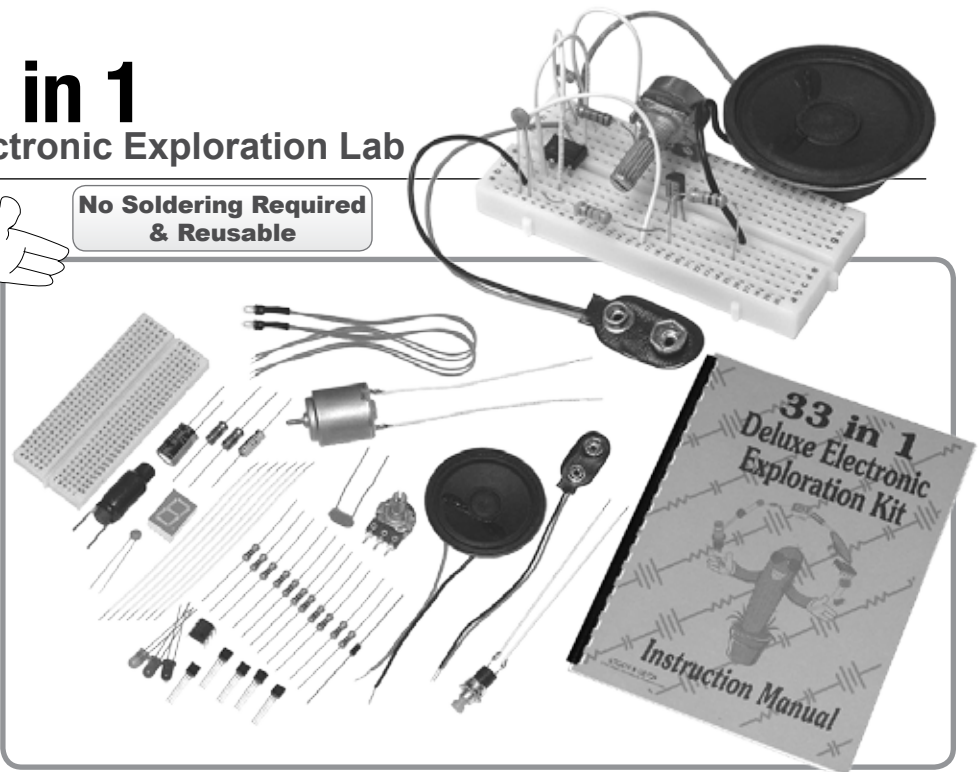
This exciting breadboard lab requires no soldering or previous electronic experience. The lab enables any student to build 33 different electronic experiments and activities. It's applicable for use in elementary grades up through college and is safe to use. The lab is meant to be used over and over again to save money. Not only is this lab complete with everything the student needs, but also the instruction booklet is designed so that the teacher does not need to be involved (unless he or she desires to be).

The student builds and studies the first 11 instructional circuits which include theory and data facts along with a simple pencil activity quiz. The remaining 22 experiments for the student are fun to build electronic circuits that have a parts list, schematic and parts placement drawing. These give the student an ample introduction to electronic components and circuitry.

Breadboard type kits have been around for years, however, this lab is the first to incorporate an introduction to Ohm's law, electromagnet circuitry, motor circuitry, transistor circuitry, IC circuitry and 7 segment display circuitry all in one lab. There is now no need to have several different breadboard kits to learn basic electronic concepts. One lab covers almost all aspects of basic electronic concepts and components.

Not only does our 33 in 1 Deluxe Electronic Exploration Lab introduce various electronic educational concepts but it is also a fun and interesting motivational activity for your student. Complete with all electronic parts, breadboard and instruction booklet. Requires one 9V battery (not included). If the student has already built the 33 in 1 Deluxe Electronic Exploration Lab, you may wish to purchase our 35 in 1 Deluxe Digital Lab Exploration Kit shown on page 10 so that the student can gain digital electronics fundamentals.

C6709 $36.75

Learn Electronics with our 33 in 1 Deluxe Electronic Exploration Lab!

33 in 1 Electronic Exploration Lab Manual Contents:

		Instructional Experiments
1	Experiment 1	Resistor Color Code
2	Experiment 2	Ohm's Law and The Basic Electronic Circuit
3	Experiment 3	Parallel Circuit with Lamp
4	Experiment 4	Diode Action
5	Experiment 5	Light Emitting Diodes
6	Experiment 6	Electromagnetism
7	Experiment 7	Capacitance
8	Experiment 8	Transistor Switch
9	Experiment 9	Variable Resistor LED Dimmer
10	Experiment 10	DC Motor Experiment
11	Experiment 11	Transistor Oscillator
		Electronic Construction Activities
12	Activity 12	7 Segment Display Circuit
13	Activity 13	SCR Latching Switch
14	Activity 14	Conductor Identifier
15	Activity 15	2 Transistor Audio Oscillator
16	Activity 16	Continuity Tester
17	Activity 17	Multivibrator LED Blinker
18	Activity 18	Insanity Alarm
19	Activity 19	Light Controlled Bird
20	Activity 20	Code Practice Oscillator
21	Activity 21	Magic LED Light
22	Activity 22	Water Alarm
23	Activity 23	Ticking Clock Sound
24	Activity 24	Phasor Ray Sound Generator
25	Activity 25	Emergency Siren
26	Activity 26	Adjustable Blinking Light and Sound
27	Activity 27	Timer with LED
28	Activity 28	Electronic Motor Speed Control
29	Activity 29	IC LED Flasher
30	Activity 30	IC Adjustable Frequency Sound Generator
31	Activity 31	IC Light Activated Wake Up Alarm
32	Activity 32	IC 2 Color LED Flasher
33	Activity 33	IC Burglar Alarm
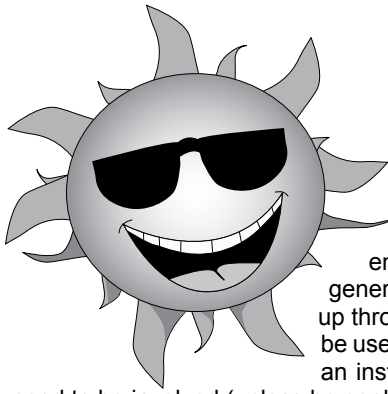
10 in 1
Solar Energy Exploration Lab

Our re-usable Solar Energy Exploration Lab requires no soldering or previous electronic experience. The lab enables any student to experiment with free electricity generated from the sun. Its applicable for use in elementary grades up through college and is safe and easy to use. The lab is meant to be used over and over again to save money. The lab is complete with an instruction booklet and is designed so that the teacher does not need to be involved (unless he or she desires to be). Utilizes a quality universal plug-in breadboard with high quality powerful solar panel, resistors, diode, motor with prop, electronic buzzer, flashing LED, super capacitor and wires. There's nothing extra that you'll need to use this lab and unlike other solar labs on the market, you will get more value from our product as it has many experiments that are unique to our 10 in 1 Solar Exploration Lab. Of course, you'll get a prop experiment plus 9 more fun and educational experiments to challenge your students. In addition, you will receive detailed descriptions of the concepts that each experiment covers. We know you will like our Solar Energy Exploration Lab and will want to have one for everyone in your class. Listed below are the main experiments/activities that the student will perform.

No Soldering Required & Reusable

	10 in 1 Deluxe Solar Energy Exploration Lab Manual Contents:	
	Instructional Lessons & Experiments	
1	*Experiment 1*	Introduction to Solar Cells
2	*Experiment 2*	Solar Panels
3	*Experiment 3*	Diode Action
4	*Experiment 4*	Solar Powered DC Motor
5	*Experiment 5*	Resistors & Color Code
6	*Experiment 6*	Solar Powered Alarm
7	*Experiment 7*	Solar Power Storage
8	*Experiment 8*	Solar Powered Flashing Light
9	*Experiment 9*	Solar Pulsating Alarm
10	*Experiment 10*	Another Environmentally Safe Method of Generating Power

This Lab comes with a special glass Solar Panel that produces a useful amount of voltage and current so that it can be used to perform your own experiments!
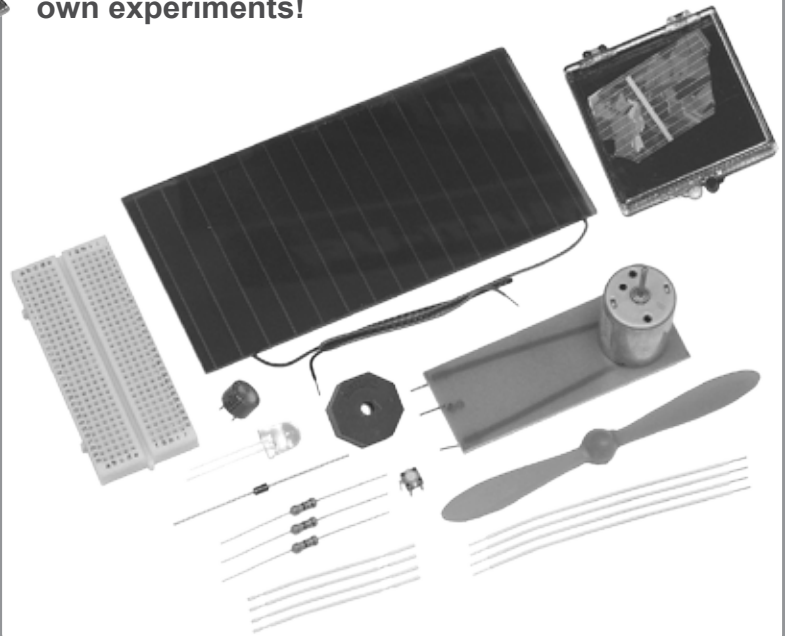
Introduce your students to SOLAR ENERGY with our 10 in 1 Solar Energy Exploration Lab!

C6853 $36.75

21 in 1
Electronic Discovery Kit
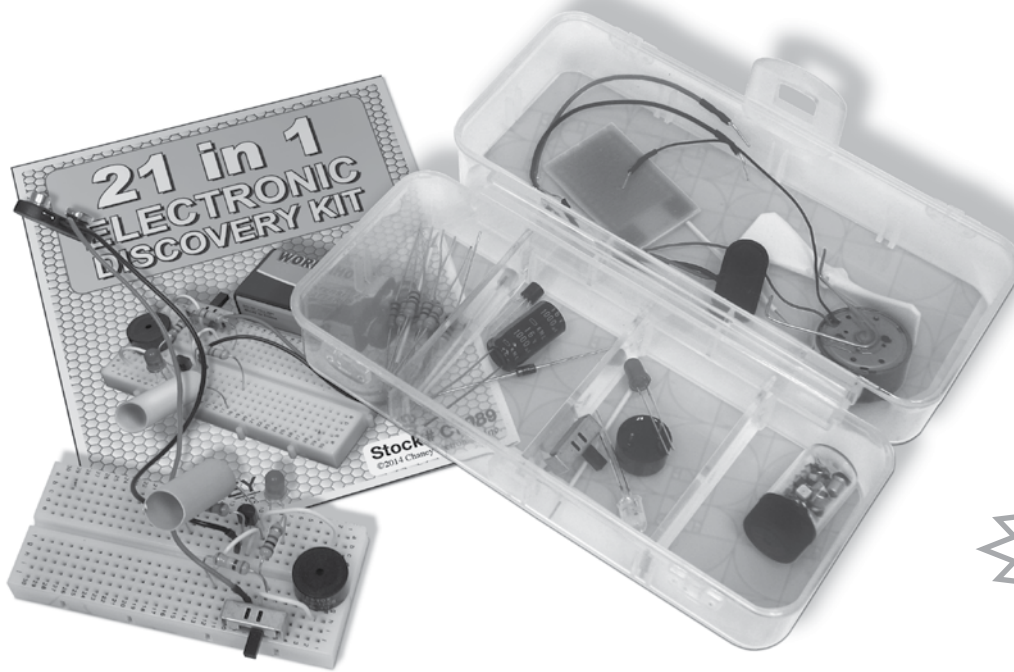
Completely Reusable!

No Soldering Required!

Storage Box Included!

This is the perfect lab for anyone interested in discovering basic electronic components and electronic circuitry.

This kit consists of a re-usable no solder breadboard and various electronic components including a buzzer, motor, capacitor, CDS cell, resistors and LEDs. Not only do you discover circuits that use these components, you'll also make many fun functional projects.

This kit does not require any soldering and is self contained in a reclosable 5.75" x 2.5" x 2" plastic storage box with small booklet.
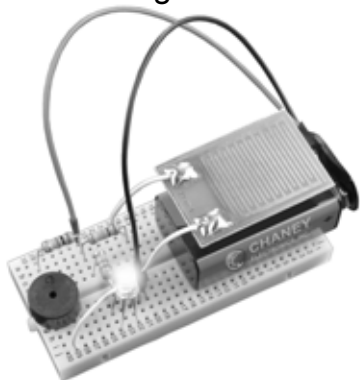
21 in 1 Electronic Discovery Kit Lab Contents:

	Explore Components and Build Fun Experiments	
1	Experiment 1	Resistor Color Code
2	Experiment 2	Switches and LEDs
3	Experiment 3	Motors
4	Experiment 4	In Series Circuits
5	Experiment 5	Parallel Circuits
6	Experiment 6	Diode Action
7	Experiment 7	Flashing LEDs
8	Experiment 8	Capacitor Storage
9	Experiment 9	Electronic Buzzers
10	Experiment 10	Transistors
11	Experiment 11	Rain Detector
12	Experiment 12	Flood Alarm
13	Experiment 13	Burglar Alarm
14	Experiment 14	Light Sensitive CDS Cells
15	Experiment 15	Automatic Night Light
16	Experiment 16	People Detector
17	Experiment 17	Pulsating Motor
18	Experiment 18	Insanity Alarm
19	Experiment 19	Automated Match Blower
20	Experiment 20	Super Sensitive Conductor Identifier
21	Experiment 21	Surface Mount Devices

C7089 $24.75

Explore Components and Build Fun Experiments using our 21 in 1 Electronic Discovery Kit !
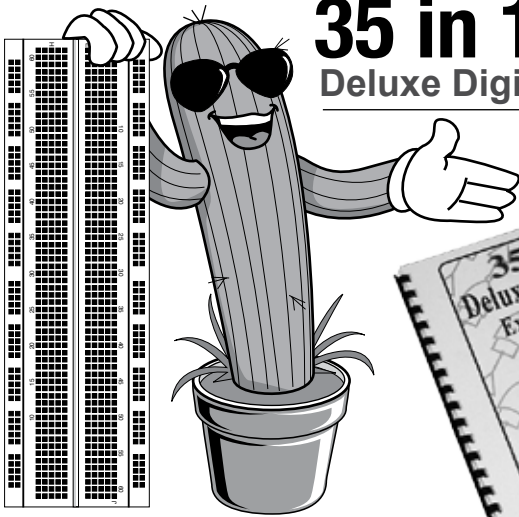
35 in 1
Deluxe Digital Exploration Lab

No Soldering Required & Reusable
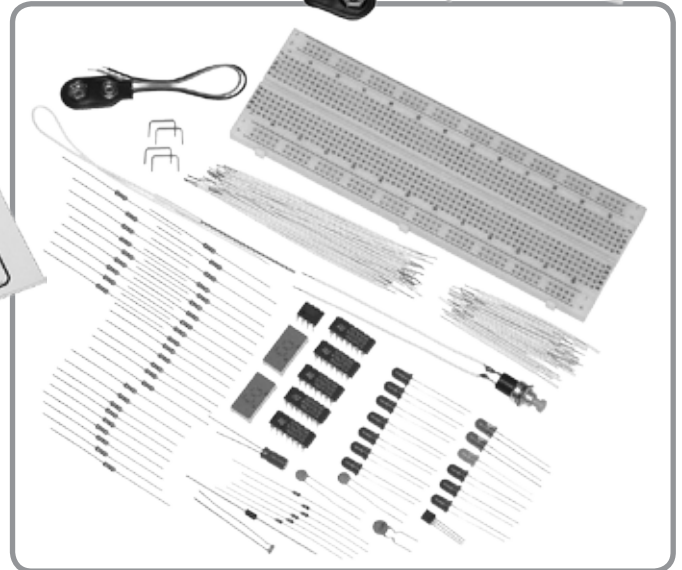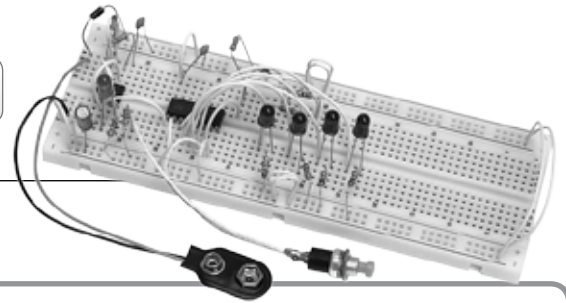
35 in 1 Deluxe Digital Exploration Lab Manual Contents:

		Tips on Building the Experiments
		The Universal Solderless Breadboard: Use and Preparation
		Instructional Lessons & Experiments
1	**Lesson 1**	**Introduction to Digital Electronics**
2	*Experiment 1*	The Logic Probe: "The Tool"
3	*Experiment 2*	The YES Logic Circuit: "The Buffer"
4	*Experiment 3*	The NOT Logic Circuit: "The Inverter"
5	*Experiment 4*	The AND Logic Gate
6	*Experiment 5*	The OR Logic Gate
7	*Experiment 6*	The NAND Logic Gate
8	**Lesson 2**	**Components, Gates and ICs**
9	*Experiment 7*	The NOR Logic Gate
10	*Experiment 8*	Building the Six Basic Logic Gates Using Only NOR Gates
11	**Lesson 3**	**Combinational & Sequential Circuits, Boolean Algebra & Timing Diagram**
12	*Experiment 9*	"The Clock": Astable Multivibrator
13	*Experiment 10*	The 555 Timer IC
14	*Experiment 11*	"The Timer": Monostable Multivibrator
15	*Experiment 12*	"The Flip–Flop": Bistable Multivibrator
16	*Experiment 13*	Reaction Challenge Game
17	**Lesson 4**	**The Binary Numbering System**
18	*Experiment 14*	The Binary Counter/Divider
19	*Experiment 15*	Manual Binary Counter & Switch Debouncing
20	*Experiment 16*	The BCD Counter (Decade Counter)
21	*Experiment 17*	Touch Activator ON/OFF Switch
22	*Experiment 18*	Seven Segment Display Decoder
23	*Experiment 19*	"0 to 9" Counter with Display
24	*Experiment 20*	Lucky Number Generator
25	*Experiment 21*	Electronic Die Game
26	*Experiment 22*	0 to 9 Photoelectric Counter
27	*Experiment 23*	Sequential LED Flasher
28	*Experiment 24*	Triple Answer Decision Maker
29	*Experiment 25*	"10 by 10" Reaction Game
30	*Experiment 26*	Touch Activated Brightness Control
31	*Experiment 27*	Macho Meter
32	*Experiment 28*	"Go for the Gold" Game
33	*Experiment 29*	0 to 99 Counter with Display
34	*Experiment 30*	0 to 99 Photoelectric Counter
35	**Lesson 5**	**Troubleshooting Techniques**

This lab does not require soldering, is reusable, and contains 5 lessons and 30 meaningful and exciting digital experiments. The booklet is fully illustrated with easy-to-follow pictorial diagrams and schematics. It is designed so that the teacher does not need to be involved (unless he or she desires to be). It is applicable for use in junior high grades up through college. All experiments operate on one 9V battery (not included) so there are no dangerous voltages involved. Compared to other similar digital labs, you will find that this lab is far superior in that it contains a wider variety of digital components, including a double binary counter and two 7-segment displays, allowing the students to build "0 to 99" digital counters instead of only "0 to 9". This lab also includes LEDs of three different colors (red, green, and yellow), and uses a uniform prewired breadboard system which is applied in each experiment, along with reverse polarity protection and a switch wire to prevent damage to the ICs or battery snap. This lab also covers more digital topics such as Boolean algebra, timing diagrams, frequency and duty cycle formulas, troubleshooting techniques. The lab includes a 96 page, fully illustrated manual, a large solderless breadboard, 6 integrated circuits, a CDS photocell, plus all other parts necessary to perform each experiment. Just supply a fresh 9V battery and nothing else is required to perform all the experiments in the book. The Complete 35 in 1 Deluxe Digital Exploration Lab is self-contained and ready to use!

C6721 $47.25

The perfect lab to introduce students to Digital Electronics and Computer Technology!

Optional Logic Probe: Although the 35 in 1 Deluxe Digital Lab includes a simple logic probe section built on the breadboard, you may wish to purchase the very inexpensive Chaney C6722 CMOS/TTL Logic Probe Kit. Although this is totally optional you will find that this logic probe is very useful to test and troubleshoot all kinds of digital circuits. (See Page 37).
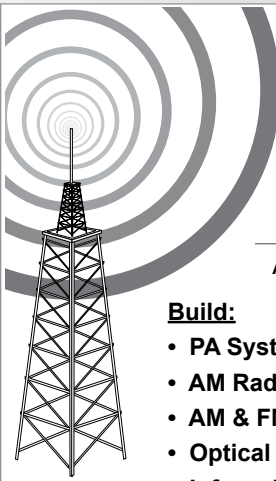
44 in 1

Super Value & Reusable

Communications & Opto-Electronics
Deluxe Exploration Lab

Absolutely the best introduction to Radio Communications and Opto-Electronics.
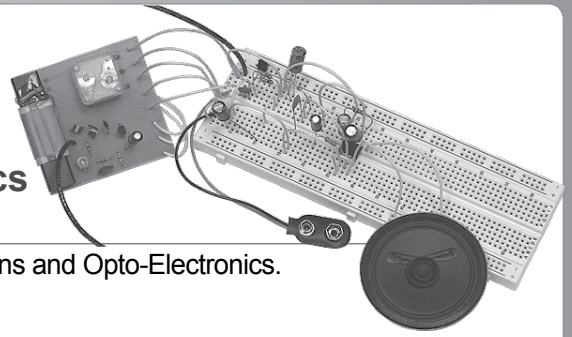
Build:

- **PA Systems with Microphone and Speakers**
- **AM Radio Receiver**
- **AM & FM Broadcast Stations**
- **Optical Receivers & Transmitters**
- **Infrared Communication Links**
- **Fiber Optic Communication Links**
- **IR Remote Control Transmitters and Receivers**
- **IR Proximity Detectors**
- **...and Many More!**

This lab was created with the student in mind. It will keep the hands and minds of the students busy building amazing communication experiments by using wire, fiber optics, radio waves, light and infrared links. No previous knowledge or experience is required.

Try it! We are sure you will be completely satisfied with this exciting and fun Chaney Communications Lab.

C6763 $55.95

Lab includes:
- Over 50 Electronic Components
- 2 Solderless Breadboards
- 64 Page, Fully Illustrated Manual
- A Tuner Board
 (Requires Soldering)

Introduce your students to the basics of various communication systems with this exciting and reusable Communications Training Lab.

	44 in 1 Communications & Opto-Electronics Deluxe Exploration Lab Manual Contents:	
1		Introduction
2		Parts Inventory
3		Preactivity
	Instructional Lessons & Experiments	
4	**Lesson 1**	**Electronic Communication**
5	*Experiment 1*	Morse Code Generator
6	*Experiment 2*	1-Wire Telegraph System
7	*Experiment 3*	2-Wire PA System
8	*Experiment 4*	Coaxial Cable PA System
9	**Lesson 2**	**Alternating Current (AC) Characteristics**
10	**Lesson 3**	**Radio Communication & Electromagnetic Waves**
11	**Lesson 4**	**Frequency Spectrum**
12	**Lesson 5**	**Wireless Lightwave Communication**
13	*Experiment 5*	Opto Receiver
14	*Experiment 6*	Opto Transmitter
15	*Experiment 7*	Infrared Opto Transmitter
16	*Experiment 8*	Opto Voice Transmitter
17	*Experiment 9*	Infrared Opto Voice Transmitter
18	*Experiment 10*	Opto Music Transmitter
19	*Experiment 11*	Infrared Opto Music Transmitter
20	**Lesson 6**	**Fiber Optics Communication**
21	*Experiment 12*	Introduction to Fiber Optics
22	*Experiment 13*	Fiber Optics - Dual Color Transmission
23	*Experiment 14*	Fiber Optics - Multiple Fiber Transmission
24	*Experiment 15*	Fiber Optic Audio Link
25	*Experiment 16*	Infrared Fiber Optic Audio Link
26	*Experiment 17*	Infrared Remote Control Receiver
27	*Experiment 18*	Infrared Remote Control Transmitter
28	*Experiment 19*	Audible Infrared Remote Control Receiver
29	*Experiment 20*	Infrared Proximity Detector
30	*Experiment 21*	Audible Infrared Proximity Detector
31	*Experiment 22*	Infrared On/Off Remote Control Switch
32	*Experiment 23*	Simple Infrared Transmitter
33	**Lesson 7**	**AM/FM Radio Communication**
34	*Experiment 24*	Crystal Radio Receiver
35	*Experiment 25*	Basic AM Receiver
36	*Experiment 26*	AM Radio Receiver with Speaker
37	*Experiment 27*	AM Radio Receiver with Speaker and Volume Control
38	*Experiment 28*	AM Tone Transmitter
39	*Experiment 29*	AM Code Transmitter
40	*Experiment 30*	AM Broadcast Station
41	*Experiment 31*	AM Microphone Transmitter
42	*Experiment 32*	FM Tone Transmitter
43	*Experiment 33*	FM Code Transmitter
44	*Experiment 34*	FM Microphone Transmitter

54 in 1
Solar House "Green Energy" Lab

Have you seen a house with a solar panel on the roof and wondered how it produces electricity? In response to increasingly high electricity costs and the overall well-being of our environment, advanced technologies in solar energy has made it possible for home owners and businesses to install Photovoltaic Solar Panels to convert sunlight to usable electricity and heat. With this in mind, we have designed this course for the inquisitive student that wants to gain an understanding of how different technologies using green or alternate energy can be used in the home.

In this course, we will create our own model house made of Plexiglass and install an amorphous silicon glass solar panel to simulate how we can harness the sun's energy into one's house. The solar panel that we will be using will provide the energy used for all of our experiments. We will perform most experiments with solar energy stored in a battery that has been charged from our solar panel along with a re-useable solderless breadboard.

The fully illustrated and detailed manual included in this course will introduce the student to some basic technology and fundamental concepts used in common household devices such as lighting, thermostats, fire alarms, and burglar alarms. In order to study these technologies, we are going to study solar panels, motors, fans, resistors, diodes, LEDs, switches, lamps and batteries. The easy-to-follow pictorial diagrams will guide the student through 26 chapters containing a variety of activities and useful experiments along with fun and interesting facts relating to solar energy.

This course offers a hand-on approach that is applicable for use in grades junior high up through college. All parts to create the model house, along with the necessary components, wires, breadboard, solar panel, and detailed instruction manual are included. No soldering or additional batteries required. Re-usable and safe to use. Skill Level 1.
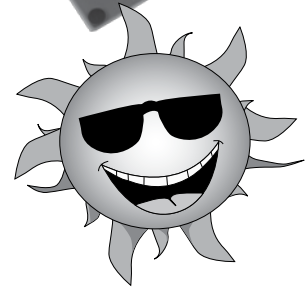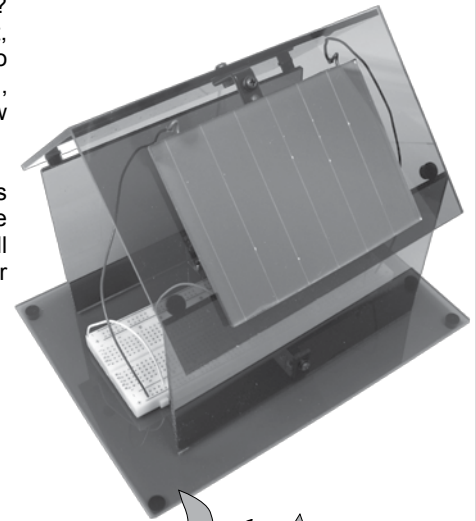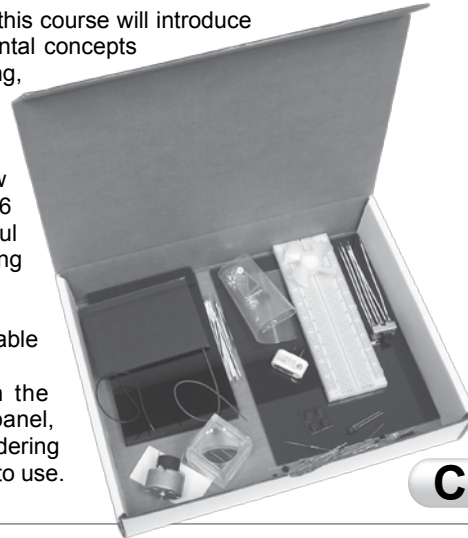
C7041 $62.95

54 in 1 Solar House "Green Energy" Lab Contents:

	Introduction		
	Introduction	**Experiment 1**	Battery Charging with solar Power
Chapter 1	Energy Sources	**Experiment 2**	Switches
Chapter 2	Constructing the Solar House	**Experiment 3**	Fans
Chapter 3	Solar Systems	**Experiment 4**	Diodes
Chapter 4	Solar Cells	**Experiment 5**	LEDs
Chapter 5	Solar Panels	**Experiment 6**	LED Lighting Color Temperature
Chapter 6	Inverters	**Experiment 7**	Incandescent Lamps vs LEDs
Chapter 7	Grid-Tied vs Off-Grid	**Experiment 8**	Parallel Circuits
Chapter 8	Batteries	**Experiment 9**	Series Circuits
Chapter 9	Metering	**Experiment 10**	Automatic Outdoor Lighting
Chapter 10	Disconnect	**Experiment 11**	Transistors
Chapter 11	Charging Batteries with Solar Power	**Experiment 12**	Conductors
Chapter 12	Resistors	**Experiment 13**	Water Flood Alarm
Chapter 13	Switches	**Experiment 14**	Doorbell
Chapter 14	Ceiling Fans	**Experiment 15**	Thermostat
Chapter 15	Diodes	**Experiment 16**	Burglar Alarm
Chapter 16	LEDs	**Experiment 17**	Fire Alarm
Chapter 17	Lighting	**Experiment 18**	Electronic Candle
Chapter 18	Series Circuit vs Parallel Circuits	**Activity 1**	Energy Activity
Chapter 19	Outdoor Lighting	**Activity 2**	Solar Systems Activity
Chapter 20	Transistors	**Activity 3**	Solar Cells Activity
Chapter 21	Conductors	**Activity 4**	Solar Panels Activity
Chapter 22	Water Flood Alarm	**Activity 5**	Batteries Activity
Chapter 23	Doorbell	**Activity 6**	Resistors Activity
Chapter 24	Thermostats	**Activity 7**	Ceiling Fans Activity
Chapter 25	Burglar Alarm	**Activity 8**	Diodes Activity
Chapter 26	Fire Alarm	**Activity 9**	LEDs Activity
Appendix	Additional Information	**Activity 10**	Conductors Activity

25 in 1
Deluxe Magnetism, Motors and DC Circuits Exploration Lab
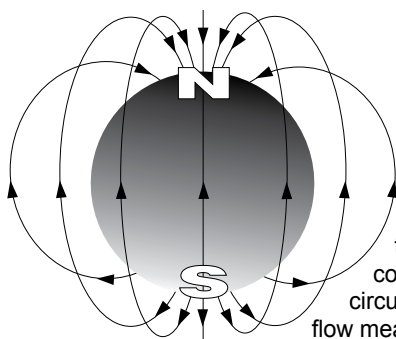
This fun, interesting and reusable Exploration Lab is perfect for any beginning student in Science, Electricity/Electronics, or Physics.

Not only does this lab introduce students to important concepts in magnetism, but also it introduces them to resistance, capacitance, diode action, LEDs, electromagnets, motors, switch operation, color code for resistors, series/parallel circuits, basic Ohm's Law, current flow measurement and even electricity generation.

This breadboard lab requires no soldering and is battery operated for safety. This lab doesn't require any previous experience or knowledge. The instructor does not need to be involved and the lab will amaze and provide interesting experiments to motivate your students. This lab can be used over and over again so it is very economical.

The 25 in 1 Deluxe Magnetism Lab covers some of the same concepts that are presented in our 33 in 1 Electronic Exploration Lab, however the 33 in 1 moves onto electronic concepts whereas this lab concentrates on electricity and magnetism concepts and goes into more depth in these areas. It's best to have the students complete the 25 in 1 Deluxe Magnetism Lab first and then move on to the 33 in 1 Deluxe Electronic Exploration Lab if possible, although each lab can be used alone and neither lab requires any previous knowledge of electricity!

The Deluxe Magnetism Lab Instruction Manual features 25 exciting and fun to build learning experiments. Each experiment has an explanation, a hands-on lab that the student completes and a short quiz to help with the learning experience and reinforce important concepts.

Please look at the list of experiments on the right and you'll discover that the 25 in 1 Deluxe Magnetism, Motors and DC Circuits Exploration Lab is the best introduction to electricity and magnetism, at an affordable price on the market today. Complete with all parts, universal breadboard and comprehensive Lab Manual. Requires 4 "C" batteries (not included). Skill Level 1.

25 in 1 Deluxe Magnetism Exploration Lab Manual Contents:

	Instructional Lessons & Experiments	
1	Experiment 1	Permanent Magnets
2	Experiment 2	Electromagnets
3	Experiment 3	Compass Operation
4	Experiment 4	Galvanometer
5	Experiment 5	The Basic Electrical Circuit
6	Experiment 6	Resistors / Color Code
7	Experiment 7	Light a LED
8	Experiment 8	The Diode
9	Experiment 9	Series Circuits
10	Experiment 10	Parallel Circuits
11	Experiment 11	Series / Parallel Circuits
12	Experiment 12	Current Flow in Circuits
13	Experiment 13	Ohm's Law
14	Experiment 14	Switch Action
15	Experiment 15	Make a Simple Motor
16	Experiment 16	Practical Motor
17	Experiment 17	Complex Circuit
18	Experiment 18	Insulator or Conductor
19	Experiment 19	Flashing LEDs
20	Experiment 20	The Capacitor
21	Experiment 21	Electronic Coin Flipper
22	Experiment 22	Swinging Compass
23	Experiment 23	Stop/Go Motor with Indicators
24	Experiment 24	Small Electricity Generator
25	Experiment 25	Storage and Use of Electricity

Requires No Soldering & Can Be Used Over and Over
A Tremendous Educational Value!
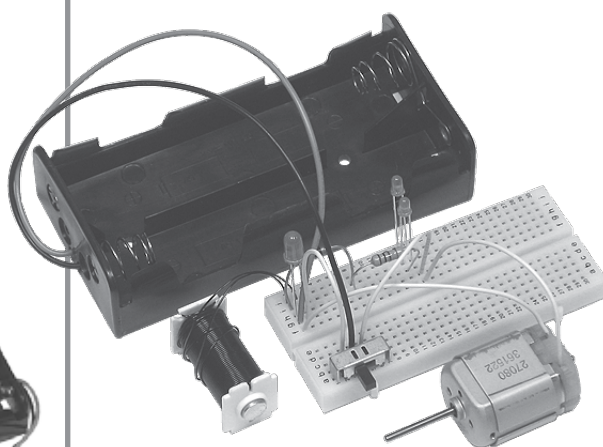
25
Reusable Experiments

C6819 $31.75

Introduction to SMT
Surface Mount Technology Lab

Chaney Electronics would like to introduce you to the tiny world of SMT
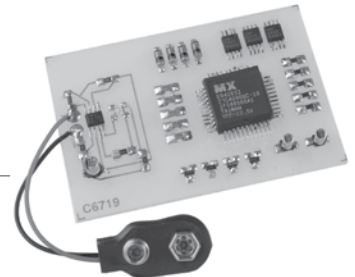
Surface Mount Technology for the Advanced Student

This Chaney Training Lab will introduce your students to the latest assembly technology known as "Surface Mount Technology". Surface mount technology uses tiny leadless components, known as surface mount devices (SMDs) which are quickly replacing standard electronic components. Currently most electronic equipment incorporates this exciting new technology.

By completing this lab, the student learns concepts about surface mount technology (SMT) such as the different types of surface mounts devices (SMDs), the various types of surface mount assemblies, the automated soldering methods, and all of the stages of the manual and automated assembly processes of surface mount circuits. The student gains experience identifying, soldering and using surface mount devices by physically building an actual working surface mount technology project.

This lab is the perfect introduction to SMT and does not require any previous knowledge of this topic. It was designed so that the teacher does not need to be involved (unless he or she desires to be). The lab is self-contained and reusable with the exception of the SMT project kit: "Deluxe SMD Learn to Solder Kit" (Stock # C6719) which may also be purchased separately. A small soldering iron with a fine point and some solder is all that is required to build the included kit.

Intro to SMT
Surface Mount Technology Lab

Perfect introduction for students to learn one of the latest component technologies!

C6725 $32.95

LAB INCLUDES:
- Fully Illustrated Instructional Manual
- All Necessary Electronic Parts
- Extra Practice and Identification Components
- Magnifier with Tweezers

SMD COMPONENTS

IDENTIFICATION COMPONENTS

MAGNIFIER WITH TWEEZERS

DELUXE SMD LEARN TO SOLDER KIT

The latest technology in electronic products is Surface Mount Devices (SMDs). SMDs are tiny leadless (short lead) components that are used in almost everything from computers to phones. Now Chaney Electronics makes it possible for your students to learn more about surface mount technology through the construction of any of our SMD kits. Students use a drop of white glue (or any other glue that's handy) to glue the parts to the PC board, then they solder the parts. We recommend using tweezers, a magnifying glass and a small tip soldering iron. **NOTE: Please do not have beginners build these kits as we can not repair them due to the fact that the components are very tiny and glued onto the PC board.**

Brilliant Red and Blue SMD Flasher Kit

Small brilliant LED flasher alternately flashes one red and one blue LED. Uses SMD (surface mount device) components so there are no holes in the PC board (all components mount to the small foil pads on top of PC board). SMD is the most common technology in use today and this kit provides a nice introduction for your students. Operates on one 9V battery (not included). Size of PC board 1.6" x 1.1". Complete with all parts, PC board and instructions. Skill Level 2.
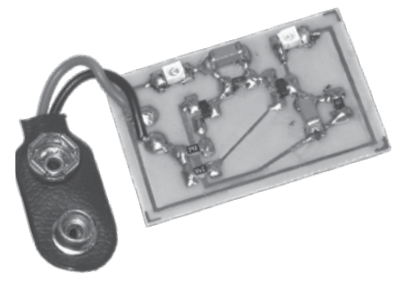
OPTIONAL PLASTIC TYPE 1 BOX C6363 $3.00

*Brilliant Red and Blue SMD Flasher Kit...***C6945 $7.75**

SMD IC Star LED Flasher Kit

Our most advanced SMD kit uses a tiny 555 SMD IC to flash 5 tiny SMD LEDs. The LEDs flash with a bright yellow green color. Because this kit uses a tiny SMD IC, SMD resistors, a tiny SMD capacitor, and SMD LEDs, it provides the best introduction to SMD technology. We do not recommend this kit for beginning students as the lead spacing on the IC is very tight and the kit must be assembled with patience and a small tip soldering iron. Great for advanced students, colleges and technicians wishing to learn more about SMD technology. Operates on a 9V battery (not included). Size of PC board: 1 3/4" x 2". Complete with all parts, PC board & instructions. Skill Level 3.

OPTIONAL PLASTIC TYPE 2 BOX C6364 $4.00

*SMD IC Star LED Flasher Kit..***C6708 $9.75**

SMD Flashing Initials Kit

Very unique kit flashes two initials of your choice on and off. Features brilliant green SMD LEDs that you install to form any two letters from A to Z or any two numbers from 0 to 9. Letters are 2" high and can be seen from quite a distance. Complete with 44 SMD LEDs, all parts, PC board and instructions. Overall size of PC board 2 1/2" x 3". Operates from one 9V battery (not included). Skill Level 3 (This kit is not for beginners).
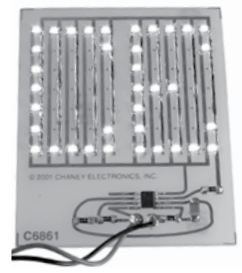
OPTIONAL PLASTIC TYPE 2 BOX C6364 $4.00

*SMD Flashing Initials Kit..***C6861 $19.50**

Binary Counter (Logic Basics) Kit

One of the most basic building blocks of electronic computers is the binary number system. This kit counts in binary numbers and displays the binary number by red LEDs. A LED turned on is a 1 and off is a 0. This kit provides an easy to understand display of the binary number. The counter increases by 1 number each time the button is pushed. It also can count automatically by holding the button down. Teaches logic principles and binary counting. This kit features 7 red LEDs, count button, clear button and a 2 IC circuit. Counts from 0 up to 127 in binary numbers. Can be used alone or can be connected to the Decimal Display Kit below which displays the decimal number equivalent of the binary number. Operates from one 9V battery (not included). Size of circuit board: 3.6" x 3". Complete with all parts, PC
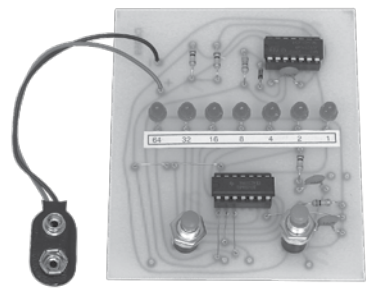
OPTIONAL PLASTIC TYPE 5 BOX C6367 $6.00

*Binary Counter (Logic Basics) Kit...***C6359 $15.75**

Decimal Display Kit

The Decimal Display Kit counts and displays decimal numbers from 0 to 99. Its primary function is to be connected to the Binary Counter Kit above to display the decimal number equivalent of the binary number shown on the Binary Counter Kit. Can also be used in conjunction with several of our kits to provide "next number to be served display", people counter, lap timer, event counter, etc. Features IC circuitry and two bright 7 segment LED displays. Operates from one 9V battery (not included). Size of board: 3" x 3.25". Complete
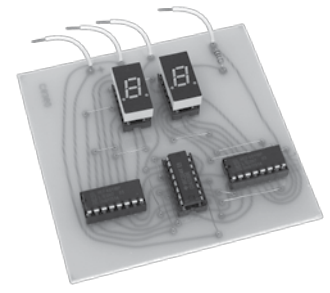
OPTIONAL PLASTIC TYPE 5 BOX C6367 $6.00

*Decimal Display Kit...***C6360 $16.75**
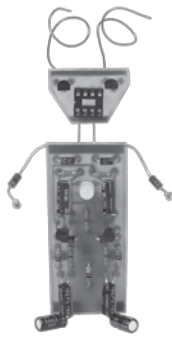
R.O.H.S. Magical LED Learn to Solder Robot Kit 🖊

The "Magical LED Learn to Solder Robot Kit" consists of 2 circuit boards and various electronic parts that you solder to the boards. You first solder the non-functional components to learn good soldering techniques, then you progress to the functional components. Simple to build and can be customized to make variations. You can paint the boards before assembly, pose the arms, and change the top antenna, i.e. hair-wire! In the center of the robots body is an LED that magically changes from red to green. The 3.5" tall by 1" wide robot uses one 9V battery (not included) which allows the robot to stand on its own. Skill Level 1.

*R.O.H.S. Magical LED Learn to Solder Robot Kit...........................***C6959**   **$11.95**
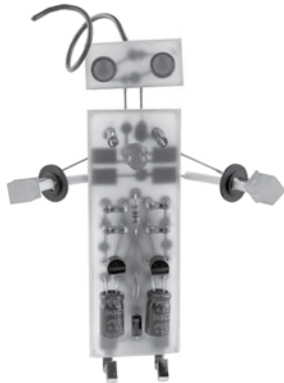
Learn to Solder Robot Kit 🖊

This unique flashing Robot will not only help you learn good soldering techniques but will also be the center of attention wherever it is placed! The eye LEDs, center LED, and both hand LEDs flash brightly for weeks continuously or for months when you turn it off at the end of the day. Consists of 2 circuit boards and various electronic parts that you solder to the boards. You first solder the non-functional components in to learn good soldering techniques, then you progress to the functional LEDs. Simple to build and can be customized to make unlimited variations (you can paint the boards before assembly, pose the arms and eyes, change the appearance of the antenna, etc.)! The 3 1/2" tall x 7/8" wide Learn to Solder Robot uses one 9V battery (not included) which also allows it to stand on just about anything (keyboards, monitors, desks, books, etc.). Unique design incorporates the battery into the robot. Simple to build! Skill Level 1.

*Learn to Solder Robot Kit...***C6845**   **$12.50**
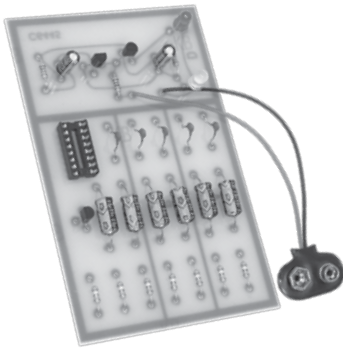
Learn to Solder Kit 🖊

OPTIONAL PLASTIC TYPE 5 BOX C6367 $6.00

Special kit designed for the student who has not had any experience with soldering. This kit has 30 components to solder to give the student ample soldering experience. The first 20 components to be soldered are used to gain soldering experience, but the last 10 components, when soldered in, make up a bright red and yellow alternating LED flasher! The LED flasher portion is built after the student has soldered in the 20 practice components, which include: capacitors, a transistor, resistors, and an IC socket. When the student has completed this kit, he/she should have developed good soldering techniques and has a functioning LED flasher to show for his/her efforts. This kit requires one 9V battery (not included). Size of board: 4.75" x 3". Complete with all parts (including practice parts for soldering) and complete soldering instructions. Skill Level 1.

*Learn to Solder Kit...***C6445**   **$11.95**
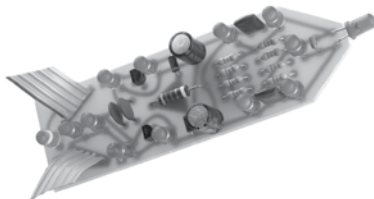
Learn to Solder Rocket Kit 🖊

This special kit is the perfect kit to introduce students to good soldering techniques. When completed, the 4" tall rocket flashes 13 bright red LEDs and will stand upright on a desk or shelf. The student learns to solder by following the detailed instructions showing how to solder the 22 practice components. These include cable, capacitors, diodes, resistors, and transistors. With the knowledge and skills obtained from soldering the practice components, the student then finishes the rocket by installing the 13 bright LEDs that flash when a 9V battery is connected (battery not included). Size of rocket PC board is 4 3/8" tall x 1 1/4" wide. Complete with all parts, PC board and instructions. Skill Level 1.

*Learn to Solder Rocket Kit..***C6864**   **$12.50**
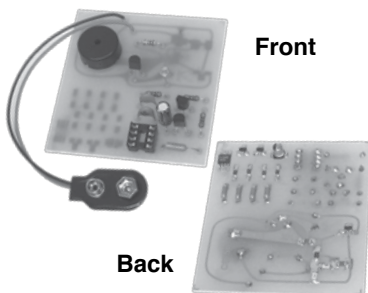
Universal Learn to Solder Kit 🖊

OPTIONAL PLASTIC TYPE 2 BOX C6364 $4.00

Front

Back

Here's the perfect kit to give students experience in learning soldering techniques for both standard and SMD components. The student begins by soldering various standard lead components such as transistors, capacitors and an IC socket. The student then progresses to SMD sections (on the reverse side of board) where the student practices soldering various SMD parts such as transistors, diodes, resistors, capacitors and an IC. Finally, the student builds a functional Insanity Alarm Kit (see description on page 28) which is constructed using both regular and SMD components so that some parts are on each side of the board. The Insanity Alarm operates on one 9V battery (not included). Size of PC board: 2 1/2" sq. Kit is supplied with 33 parts, PC board and instructions. Skill Level 1.

*Universal Learn to Solder Kit...***C6758**   **$12.50**

Deluxe Learn to Solder Kit

This special kit is similar to the regular "Learn To Solder Kit" shown on page 19, however, this kit has some very unique features. Not only does it have a special non-functioning "Learn To Solder" section, it also has two additional kits on one circuit board. You get a bright yellow and red "Jewel" LED Flasher Kit and also an Insanity type Alarm Kit. The deluxe learn to solder kit uses a specially designed circuit board that allows you to build all three kits. After construction and testing, you simply snap the main circuit board into the 3 separate individual kits.

1. The Learn to Solder middle section is constructed first to give your student ample soldering experience.

2. Next, the student constructs the Insanity type Alarm Kit section. This unique kit is equivalent in operation to our most popular selling Insanity Alarm Kit (see page 28). It emits a piercing tone when the lights go out, but stays perfectly silent when they turn on the lights to look for it.

3. Finally, the student completes the more complicated "Jewel" LED Flasher Kit section. This IC circuit kit alternately flashes 4 bright red LEDs with one bright yellow LED.

This unique kit is more challenging to build and is the perfect "wrap up" to test the student's skills in making kits.
Remember, you get all three kits listed with all parts and PC board. Requires two 9V batteries (not included), one for each functional kit. Overall size of circuit board before snapping it apart is 5.5" x 1.75". Order this unique kit now for a complete solution to your kit building needs! Skill Level 1.

OPTIONAL PLASTIC TYPE 2 BOX C6364 $4.00 *(REQUIRES TWO BOXES)*

*Deluxe Learn to Solder Kit...***C6491** **$13.95**
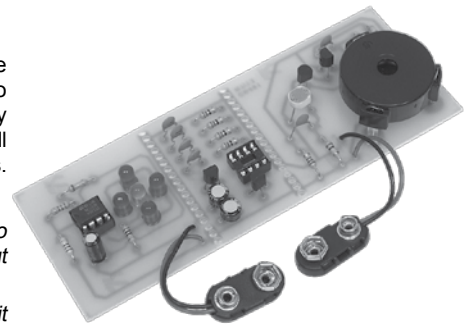
Deluxe SMD Learn to Solder Kit

Here's the perfect way to gain experience in soldering, identification and use of Surface Mount Device (SMD) technology. This kit features 32 SMD components, including 3 SMD 8 pin ICs, microprocessor IC, capacitors, resistors, transistors and a LED. The first 24 components are parts used to gain ample soldering experience with SMD parts as the student solders the various parts onto the practice section of the PC board. The last 8 SMD components are used to make an IC type dual LED flasher. This section of the kit flashes a dual color SMD LED. It flashes red then green from the same LED. Not only does the student learn to solder SMD parts but in the end the student has an attractive and functional SMD dual color LED flasher to show for his/her effort. Operates on one 9V battery (not included). Size of PC board: 2" x 3". Complete with all parts, PC board and instructions. A super value! Skill Level 2. *OPTIONAL PLASTIC TYPE 2 BOX* C6364 $4.00

*Deluxe SMD Learn to Solder Kit...***C6719** **$12.95**
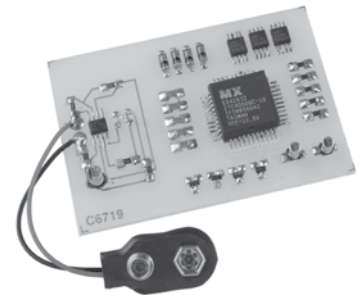
Learn to Solder 9V Battery Tester Kit

This is the perfect learn to solder kit! Not only does it give the first year student ample soldering experience with 22 practice components, it allows the student to create a very useful 9VDC battery analyzer/tester. Accurate and handy to have around, the tester lights up 2 LEDs to indicate whether the battery is in new/fresh condition, has some life left (about 7.5V to 8V) or is dead (under 7V). Size of PC board 1.9" x 3.4". Complete with all parts (including practice parts for soldering) and complete soldering instructions. Skill Level 1. *OPTIONAL PLASTIC TYPE 2 BOX* C6364 $4.00

*Learn to Solder 9V Battery Tester Kit...***C6972** **$12.50**
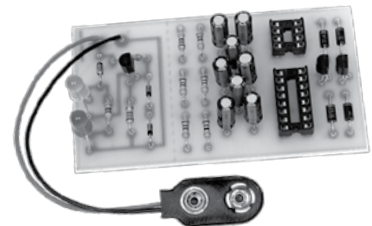
Ultimate Learn to Solder Kit

The Ultimate Learn to Solder Kit provides a perfect way to become proficient in soldering. Comes with 3 resistors, 6 disc capacitors, 13 integrated circuits and a pre-drilled glass epoxy PC board custom made for these parts. You start with the 3 resistors, progress to the 6 disc capacitors and then "hone" your skills by soldering the 13 integrated circuits in. Instructions that come with the kit present illustrations of correct techniques and solder joints. The kit is non-functional but provides one of the best platforms to obtain good soldering techniques. PC board size is 2" x 3". Skill Level 1.

*Ultimate Learn to Solder Kit...***C7045** **$9.95**
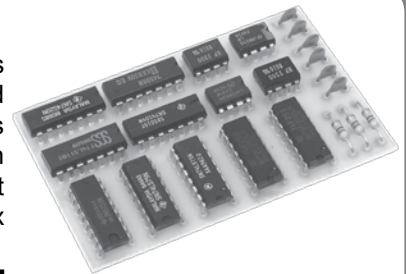
Electric Slider Learn to Solder Robot

Stand up Electric Slider Learn to Solder Robot not only allows students to learn good soldering techniques, but also provides them with a bright colorful sliding, scooting robot. Operates on one 9V battery (not included) and uses 2 powerful motors and a one IC circuit to move in a weird pattern on any smooth surface. Features colorful flashing LEDs which make this kit a real attention getting project. Overall size of PC board is 1.8" x 4". Complete with all parts, PC board and instructions. Skill Level 1.

*Electric Slider Learn to Solder Robot...***C7012** **$14.95**
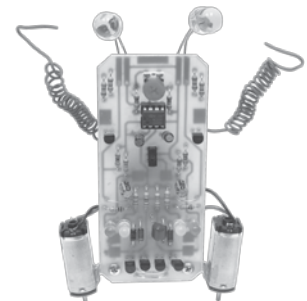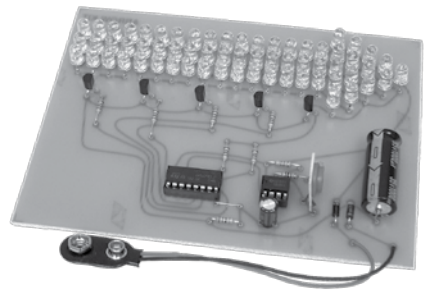
Amazing Arrow Kit

Optional AC Adaptor: **C6401** **$4.95**

Giant bars of LEDs light up sequentially as this arrow appears to move! Absolutely amazing visual effect using 63 LEDS and a variable speed control. Great as an attention getter, people director, or use 2 kits as an auto directional signal (check local laws). Kit comes with 9V battery snap but will also operate on any voltage between 5V and 12VAC or DC. Kit is available in one of three bright LED colors: red, green or yellow. Optional AC adapter is available. Size of board: 5 1/2" x 4". Complete with all parts, PC board and instructions. Skill Level 2.

OPTIONAL PLASTIC TYPE 5 BOX C6367 $6.00

Arrow with Red LEDS **C6398** **$25.25**
Arrow with Green LEDS **C6399** **$25.25**
Arrow with Yellow LEDS **C6400** **$25.25**
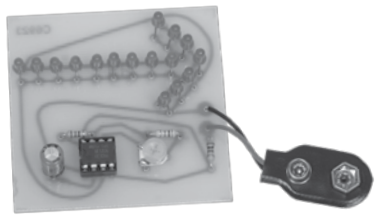
Flashing Arrow Kit

OPTIONAL PLASTIC TYPE 2 BOX C6364 $4.00

Our Flashing Arrow Kit uses 16 bright red LEDs and one IC to provide a unique "arrow" that flashes. The IC circuitry features a small trimmer resistor to adjust the speed at which the "arrow" flashes. Operates on one 9V battery (not included). Size of PC board is about 2 3/8" square. Complete with all parts, PC board and instructions. Skill Level 2.

Flashing Arrow Kit **C6923** **$8.25**
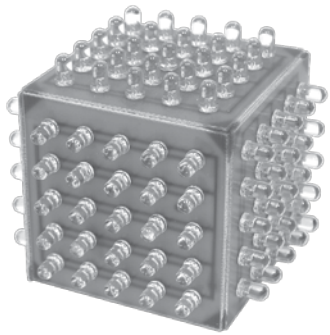
Brilliant 3D Shimmering White Cube Kit

The Brilliant 3D Shimmering White Cube Kit uses 125 ultra bright 10,000MCD white LEDs that flash or shimmer depending on the hidden control setting. Operates from one 9V battery (not included) and uses 6 PC boards. The small one IC control board and 9V battery are located out of sight inside the 2.5" square cube. The light effects from this kit are amazing! The output is a brilliant strobe flash to a dazzling shimmering effect (depending on the control setting). This kit is time consuming to build and should not be attempted by anyone who has not built kits before. Assembling this kit requires good soldering skills, however you will be rewarded with a stunning display! Complete with all parts, 6 PC boards and instructions. Skill Level 3.

Brilliant 3D Shimmering White Cube Kit **C6919** **$39.25**
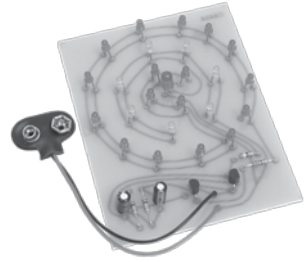
Electronic Fireworks Kit

OPTIONAL PLASTIC TYPE 5 BOX C6367 $6.00

Exciting kit electronically creates an exploding "firework" like display. Kit features 17 micro red LEDs, 7 green mini LEDs and 1 jumbo red LED. The circuit uses a 2 transistor multi-vibrator that alternates between the "rings" of LEDs, which cause a display like "sky rocket" type fireworks. Great attention getter in a darkened room. Attractive and makes an interesting intermediate project. Size of board: 3.875" x 3". Operates from one 9V battery (not included). Complete with all parts, PC board and instructions. Skill Level 2.

Electronic Fireworks Kit **C6454** **$11.25**

Giant LED Traffic Light Kit

OPTIONAL PLASTIC TYPE 3 BOX C6365 $5.00

Unique attention getting Traffic Light Kit uses 3 bright, colorful, giant 10mm LEDs. Just like a real traffic light, this smaller version slowly sequences through green, yellow and red lights. Comes with a paper traffic light label you glue on the PC board and uses a 3 transistor sequencing circuit. Works from one 9V battery (not included). Size of PC board is 3 1/4"L x 1 15/16"W. Comes with all parts, PC board & instructions. Skill Level 1.

Giant LED Traffic Light Kit **C6810** **$10.25**

Flashing Stop Sign Kit

OPTIONAL TYPE C MOUNTING BASE C6622 $3.85

This kit features 20 small LEDs which flash a bright red color. Features a red and white label which you glue to the octagon shaped PC board and a reliable 1 IC circuit. The circuitry features a small control to adjust the flash speed. Operates from one 9V battery (not included). Overall size: about 5" x 5". Complete with all parts, label, PC board and instructions. Skill Level 1.

Flashing Stop Sign Kit **C6788** **$13.95**

"Flash" The Robot Kit (Learn to Solder) ✎

What a fun kit to practice your solder techniques on. Plus, upon completing this kit, you will have created "Flash" The Robot. This kit features Flash's eyes that use two very bright and colorful, flashing rainbow LEDs that light up in colors of red, green, blue, violet, and yellow. The hands light up in green. Another feature that's really cool about this kit, is that there are no worries about finding batteries to keep Flash fueled up because your robot kit is powered by your computer's USB port! This kit is perfect for beginners learning to solder and stands 3.2" X 1". Complete with all parts, PC board. Requires soldering. Skill Level 1.

*"Flash" The Robot Kit...***C7075** **$12.50**

"Blinder" LED Flasher Kit ✎

This kit features 3 crystal clear special LEDs which create brilliant flashes of orange-red light. The light output of this flasher kit can even be seen in direct sunlight. You've never seen anything like it! Great for night joggers, bicyclists, warning markers, etc. Size of PC board: 2" x 1.4". Operates on one 9V battery (not included). Flash rate is adjustable with the built-in trimmer potentiometer. Complete with all parts, PC board and instructions. Skill Level 1.

OPTIONAL PLASTIC TYPE 2 BOX C6364 $4.00

*"Blinder" LED Flasher Kit...***C6891** **$7.25**

*"Blinder" LED Flasher Kit - Bulk Package for 25 Students......................***C8100** **$139.00**

Flashing Alien Robot Kit ✎

Full color Flashing Alien Robot Display Kit features 4 Red LEDs, 2 Green LEDs and 1 Yellow LED that flash brightly. Comes complete with a full color robot label which you glue onto the PC board before you start building. The reliable 4 transistor circuit forms the robots body as shown. Very unique and exciting kit to build and show. Operates from one 9V battery (not included). Size of PC board is 3" square. Compete with all parts, PC board, color label and instructions. Skill Level 1.

*Flashing Alien Robot Kit...***C6756** **$10.25**

*Flashing Alien Robot Kit - Bulk Package for 25 Students........................***C8107** **$205.00**

Magic Light Sweep Kit ✎✎

OPTIONAL PLASTIC TYPE 4 BOX C6366 $5.75

This kit produces sweeping light bars that magically speed up or down depending on the ambient light Level. In darkness, the bars (made up of 4 bright clear lens LEDs each) rotate very slowly, then as the ambient light increases, the sweeping increases and takes on a radar screen appearance. If the ambient light is very bright the sweeping speed is so rapid that the kit appears to shimmer. This kit produces these effects automatically and makes a great attention getting display. Size of board: 2.6" x 4.1". Operates from one 9V battery (not included). Complete with all parts, PC board and instructions. Skill Level 2.
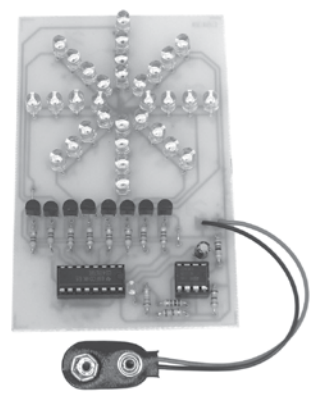
*Red Magic Light Sweep Kit ***C6439R** **$14.50**
*Yellow Magic Light Sweep Kit ***C6439Y** **$14.50**
*Blue Magic Light Sweep Kit ***C6439B** **$14.50**
*Red/White/Blue Magic Light Sweep Kit ***C6439RWB** **$14.50**

3D Shimmering Pyramid Kit ✎✎✎

Giant 3D pyramid shimmers mysteriously to delight and amaze everyone! Uses 75 jumbo red LEDs on a 3 dimensional pyramid that stands over 4" tall and has a base of 6" x 6" x 6". Our 3D Shimmering Pyramid Kit features a hidden control to vary the effect from an overall shimmering effect to a sequencing effect which features bands of LEDs that sequence from the base to the top. Stunning and mysterious pyramid will be the focus of attention wherever it is placed. Operates from one 9V battery (not included). Has a two IC circuit and uses 4 separate circuit boards (3 LED boards and 1 IC board). Complete with all parts, PC board and instructions. Skill Level 3. This kit requires soldering of components to the PC board while building. (Please do not attempt this kit if you have never built a kit).
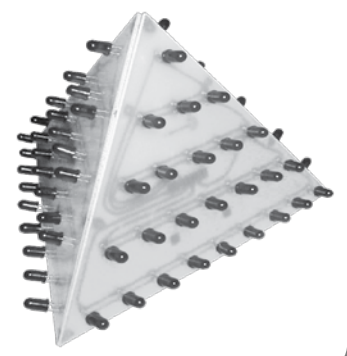
*3D Shimmering Pyramid Kit...***C6437** **$34.95**

Adjustable Flashing Bright Light LED Kit

Small size Adjustable Flashing Bright Light LED Kit alternately flashes 2 groups of 4 LEDs. The first group consists of 2 green and 2 yellow LEDs and the second group consists of 1 green, 2 yellow and 1 orange LED. The 2.2" x 0.75" kit also uses a one IC circuit with a trimmer control to adjust the speed of flashing. Operates on one 9V battery (not included). Great attention getter! Complete with all parts, PC board and instructions. Skill Level 2.

OPTIONAL PLASTIC TYPE 2 BOX C6364 $4.00

Adjustable Flashing Bright Light LED Kit.. **C7019** **$6.75**
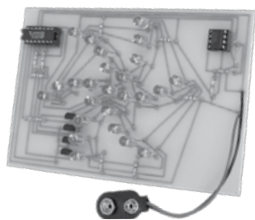
Fascination Star Kit

Produces an "exploding star" visual effect using 25 LEDs and IC circuitry. The center LED lights first then the next group of LEDs light and then another set lights until the outer edge of the star lights up. The process then reverses itself. Great attention getter for game rooms etc. Operates from one 9V battery (not included). Size of board: 5.25" x 3.5". Complete with all parts, PC board and instructions. Skill Level 3.

OPTIONAL PLASTIC TYPE 5 BOX C6367 $6.00

Fascination Star Kit... **C4432** **$16.75**

Super LED Chaser Kit

Here is an exciting visual display! Three groups of 2 LEDs light up sequentially to provide a stunning display. Kit uses 6 jumbo LEDs and 3 transistors. Operates from one 9V battery (not included) and comes in your choice of colors. Size of PC board is 2 7/8" x 15/16". Complete with all parts, PC board and instructions. Skill Level 2.

OPTIONAL PLASTIC TYPE 2 BOX C6364 $4.00

BULK SAVINGS AVAILABLE
SEE PAGE 23

Red LEDs...	**C6825**	**$6.50**
Green LEDs...	**C6826**	**$6.50**
Yellow LEDs...	**C6827**	**$6.50**
Super Bright Clear Case Red LEDs...........................	**C6828**	**$6.95**
Super Bright Clear Case Green LEDs........................	**C6829**	**$6.95**
Super LED Chaser Kit (Assortment) - Bulk Package for 25 Students.............	**C8106**	**$130.00**
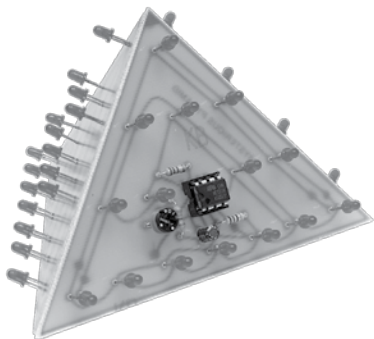
Mysterious 3D Pyramid Kit

Very unique kit consists of 3 circuit boards that when assembled form a 3 dimensional flashing LED pyramid. This mysterious and amazing kit features 47 bright LEDs that flash at a rate that you can adjust using a small control. Operates from one 9V battery (not included) and uses a reliable one IC circuit. The pyramid is about 3" high and has a 4 1/2" base. The pyramid is hollow inside and can be set on top of the 9V battery to conceal it. Complete with all parts, PC board and instructions. Skill Level 2.

OPTIONAL TYPE C MOUNTING BASE C6622 $3.85

Red LEDs...	**C6792**	**$17.50**
Yellow LEDs...	**C6793**	**$17.50**
Green LEDs..	**C6794**	**$17.50**
Blue LEDs..	**C6795**	**$17.50**

Rock Star Kit

OPTIONAL PLASTIC TYPE 4 BOX C6366 $5.75

Thinking about stardom? With your skill Level 3 talent you can create your own rock star. This Rock Star Kit is sure to light up the billboards with 78 ultra bright LEDs that sequentially flash R.O.C.K.S.T.A.R. one letter at a time. The Rock Star Kit uses 2 ICs and has 2 PC boards. The control PC board allows the speed of the letters to be adjusted. Approximate size: main board 2.6" x 4.5" and the control board 1.4" x 2.9". Operates from a standard 9V battery (not included). Complete with all parts, rockstar label, 2 PC boards and instructions. Skill Level 3.

Rock Star Kit.. **C6955** **$19.50**
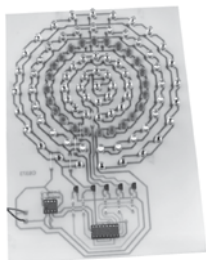
Fantastic ATOM Expander Kit

Giant visual effect kit uses 98 bright red LEDS to provide an "Exploding Atom" electronic display. Kit sequences from a small "Nucleus" center to consecutive larger rings - then "Shrinks" back to the center again. Absolutely incredible display for science exhibits, game rooms, art displays or any place where you need to attract attention. Kit requires longer assembly time than most of our kits due to the large number of components. Please don't attempt this kit unless you have built other kits. Size of board: 8" x 5-3/4". Operates from one 9V battery (not included). Complete with all parts, PC board and instructions. Skill Level 3.

*Fantastic ATOM Expander Kit..* **C6373** **$39.95**

Electro Spinner Kit

This amazing kit features a brilliant neon like rainbow of spinning colors. The Electro Spinner Kit uses two special rainbow flashing LED's, a motor and a special electronic circuit to produce attractive and stunning ever changing rings of neon like colors. The Electro Spinner automatically turns on when it is in the dark and spins for almost an hour before needing to be recharged. Kit includes all parts, PC board, motor, rechargeable battery, charger and CD base. Overall size of PC board is about 2" square. Skill Level 2.
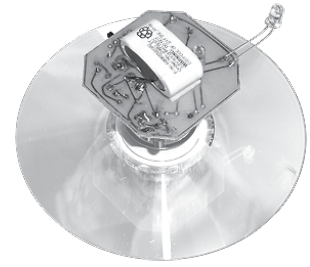
Electro Spinner Kit...**C6936**   **$19.75**

Exploding Star Color Organ Kit

This spectacular color organ kit will amaze and thrill anyone who has the pleasure of seeing it in action. Very colorful, bright and highly animated exploding star effect is controlled by the beat of the music and a 2 IC circuit. The display is like a firework that is in sync with your music. No connection to your sound source is necessary as it uses an ultra-sensitive electret microphone to pick up the sound. Kit uses blinding output LEDS in red, green and yellow colors (25 total), 6 transistors and 2 ICs. Operates on one 9V battery (not included). Size of PC board is 5 1/16" x 3". Complete with all parts, PC board and instructions. Be the first in your class to own this amazing electronic display and everyone else will want to borrow it for their next party! Skill Level 3.

OPTIONAL PLASTIC TYPE 5 BOX   C6367 $6.00

Exploding Star Color Organ Kit..**C6818**   **$22.95**

Shimmering Color Organ Kit

Exciting portable color organ provides a colorful display in response to music. Display shimmers and flashes to your music without any connections. The kit uses 6 jumbo red LEDs and 6 jumbo yellow LEDs with a sensitive amplifier IC. No connection to your stereo is needed as the Shimmering Color Organ Kit uses a crystal microphone to pick up the sounds of your music! Take your color organ with you anywhere, as it requires only one 9V battery (not included) to operate. Size of board: 2 3/4" x 3 1/8". Complete with all parts, PC board and instructions. Skill Level 2.
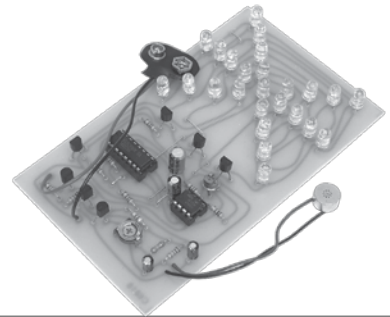
OPTIONAL PLASTIC TYPE 4 BOX   C6366 $5.75

Shimmering Color Organ Kit...**C6446**   **$12.25**
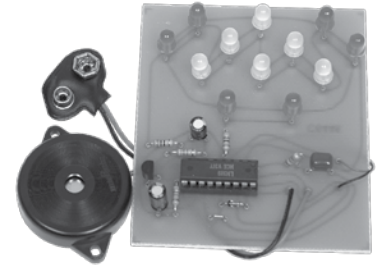
Bright Star Color Organ Kit

This small super sensitive color organ kit features 5 bright LEDs that flash to the beat of the music. Circuit features a miniature electret microphone and a high gain 3 transistor circuit so no connections to your stereo are needed! Simply place the kit in the general vicinity of your speakers, adjust the gain control and you are ready for bright Star flashes of light as your music plays. Operates on one 9V battery (not included). Size of PC board is 1 13/16" square. Complete with all parts, PC board and instructions. Skill Level 1.

OPTIONAL PLASTIC TYPE 2 BOX   C6364 $4.00

Bright Star Color Organ Kit...**C6815**   **$10.95**
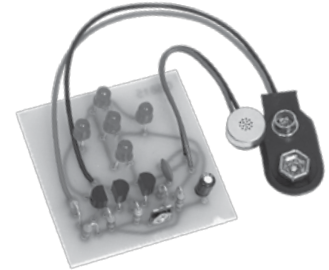
120VAC Sound Activated 3 Channel Color Organ Kit

This exciting kit causes lights of your choice (up to 200 watts per channel/600 watts total) to flash to the beat and the frequency of the music without any connection to your amplifier, stereo, radio, etc. Simply plug in any lights of your choice to the 3 AC outlets provided. Features 3 separate filters with each channel having its own "on board" response control so that you can adjust each channel for desired response. This deluxe kit has a speaker microphone driving a high gain IC/SCR circuit. Operates from standard 120VAC. Size of board: 6.2" x 3.4". Complete with all parts, PC board and instructions. No case available. Skill Level 2.

120VAC Sound Activated 3 Channel Color Organ Kit...............**C6353**   **$29.95**
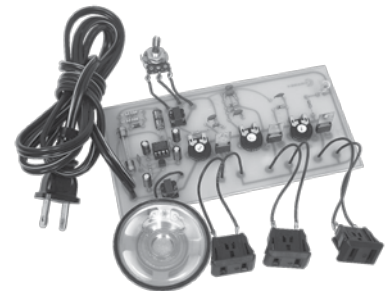
120VAC 3 Channel Color Organ Kit

Very popular 3 channel color organ causes lights of your choice (up to 200 watts per channel) to flash to the beat and frequency of the music. Simply connect the color organ to your stereo speaker. Has input transformer to isolate color organ from stereo and has 3 different signal filtering stages for low, medium and high notes. Kit features Level control and 3 separate AC outlets to connect Christmas lights, lamps, etc. Operates from standard 120VAC. Size of board: 3" x 5". Complete with all parts, PC board and instructions. Skill Level 2.

OPTIONAL PLASTIC TYPE 5 BOX   C6367 $6.00

120VAC 3 Channel Color Organ Kit..**C4530**   **$17.50**
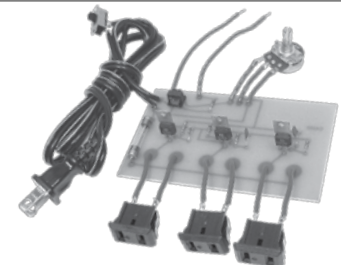
The Light Spider Robot II Kit

Our new and improved Light Spider Robot II Kit can now be used with any LED or Incandescent Flashlight! Using its electronic brain to find or follow a light source, this amazing robot quickly scoots across any smooth, hard surface (such as a linoleum floor or a wooden table top). While searching for light, one colorful and bright flashing rainbow LED, lights up and blinks on the front of the robot. Operates from one 9V battery (not included) and uses a transistor brain to control its 2 motors. The PC board and motors can be customized by painting them before assembly. Size of PC board is approximately 3.50" x 2.25". Comes complete with all parts, PC board & instructions. Skill Level 2.

The Light Spider Robot II Kit..**C7049 $17.25**

Little Jitterbug Robot Kit

BULK SAVINGS AVAILABLE
SEE PAGE 23

Better not leave any popcorn or chips around! This little jitterbug robot is waiting for night, or when it's completely dark, to roam the countertops in search of goodies. The light sensor allows the jitterbug to come alive and scoot around with the help of a tiny vibrating motor. Customize its antennas and legs. Flashing LED allows you to find this little critter. Operates on a 3V coin battery (included). Size of PC board 1.8" x 0.9". Complete with parts, battery, PC board and instructions. Soldering required. Skill Level 1.

Little Jitterbug Robot Kit...**C6984 $7.95**
Little Jitterbug Robot Kit - Bulk Package for 25 Students....**C8104 $180.00**
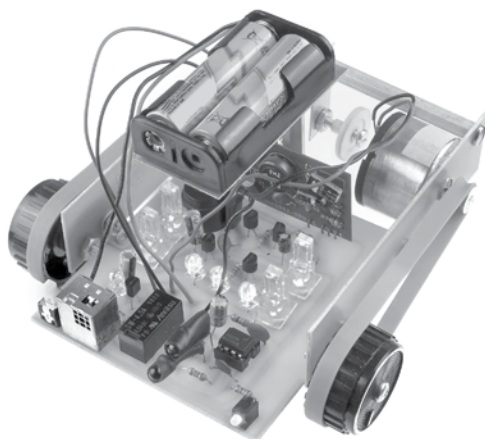
IR Vision Rover Robot Kit

This incredible robot can actually see! As it explores, it emits invisible beams of IR (infrared) light which reflects off any obstacles in its path, including walls, rocks, humans, boxes, etc. Its simple brain and sensor causes the IR Vision Rover Robot to turn backwards and then go forward in a different direction avoiding the obstacle it has detected up to one foot away. It can even be remotely controlled from up to 25 feet away by using any standard DVD/TV IR remote control that you have. Simply point and press almost any button on your remote and you will notice that your IR Vision Rover Robot will immediately back up and then go forward in a different direction. The Rover emits beeps and blinks bright colorful LEDs as it explores. Operates from only two AA batteries (not included). Features DC-DC converter circuitry, sensitive IR sensor module, 2 IR LEDs, 9 colorful LEDs, 2 powerful motors and reliable drive train. It's a fun kit to build, and an excellent introduction to robotics for your student. Size about 5 1/2" x 6 1/2". Works on any smooth hard surface. Complete with all parts, PC board and instructions. Skill Level 2.

IR Vision Rover Robot Kit..**C6761 $39.95**

The Unstoppable Bug Robot Kit

The Unstoppable Bug Robot (TUBR) is really a bug with an attitude and an electronic brain. It just can't be stopped! If you put a box, object, or if there is a wall in front of the bug it has a powerful infrared detecting system that "senses" the obstacle and causes its simple brain to change direction. Features 2 motors, a bright red eye, a transistor/relay brain and 2 built in rechargeable batteries. Black plastic bug body is about 3 3/4" long x 1" wide (excluding arms which have small motors attached). Operates on any smooth surface such as a table, floor, desk, etc., when quick charged from a 9V battery (not included). Complete with all parts, PC board, bug body, motors and instructions. Skill Level 2.

The Unstoppable Bug Robot Kit......................................**C6902 $25.50**

Learn to Solder Fish Kits ✎

Great small kit for learning how to solder. This fun kit has a special colorful rainbow LED that flashes all the colors of the rainbow. The student starts by soldering in all the practice components including our unique tropical capacitor plus various resistors and capacitors as shown. Kit operates from one 9V battery (not included) and comes complete with all parts and easy to follow instructions. Skill level 1.

Learn to Solder Shark C7603   *$5.50*
Learn to Solder Clown Fish C7604   *$5.50*
Learn to Solder Angler Fish C7605   *$5.50*

Racing Robot Learn to Solder Kit ✎

The Racing Robot Learn to Solder Kit features a three wheel motorized chassis and a colorful robot face that flashes on and off as the robot races out of control. Race this robot against others to see which robot is the fastest. Kit features 18 components that you install first to learn good soldering techniques. Once you have m astered soldering, you then install the one IC circuitry, Face circuit, motor and mechanical assembly. Operates from one 9V battery (not included). Size of Face PC board about 1.5" x 2". Size of main chassis PC board 2" x 4". Complete with all parts, PC boards, motor and instructions. Skill Level 1.

Racing Robot Learn to Solder Kit...**C6927**   **$19.95**

Supercapacitor Breadboard Racer Kit (Non-Soldering)

Our new Supercapacitor Breadboard Racer is easy to assemble and requires no soldering. It uses technology that is now being introduced into electric vehicles. After assembling your Racer simply "Charge It" from the battery powered charger and within a minute you are ready to race! Go Green with the optional C6581 - Solar Charger (Sold Separately) and use the Sun's energy to quickly charge the Racer's Supercapacitor.

Travels at a high rate of speed and has a flashing red LED to indicate charge condition. Uses a powerful Supercapacitor for its power source. Requires 2 "AA" batteries (not included). Skill Level 1.

Supercapacitor Breadboard Racer Kit....................................**C7411**   *$20.95*
Optional Deluxe 5.5V USB Solar Panel with USB Cable...............**C6581**   *$12.00*

3 in 1 Non-Soldering Sportscar Racer Kit ✎

This exciting and reusable kit requires no soldering, yet provides a great introduction to motors, transistors, and electronic circuitry. Powered by one 9V battery (not included), this 3 in 1 Non-Soldering Sportscar Racer Kit includes all electronic components to build 3 different Sportscar Racers: Darlington Mode, Lights Out Mode, Lights On Mode. Has a bright red LED, powerful motor, Darlington transistors, CDS cell, resistors, wires and re-usable breadboard. Easy to understand instructions with theory of operation makes this a great first kit for beginners! The color of the breadboard may vary. Skill Level 1.
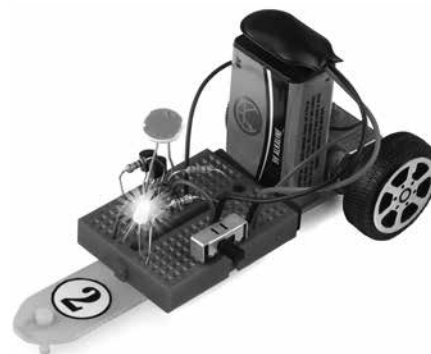
3 in 1 Non-Soldering Sportscar Racer Kit..............................**C7410**   **$15.75**

Classroom Solder Practice Activity (With PowerPoint) for up to 24 Students ✐ Skill Level 1

Here's the perfect way to introduce soldering to your students and give them the necessary soldering experience needed to build electronic kits. This activity box contains 24 etched and drilled 2-1/2" x 1" PC boards, a large bag of resistors, a bag of capacitors, a bag of diodes, a bag of LEDs, two different sizes of IC sockets and a bag of transistors. All of the components and circuit boards necessary to give 24 students ample practice in soldering.

As a bonus we also include a PowerPoint USB Drive (Windows Only) that has information for the teacher to use to teach soldering techniques, and a small commercially assembled board the teacher can show students what good soldering joints look like. All that is needed is solder, soldering irons, cutters and safety glasses. Most school shops already have these, or they can be purchased from Chaney Electronics (See page 39).

You get over 400 practice parts and 24 nonfunctional circuit boards for practice. Skill Level 1.

Classroom Solder Practice Activity with PowerPoint USB	**C6774**	**$131.25**
Additional Package of Parts & PC Boards for 5 extra Students	**C6836**	**$26.95**

Complete Introduction to Kit Building ✐

This super package helps your student succeed in building electronic kits because it contains everything your student needs to get started. This is an amazing value and it provides an easy way to get started in the "Fun of Kit Building". Skill Level 1.

Learn to Solder Kit

Non-functional PC board and components that the students build to learn how to solder.
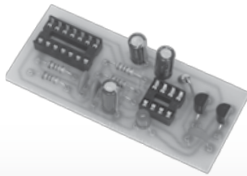
"Blinder" LED Flasher Kit

(see C6891 on page 17 of this catalog)
Creates brilliant flashes of orange/red light!
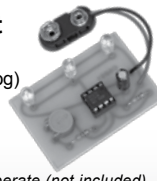
C6891 kit requires one 9V battery to operate (not included).

Contains everything needed for the novice to start building kits right away: Tools, Solder, Kits & more!
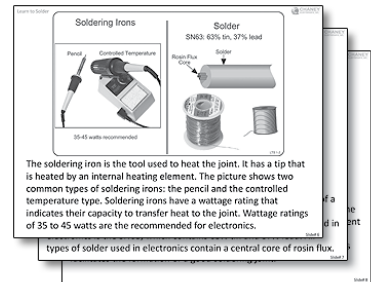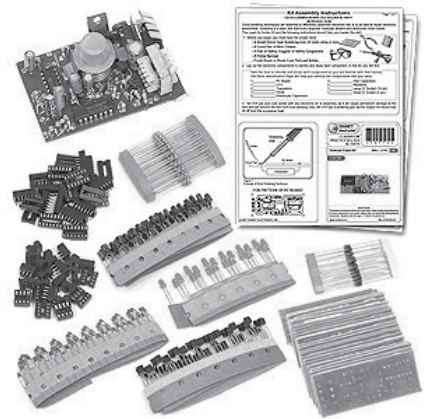
Complete Introduction to Kit Building	**C6898**	**$41.50**

"Customizable" Colorful Brilliant Blinker Kit ✐

BULK SAVINGS AVAILABLE
SEE PAGE 23

This small easy to build electronic kit uses a special 2 transistor multivibrator circuit to alternately flash two brilliant clear lens LEDs. To make this kit customizable we give you 2 red LEDs, 1 green LED, 1 yellow LED, 1 white LED and 1 blue LED so that you can make the color combination of your choice. Operates from one 9V battery (not included). Size of PC board 1 1/4" x 1 3/8". Complete with all parts (including the 6 brilliant color LEDs), PC board and instructions. Skill Level 1.

Note: Bulk package comes with an assorted bag of 50 colorful LEDs containing 10 each of

Red, Green, Yellow, Blue and White.   *OPTIONAL PLASTIC TYPE 1 BOX* C6363 $3.00
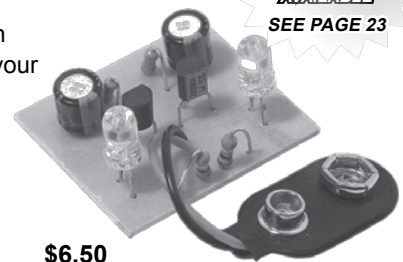
"Customizable" Colorful Brilliant Blinker Kit...	**C6958**	**$6.50**
"Customizable" Colorful Brilliant Blinker Kit - Bulk Package for 25 Students.....	**C6944**	**$146.25**

Samurai Koji Kit ✐

Samurai Koji's, (**pronounced** *KOH jee*) meaning "Abundance and two", expression is constantly changing to keep his friends from guessing his true mood. One second he's happy, and then he's not. Fun kit to build that requires many soldering connections to create the green LED happy/smiley face and the red LED upset/sad expression. This circuit uses a 555 IC to alternately flash the two groups of bright LEDs. Operates from one 9V battery (not included). Size of PC board is 3" x 4". Complete with all parts and PC board. Requires soldering. Skill Level 1.   *Samurai Koji Kit* **C7074**   **$12.50**

Classroom Bulk Package Kits

A great economical way to introduce your students to the fascinating field of electronics. Bulk packages contain all the parts and PC boards to build 25 kits. In addition, a set of 25 individual instructions and recloseable zip bags are included for you to distribute the parts to your students.

"Blinder" LED Flasher Kits
Package for up to 25 Students

This kit features 3 crystal clear special LEDs which create brilliant flashes of orange-red light. The light output of this flasher kit can even be seen in direct sunlight.
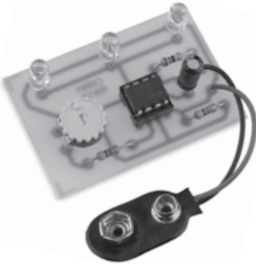
See C6891 (Page 17) for kit details. **C8100** **$139.00**

Flashing Alien Robot Kits
Package for up to 25 Students

Here's is a colorful, fun kit for begineer electronics students. Features 4 transistor multivibrator circuit which causes the 7 LEDs to flash bright with vibrant colors.
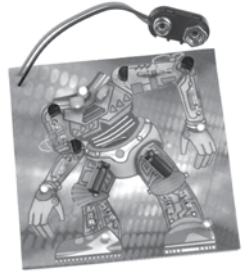
See C6756 (Page 17) for kit details. **C8107** **$205.00**

Crazy Chirper Kits
Package for up to 25 Students

Here's the perfect kit to keep your unsuspecting guests entertained or should we say irritated. The chirper kit remains silent until the lights go out (just like a real cricket). The moment it gets dark the "chirper" starts to make its racket driving your guest crazy.

See C6470 (Page 31) for kit details. **C8102** **$150.00**

TOWS Kits
Package for up to 25 Students

The TOWS (Terribly Obnoxious Woodpecker Sound) Kit produces a very loud woodpecker sound. This small kit just can't be ignored as it generates the pecking sound of a crazed bird.

See C6712 (Page 31) for kit details. **C8103** **$159.00**

Little JitterBug Robot Kits
Package for up to 25 Students

Better not leave any popcorn or chips around! This little jitterbug robot is waiting for night, or when it's completely dark, to roam the countertops in search of goodies. The light sensor allows the jitterbug to come alive and scoot around with the help of a tiny vibrating motor.

See C6984 (Page 20) for kit details. **C8104** **$180.00**

Super LED Chaser Kits
Package for up to 25 Students

Here is an exciting visual display! Three groups of 2 LEDs light up sequentially to provide a stunning display. Kit uses 6 jumbo LEDs and 3 transistors. Includes five different LED colors.

See C6825/C6829 (Page 18) for details. **C8106** **$130.00**

Magic Christmas Tree Kit
Package for up to 25 Students

This colorful tree uses 3 LED bulbs that magically blink all red, then all green, repeating the cycle over and over again. It's a perfect classroom activity students enjoy soldering.

See C6773 (Page 29) for kit details. **C8109** **$159.95**

IR Control Spinner Kits
Package for up to 25 Students

Your classroom will be mesmerized with the dizzying effects of their IR control Spinner Kit. Uses a motor and a sensitive IR module to work with any type of IR remote control (not included).

See C6778 (Page 32) for kit details. **C8108** **$199.50**

Bulk Colorful Brilliant Blinker Kit
Package for up to 25 Students

Here's a great economical way to introduce your students to the fascinating field of electronics. This bulk package contains all the parts and PC boards to build 25 Colorful Brilliant Blinker Kits.
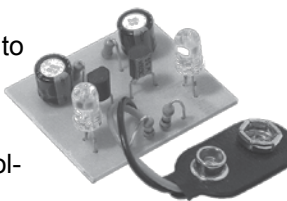
See C6958 (Page 22) for kit details. **C6944** **$146.25**

Cosmic Popper Kit
Package for up to 25 Students

Emits random sound pops and explosions of white light using CDS cell technology. This "out-of-this-world" effects use SCR and CDS circuitry and a piezoelectric speaker.

See C6893 (Page 30) for kit details. **C8110** **$179.00**
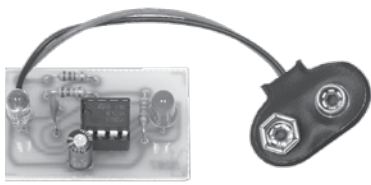
LED Flasher Kit

Easy to build kit uses the amazing 555 timer IC to alternately flash a red and green LED. The kit makes a great attention getter and can be used in robots, warning lights, model railroads, space models, etc. Operates from 9V battery (not included). Size: 1.5" x 1". Complete with all parts, PC board and instructions. Skill Level 1.

OPTIONAL PLASTIC TYPE 1 BOX C6363 $3.00

*LED Flasher Kit..***C3287** **$5.75**

Jumbo LED Flasher Kit

Simple to build kit uses a programmable unijunction transistor (PUT) to flash a jumbo red LED. Makes a great first kit and is useful for all types of convention badges, posters, attention getters, hats, model railroads, model planes, etc. Operates from one 9V battery (not included). Size of board: 1.25" x 1". Complete with all parts, PC board and instructions. Skill Level 1.

OPTIONAL PLASTIC TYPE 1 BOX C6363 $3.00

*Jumbo LED Flasher Kit..***C4567** **$5.75**
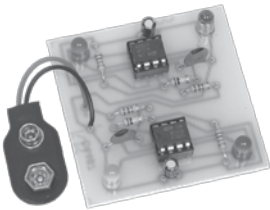
Super LED Flasher Kit

One of our most popular display kits, this kit is perfect for use in robot projects, space models, warning lights, etc. Features a two IC circuit which alternately flashes 4 LEDs: 2 red, 1 yellow and 1 green. Produces a bright and colorful display. Operates from one 9V battery (not included). Size of board: 2" x 2". Complete with all parts, PC board and instructions. Skill Level 1.

OPTIONAL PLASTIC TYPE 2 BOX C6364 $4.00

*Super LED Flasher Kit..***C4407** **$7.75**

Flashing Triangle Kit

This triangle shaped LED flasher has 8 jumbo red LEDs that flash brightly. Kit is divided into two independent LED flasher groups with one group of LEDs flashing at a faster rate than the other. This difference produces an exciting display. The circuit consists of two independent multi-vibrator transistor circuits each driving four LEDs. Although this kit is a little more complicated than many of our Skill Level 1 kits, it can be built by a Skill Level 1 student if the teacher gives some supervision. Size of board: 3.8" x 3.8" x 3.8". Operates from one 9V battery (not included). Complete with all parts, PC board and instructions. Skill Level 1.

OPTIONAL PLASTIC TYPE 5 BOX C6367 $6.00

*Flashing Triangle Kit..***C6440** **$8.75**
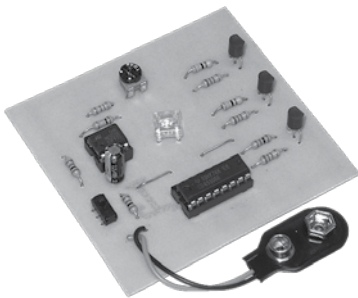
Ultra-Bright RGB LED 7 Color LED Flasher Kit

This amazing kit uses a single ultra-bright RGB (Red Green Blue) LED to produce 7 different colors! By combining the different LED elements inside the RGB LED it is possible to have Red, Green, Blue, Aquamarine (B+G), Purple (R+B), Yellow (R+G), and White (R+B+G). This kit uses a two IC circuit to continuously flash through a pattern of colors. Features a speed control to adjust the flash rate and an on/off switch. This kit makes a unique visual display in the dark as the ultra-bright colors are very intense - perfect for parties or as a conversation piece. Operates from one 9V battery (not included). Size of PC board 2 7/8" x 2 3/4". Complete with all parts, PC board, and instructions. Skill Level 2.

OPTIONAL PLASTIC TYPE 4 BOX C6366 $5.75

*Ultra-Bright RGB LED 7 Color LED Flasher Kit...............................***C6953** **$10.75**

Learn to Solder Flashing Star

This kit makes learning to solder fun with its Star Spangled Flashing design. This eye-catching Patriotic Flashing Star strobes 15 brilliant Red, White and Blue LEDs which outline the special cut 4-1/4" star shaped PC board. Practice your soldering technique first with the special "Dogbone" practice resistors. After you connect a few, you will be comfortable and ready to solder the other components to the PC board with confidence. The speed of the flashing LEDs can be adjusted with the trimmer resistor located above the IC chip. Celebrate the 4th of July, Memorial Day, Labor Day or Your Birthday with this colorful display. Operates from one 9V battery (sold separately). Size of PC board is 4-1/4". Complete with all parts, PC board and instructions. Skill Level 1

*Learn to Solder Flashing Star..***C7601** **$14.95**
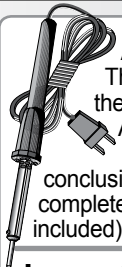
Are you introducing soldering kits to your students? You'll want one of these value packed exciting 4 in 1 Soldering Packages. The student starts by following detailed instructions on "how to solder" and solders a non-functional "learn to solder" practice kit. This allows the beginner to gain hands-on soldering experience with actual components onto a PC board without ruining kit functionality in the process. After the proper soldering skills are mastered, the student can then progress on to each of the 3 remaining functional kits with experience and confidence. Each remaining kit is battery operated, fully functional and can be mounted in an optional project box (if desired). At the conclusion, the student has built 1 non functional kit and 3 fully operating kits that they can enjoy. All 4 in 1 kits are rated Skill Level 1 and come complete with all parts, PC board and detailed instructions. Each kit (except the non functional Learn To Solder Kit) operates from a 9V battery (not included). We offer five different "4 in 1" packages to choose from (each package is sold separately).
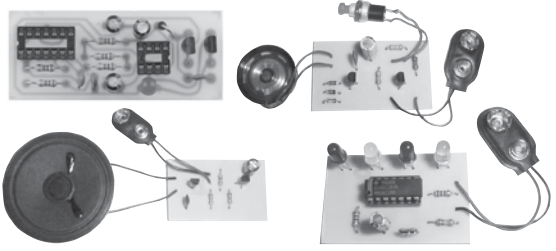
Learn to Solder Kit Package "A" 🖊 Skill Level 1

Package "A" starts off with our non-functional Learn to Solder Kit, which is an introduction to soldering and proper soldering techniques. After gaining some experience from the Learn to Solder Kit the student has three functional kits to build:

SECRET IRRITATOR KIT - About once a minute, the kit will produce a 3 second long tone then remain silent for another minute before making another sound. It is difficult for another person to find it because it remains silent for so long. Size of PC board: 2" x 1.25".

ELECTRONIC SIREN KIT - This kit produces the upward and downward wail of a "police siren" as you press and release a small pushbutton. Uses a small speaker. Size of PC board: 2" x 1.25".

MULTICOLOR LED FLASHER KIT - This kit uses 2 red LEDs, 1 yellow and 1 green LED. Features a control that can be adjusted to cause 2 groups of 2 LEDs to alternately flash or all 4 LEDs flash together. Features reliable IC circuitry. Size of PC board: 2" x 1.25".

C6880   PACKAGE "A" $22.00

OPTIONAL BOXES FOR ABOVE KITS: TYPE 1 C6363 $3.00ea. (3 BOXES FOR 3 KITS)

Learn to Solder Kit Package "B" 🖊 Skill Level 1

Package "B" starts off with our non-functional Learn to Solder Kit, which is an introduction to soldering and proper soldering techniques. After gaining some experience from the Learn to Solder Kit the student has three functional kits to build:

PHASOR RAY KIT - This kit generates the sound of a phasor ray gun and flashes a brilliant orange light. Uses a small speaker, a crystal clear lens LED and 2 transistor circuit with adjustable sound control. Size of PC board: 2" x 1.25".

RED STAR FLASHER KIT - This kit will really attract attention as it flashes a bright red star made up of six 5mm red LEDs. Features simple and reliable 2 transistor circuit. Size of PC board: 2" x 1.25".

YES/NO DECISION MAKER KIT - Simply press the button on your decision maker kit and two brightly colored LEDs will begin to flash. As soon as you release the button, one of the LEDs will remain on. The green LED indicates yes and the red LED indicates no. Uses IC circuitry. Size of PC board: 2" x 1.25".

C6881   PACKAGE "B" $21.50

OPTIONAL BOXES FOR ABOVE KITS: TYPE 1 C6363 $3.00ea. (3 BOXES FOR 3 KITS)

Learn to Solder Kit Package "C" 🖊 Skill Level 1

Package "C" starts off with our non-functional Learn to Solder Kit, which is an introduction to soldering and proper soldering techniques. After gaining some experience from the Learn to Solder Kit the student has three functional kits to build:

LED FLASHER KIT - This kit uses a 555 timer IC to alternately flash a red and green LED. The kit makes a great attention getter. Operates from 5 to 9VDC. Size of PC board: 1.5" x 1".

IC DECISION MAKER KIT - When you press a small on board switch a bright green LED and a bright red LED begin to alternately flash. As soon as you release the button, one of the LEDs stays on indicating the decision. Uses a CMOS IC. Size of PC board: 1-3/8" x 1-7/8".

TEMPERATURE WARNING KIT - The kit can be set to indicate a rise or drop in temperature by simply adjusting its control knob for ambient temperature. As the temperature changes, a Red or Green LED indicates over or under temperature from its setting. Size of PC board 2" x 1.8".

C6934   PACKAGE "C" $21.25

OPTIONAL BOXES FOR ABOVE KITS: TYPE 1 C6363 $3.00ea. (3 BOXES FOR 3 KITS)

Learn to Solder Kit Package "D" 🖊 Skill Level 1

Package "D" starts off with our non-functional Learn to Solder Kit, which is an introduction to soldering and proper soldering techniques. After gaining some experience from the Learn to Solder Kit the student has three functional kits to build:

COIN TOSSER KIT - This kit uses 3 transistors and 2 LED circuits to make decisions or replace coin tossing. Features 1 red and 1 green LED that flash when you touch the sensor wires. When you quit touching the sensor your decision is shown by the LED that remains on. Size of board: 1.6" x 2.2".

SUPER LED FLASHER KIT - This kit features a two IC circuit which alternately flashes 4 LEDs: 2 red, 1 yellow and 1 green. Size of board: 2" x 2".

NO ENTRY KIT - This Kit features a custom designed full color label and a bright flashing red LED. Perfect for bedrooms, dorm rooms, teachers' desks, offices, or any other place that you would like to express yourself. Size of PC Board: 3.25" x 4.75".
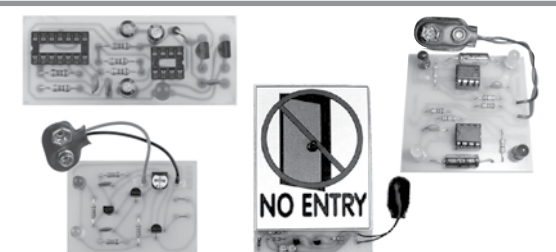
C6935   PACKAGE "D" $22.50

OPTIONAL BOXES FOR ABOVE KITS: TYPE 1 C6363 $3.00ea. (2 BOXES FOR 2 KITS) AND 1 TYPE C BASE C6622 $3.85 ea.
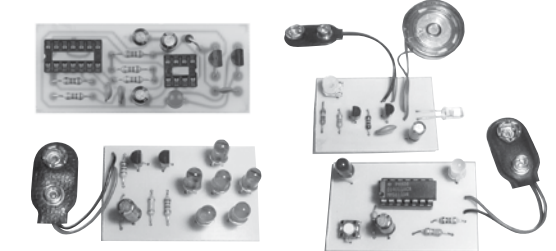
Learn to Solder Kit Package "E" 🖊 Skill Level 1

Package "E" starts off with our non-functional Learn to Solder Kit, which is an introduction to soldering and proper soldering techniques. After gaining some experience from the Learn to Solder Kit the student has three functional kits to build:

ELECTRONIC SIREN KIT - This kit produces the upward and downward wail of a "police siren" as you press and release a small pushbutton. Uses a small speaker. Size of PC board: 2" x 1.25".

YES/NO DECISION MAKER KIT - Simply press the button on your decision maker kit and two brightly colored LEDs will begin to flash. As soon as you release the button, one of the LEDs will remain on. The green LED indicates yes and the red LED indicates no. Uses IC circuitry. Size of PC board: 2" x 1.25".

LITTLE JITTERBUG ROBOT KIT - This kit uses a light sensor to come alive in darkness and scoot around with the help of a tiny vibrating motor. Customize its antennas and legs. Flashing LED allows you to find this little critter. Operates on a 3V CR2430 coin battery (included).
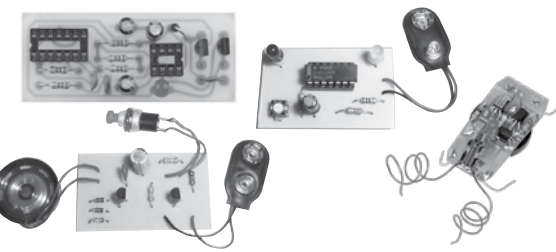
C6994   PACKAGE "E" $23.75

OPTIONAL BOXES FOR ABOVE KITS: TYPE 1 C6363 $3.00ea. (2 BOXES FOR 2 KITS)

Macho Meter Kit

Are you "macho" or a "nerd"? Or maybe you are a "jock", a "wimp" or "very smart". Whatever you are this kit brings back the days of the "Penny Arcade" with a modern twist. Five bright LEDs flash at random when you place your fingers on the touch plate. When you remove your fingers the meter indicates "your rating" by the LED which remains on - MACHO, JOCK, SMART, WIMP or NERD. Lots of harmless fun to use and fun to build. Operates from one 9V battery (not included). Size of board: 5 1/4" x 2 1/4". Complete with all parts, PC board and instructions. Skill Level 2.

OPTIONAL PLASTIC TYPE 5 BOX C6367 $6.00

*Macho Meter Kit..***C6362** **$12.25**
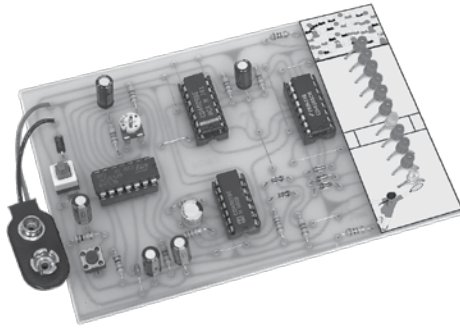
Digital Racquetball Game Kit

This game is like playing racquetball against a computer opponent. The ball is represented by LEDs, and you have to "hit" the ball by pressing a button. If you do, the ball changes direction, travels up the court, bounces off the wall, then returns for you to hit again. That's not all! Suddenly the speed of the ball changes and you have to play faster or slower to keep up with the game. This kit also includes an adjustable speed control so that beginners will enjoy playing just as much as the "experts". You have to keep on your toes though, because if you miss the ball, the game stops and you will have to start over. Operates from one 9V battery (not included). Size of board: 4.5" x 3". Complete with all parts, PC board and instructions. Skill Level 2.

OPTIONAL PLASTIC TYPE 4 BOX C6366 $5.75

*Digital Racquetball Game Kit...***C6726** **$19.25**
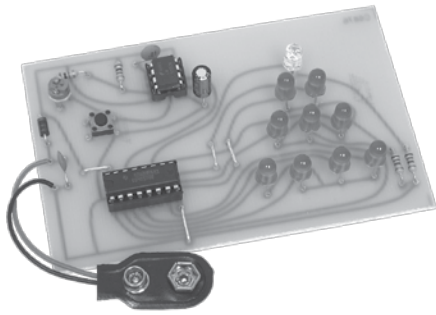
Grab the Gold Game Kit

This exciting game kit features a bright red LED pyramid with a clear LED on top. When power is applied each of the 10 LEDs light up in a sequencing pattern. If you press and hold the small pushbutton just before the top clear LED is to light, this LED will stay on illuminating its bright orange glow indicating that you made it to the top and picked up the gold. If however your timing is off, one of the red LEDs will light up indicating "you lost". To make the game even more interesting, a control is provided to speed things up! When it's adjusted to its fastest position you'll need excellent reflexes and eye to hand coordination to Grab the Gold! Operates on one 9V battery not included. Size of board 2 1/2" x 4". Complete with all parts, PC board and instructions. Skill Level 2.

OPTIONAL TYPE A MOUNTING BASE C6620 $3.00

*Grab the Gold Game Kit...***C6876** **$12.50**
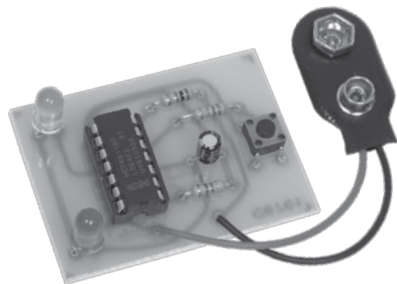
IC Decision Maker Kit

If you have ever had difficulty in making a decision then this kit may be just the answer you've been looking for. When you depress a small on board switch a bright green LED and a bright red LED begin to alternately flash. When you release the button, one of the LEDs stays on indicating the decision. Red means no and green means yes. Fun to use and fun to build. Uses a CMOS IC and operates on one 9V battery (not included). Size of PC board: 1 3/8" x 1 7/8". Complete with all parts, PC board & instructions. Skill Level 1.

OPTIONAL PLASTIC TYPE 1 BOX C6363 $3.00

*IC Decision Maker Kit...***C6701** **$6.95**

Deluxe Decision Maker Kit

Let this colorful "electronic brain" make all of your important decisions for you. Displays the results to your questions using a variety of bright colored LEDs. Uses a 2 IC circuit and a label you glue onto the PC board. Simply press the start button and all of the LEDs begin to flash. As soon as you release the button, one LED will glow to indicate the "electronic brain's" decision. Lots of fun to use and easy to build. Operates from one 9V battery (not included). Size of PC board: 3" x 3 5/8". Complete with all parts, label, PC board and instructions. Skill Level 2.

OPTIONAL PLASTIC TYPE 4 BOX C6366 $5.75

*Deluxe Decision Maker Kit..***C6780** **$11.25**

Shaky Jake's Steady Kit

Shaky Jake needs to keep it steady while mixing chemicals in his science lab so he's using The Shaky Jake's Steady Kit for practice. Jake needs to maneuver his way along the self-shaped wire course with his wand. If the wand's loop touches the wire course at any point within the course, the red LED lights up and the piezo buzzer alerts a continuous sound until the game is reset indicated by the green LED. The operation of Shaky Jake's Steady Kit is the latching action of an SCR circuit. This kit is fun to use for all ages and is easy to build and solder for the beginner. The self-shaped wire course and wand loop can be as easy or challenging as the builder desires. Operates from one 9V battery (not included). Size of PC board is 2.5" x 6". Size of Base 4" x 7". Complete with all parts, PC board and Base. Requires soldering. Skill Level 1.
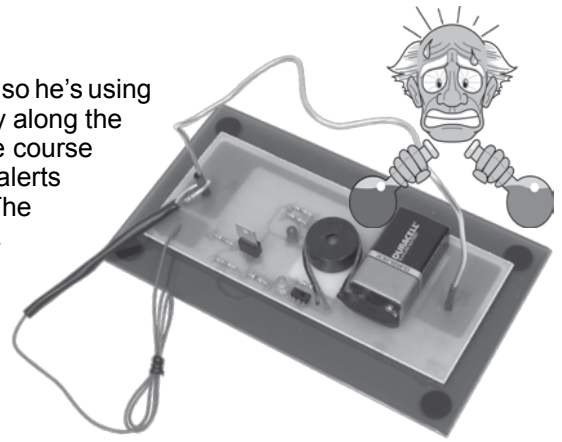
*Shaky Jake's Steady Kit..*C7084 $14.95

Lie Detector Kit

Simple to build kit emits a tone which changes with amount of skin resistance between two fingers. If you are relaxed, a lower pitched tone will be heard. Fun to use and great for parties. Has 2 copper touch plates on circuit board and small speaker. Fun "poor man's lie detector"! Operates from one 9V battery (not included). Size of circuit board: 1 1/2" x 2". Complete with all parts, PC board & instructions. Skill Level 1.

OPTIONAL PLASTIC TYPE 3 BOX C6365 $5.00

*Lie Detector Kit..*C4657 $8.25
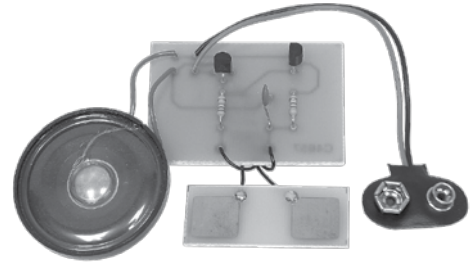
Cliff-Hanger Game Kit

Have you ever met the challenge of mountain climbing? If not, this is your chance to do it electronically. "Cliff-Hanger" will let you experience the thrill of mountain climbing and test your skills to reach the top! Easy? Not at all, but it can be done. In this game, you will have to press the control button at the precise moment to advance to the next Level on your way to the top of the mountain. If the control button is pressed at the wrong time, you will fall to the bottom. You will not break any bones but you will have to start all over again. This kit features a variable skill adjustment and LEDs of three different colors (red, green, and yellow). Operates from a 9V battery (not included). Size of PC board: 4 1/8" x 3 1/8". Complete with all parts, PC board and instructions. Skill Level 2.

OPTIONAL PLASTIC TYPE 4 BOX C6366 $5.75

*Cliff-Hanger Game Kit..*C6723 $16.00
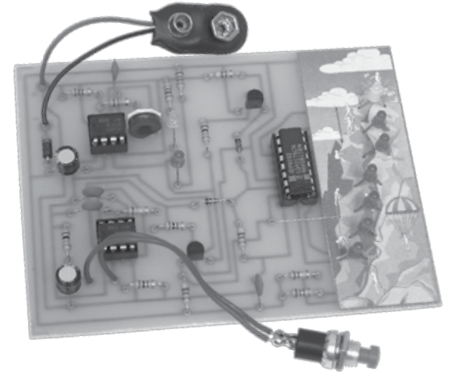
Alien Attack Game Kit

Aliens are coming in their warships and are dropping their bombs on you! The only way to defend yourself is by neutralizing their bombs before they reach the ground. The bombs fall at different speeds and in different directions. This kit includes 19 LEDs of three different colors (red, yellow and green), 3 action switches, a circuit board, three ICs, and other components. Operates from one 9V battery (not included). Size of board: 4 1/2" x 3 3/4". Complete with all parts, PC board and instructions. Skill Level 3.

OPTIONAL PLASTIC TYPE 5 BOX C6367 $6.00

*Alien Attack Game Kit...*C6727 $19.25
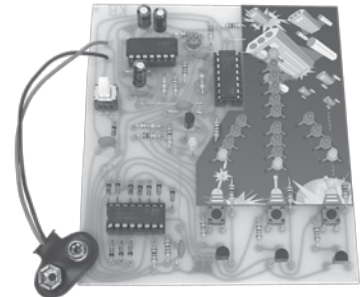
Time Reaction Tester Kit

If you ever thought that your sense of timing was good here's an electronic kit to prove it! If your timing is good the LED will stay on, if not the LED continues to flash. Operates from one 9V battery (not included). Size of board: 1" x 2". Complete with all parts, PC board and instructions. Skill Level 1.

OPTIONAL PLASTIC TYPE 1 BOX C6363 $3.00

*Time Reaction Tester Kit...*C4516 $6.50
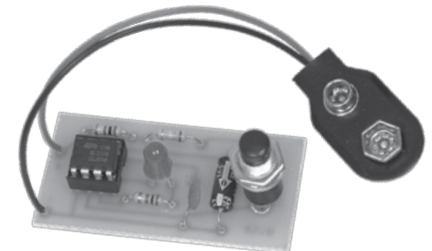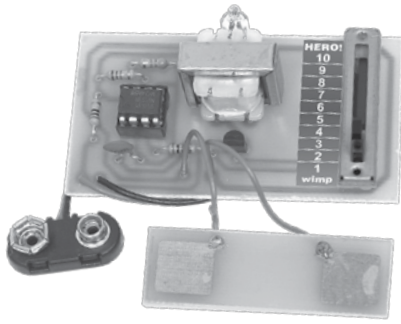
The Tingler Kit ✎

Are you a "Hero" or a "Wimp"? This kit will give you a chance to prove it! Just set the slide control to the "Wimp" position and place your fingers on the touchpads. You'll then receive a "tingling" sensation from the mild electrical voltage. Now slide the control towards the "Hero" position and you'll find it's much more difficult to leave your fingers on the touchpads (as the tingling sensation becomes much greater). This kit is fun to build and fun to use. Operates from one 9V battery (not included). Size of board: 2 1/2" x 1 1/2". Complete with all parts, PC board and instructions. Skill Level 1.

*OPTIONAL PLASTIC TYPE 2 BOX* C6364 $4.00

*The Tingler Kit...***C6740** **$13.50**
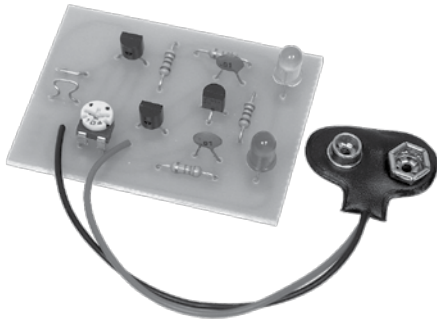
Touch Sensitive Coin Tosser/Decision Maker Kit ✎

This small kit uses 3 transistors and 2 LED circuits to make decisions or replace coin tossing. Features one red and one green LED that flash at a high frequency when you touch the sensor wires. When you quit touching the sensor your decision is shown by the LED that remains on. Has control to adjust the "odds". Safe and fun to operate. Size of board: 1.6" x 2.2" Operates from one 9V battery (not included). Complete with all parts, PC board and instructions. Skill Level 1.

OPTIONAL PLASTIC TYPE 2 BOX C6364 $4.00

*Touch Sensitive Coin Tosser/Decision Maker Kit...................***C6354** **$6.25**

Rolling Dice Kit ✎

Push the switch on this kit and bright red dice "roll" rapidly. Release the button and one of six standard dice patterns stays on. That's your number! If you are playing a game that requires two dice, simply remember the first number and roll one more time for the second number. Uses 21 bright red jumbo LEDs and two ICs to provide an electronic way to replace standard dice. Kit features black outline printed dice on top of circuit board. Operates from one 9V battery (not included). Size of board: 6.7" x 3". Complete with all parts, PC board and instructions. Skill Level 1. *OPTIONAL TYPE B MOUNTNG BASE* C6621 $3.55

*Rolling Dice Kit...***C6412** **$17.25**
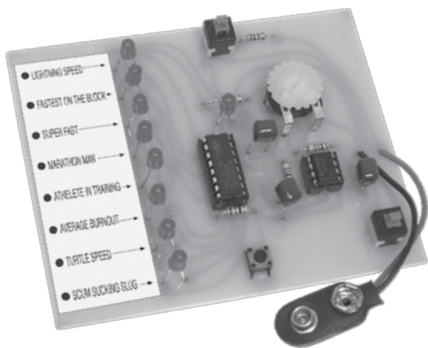
Super Time Reaction Kit ✎✎

Amazing and fun to use kit tests your reaction! Simply depress the "start" button with your finger. Eight bright LEDs begin to flash in sequence. Then as fast as possible, press and release the "stop" button with the same finger. Your reaction rating is indicated by the label next to the bright LED which remains on! Have contests with friends to see who has the fastest reaction speed. Do you react with "Lightning Speed" or "Turtle Speed"? Our colorful kit will tell you. Features adjustable speed control to set difficulty Level and operates from a 9V battery (not included). Size of PC board: 3 1/4" x 4". Complete with all parts, PC board and instructions. Skill Level 2.

OPTIONAL PLASTIC TYPE 5 BOX C6367 $6.00

*Super Time Reaction Kit..***C6716** **$11.95**
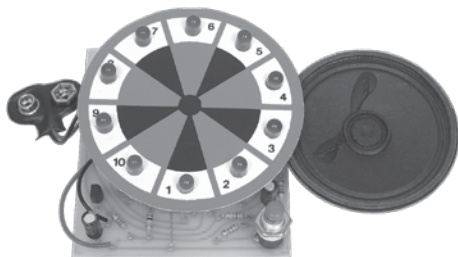
Wheel Of Fortune Kit ✎✎✎

Very popular game device! Push the start button and a bright red "ball" (LEDs) appears to spin around ten numbers gaining speed as you hold the button down. When you release the button, the electronic ball appears to slow down and finally comes to a stop on one number. As the ball spins, a small speaker emits a ticking sound in synchronization. Features colorful faceplate and jumbo red LEDs. Operates from one 9V battery (not included). Size: 2 5/8" x 2 7/8". Complete with all parts, PC board and instructions. Skill Level 3.

OPTIONAL PLASTIC TYPE 5 BOX C6367 $6.00

*Wheel Of Fortune Kit...***C3806** **$15.75**

Heart Throb Kit

How fast will your heart throb? Are you the calm, silent, cold type or the hot-blooded casanova type? Only the Heart Throb Kit knows for sure! This fun kit features a bright red heart which has the ability to flash at various rates for different people. Place your fingers on the contacts and see how fast the heart will throb! Kit features IC circuitry and 36 jumbo red LEDs. Operates from one 9V battery (not included). Size of board: 3.6" x 4". Complete with all parts, PC board and instructions. Skill Level 2.
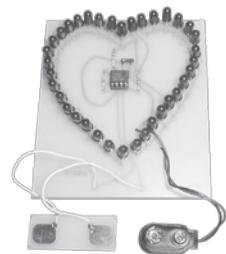
OPTIONAL TYPE A MOUNTING BASE C6620 $3.00

Heart Throb Kit **C6410 $13.50**

The Haunted Pumpkin Kit

Here is the perfect kit to spice up your Halloween. In addition to alternately flashing its green LED eyes with its red LED nose, it also produces an eerie, spooky electronic sound from its piezo mouth. The kit operates from one 9V battery (not included) and uses a 2 IC circuit and full color "pumpkin label" for you to glue on to the PC board. Size of PC board: 5" x 3". Complete with all parts, label, PC board and instructions. Skill Level 2.

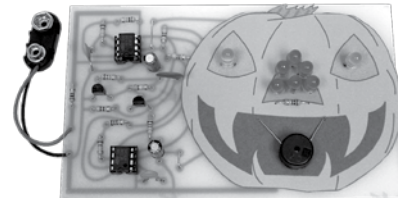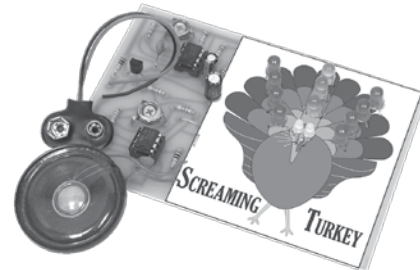*OPTIONAL PLASTIC TYPE 4 BOX* C6366 $5.75

The Haunted Pumpkin Kit.. **C6783 $12.95**

Screaming Turkey Kit

Colorful kit makes a great addition to any Thanksgiving celebration. Perfect for an unusual centerpiece or home decoration. Not only does the Screaming Turkey Kit produce a screaming turkey sound, but also the colorful red, green, and yellow LEDs light up and flash. The 2 IC circuit features 2 controls to adjust the sound and flashing speed. Operates from one 9V battery (not included) and uses a full color "Turkey" label that is glued to the PC board before you install the components. Size of PC board: 5" x 3". Complete with all parts, PC board, label & instructions. Skill Level 2.

OPTIONAL PLASTIC TYPE 4 BOX C6366 $5.75

Screaming Turkey Kit.. **C6784 $12.95**

Magic Christmas Tree Kit

This unique kit is sure to surprise all who see it! The kit shows a colorful Christmas Tree which has 3 white looking bulbs (actually LEDs). When a 9V battery (not included) is connected, the bulbs on the tree blink all red then all green and then back to red again. The effect is magic! Size of PC board: 2 1/2" x 2 5/8". Circuitry uses 4 transistors to produce this unique display and a color label which you glue to the PC board before you start assembling the kit. Complete with all parts, label, PC board & instructions. Skill Level 1.

OPTIONAL PLASTIC TYPE 2 BOX C6364 $4.00

BULK SAVINGS AVAILABLE SEE PAGE 23

Magic Christmas Tree Kit... **C6773 $7.95**

Magic Christmas Tree Kit - Bulk Package for 25 Students..... **C8109 $159.95**

Flashing Christmas Trees Kit

Bright red and green Christmas trees alternately flash in this colorful kit. This kit uses one IC and 2 transistor electronic circuit with 18 colorful miniature bright LEDs. Features adjustable flash speed control that can be adjusted from slow alternate flashing to a shimmering effect. Great attention getter, Christmas ornament, Christmas display, etc. Size of circuit board: 3 5/8" x 1 7/8". Operates from a 9V battery (not included). Complete with all parts, PC board and instructions. Skill Level 2.
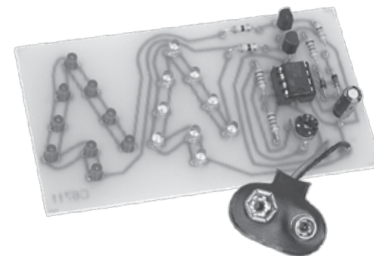
OPTIONAL PLASTIC TYPE 4 BOX C6366 $5.75

Flashing Christmas Trees Kit **C6711 $11.00**

Learn to Solder "Mesmerizing Christmas Tree"

This amazing 4.4" tall Christmas Tree uses 6 frosted white LEDs that contain one integrated circuit (IC) each which cause each LED to light up and flash different colors at different times. You'll see a kaleidoscope of bright reds, greens, blues etc. flashing and fading from each LED. In addition, it has a clear LED on the top of tree that flashes red and green! The learn to solder components are 7 special "Dogbone" resistors and 3 regular resistors to give your student ample solder practice before soldering the special flashing LEDs which contain a built in IC. Tree is self-standing or can also be hung on a strong branch of a tree with included nylon line. Skill Level 1.

Learn to Solder "Mesmerizing Christmas Tree"..................... **C1225 $12.95**

Chaney Electronics, Inc. • PO Box 4116 • Scottsdale, AZ 85261 • www.chaneyelectronics.com

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Cosmic Poppers Kit

This very unusual kit emits random pops and random explosions of bright white light when it is in the dark (kit has a CDS cell to sense the absence of light). This kit produces one of the most unusual "out-of-this-world" effects! Features SCR and CDS circuitry with 3 bright lamps and a piezoelectric speaker. Easy to build and it creates a spectacular display. It may even cause speculation as to whether or not it was left here by aliens! We put 4 of these into a darkened room and the resulting sound and display was amazing. Size of PC board: 2.9" x 2.4". Operates on 2 "AA" batteries (not included). Complete with all parts, PC board and instructions. Skill Level 1.

OPTIONAL PLASTIC TYPE 4 BOX C6366 $4.25

BULK SAVINGS AVAILABLE
SEE PAGE 23

*Cosmic Poppers Kit *C6893   **$8.95**
Cosmic Poppers Kit - Bulk Package for 25 Students.........................C8110   **$179.00**

The Aggravator Kit

This exciting kit combines the most aggravating features from 2 of our most popular kits: the Insanity Alarm and the Secret Squealer. Hide this kit in a room and it will wait in total silence until the room darkens. In the dark it begins its aggravating function: for about 2 or 3 seconds every 3 to 5 minutes it emits a screaming tone. Any unsuspecting person will want to find the culprit so he will turn on the lights, but the Aggravator Kit will remain silent again making it impossible to find. On returning to the quiet of the darkened room the person will be startled again after 3 to 5 minutes. This is a fun, harmless kit that will bring hours of enjoyment. Complete with all parts, PC board and instructions. Operates from one 9V battery (not included). Size of PC board: 1 1/4" x 2 3/4". Skill Level 1.

OPTIONAL PLASTIC TYPE 2 BOX C6364 $4.00

The Aggravator Kit... C6840   **$8.75**

Gravity Detector? Kit

This kit detects gravity? Well, not really- What it does do is remain in an off state until a curious person lifts up the kit to study it. The "Gravity Detector" has a CDS cell underneath the board which activates when the board is lifted and gives the "curiosity seeker" a mild electric shock from the "handle" attached to the board. A great practical joke item! Uses IC, SCR and FET circuitry. Operates from one 9V battery (not included). Size of PC board: 4" x 2". Comes with all parts, PC board & instructions. Skill Level 2.

Gravity Detector? Kit... C6894   **$13.25**

The RoboNote Kit

Before running out the door, check your RoboNote for any important messages. Need a reminder to bring your lunch, pack your science project or that it's test day? Now your reminder notes won't go unnoticed with the help of the flashing activated RoboNote. The RoboNote uses two large and bright 10mm LEDs that alternately flash by using a 555 IC configured as a multi-vibrator. As soon as you read your note, you can remove it from its clip and switch it off to put the RoboNote to rest. Perfect for beginner student as it has 34 practice parts (besides all the active parts) to solder throughout the design of the robot's base and body. Operates on a 9V battery (not included). Uses 2 PC boards. Size of base PC board: 3.25" x 3.25" and size of body PC board 1.25" x 3". Complete with all parts, PC boards and instructions. Skill Level 1.

The RoboNote Kit..C7098   **$13.50**

Hypnotic Bars Kit

This unusual kit consists of 10 bright green LED bars which shimmer or flash for a hypnotic looking display. Kit features 1 IC circuit with a "Bar Effect" control to adjust the back and forth flashing for the optimum unique shimmering display. Although the kit won't hypnotize you it really has a unique attention getting display of bright green bars. Operates from one 9V battery (not included). Size of PC board 2" x 1 1/2". Complete with all parts, PC board and instructions. Skill Level 2.

*OPTIONAL PLASTIC TYPE 1 BOX* C6363 $3.00

Hypnotic Bars Kit.. C6772   **$8.75**

Electronic Cricket Kit ✐

Here's just what you need to complete your home, an electronic cricket that starts "chirping" every time the lights go out. Of course if you turn on the lights to look for the "cricket", it becomes silent again. Uses a CMOS IC and CDS cell circuit with an adjustable "cricket" sound control, that enables you to adjust your cricket to the chirp that you find most irritating. Simple to build and loads of fun to use. Your electronic cricket is sure to get the attention it deserves. Operates from one 9V battery (not included). Size of the PC board: 1 7/8" x 2 1/2". Complete with all parts, PC board and instructions. Skill Level 1.

OPTIONAL PLASTIC TYPE 2 BOX C6364 $4.00

Electronic Cricket Kit..**C6707 $8.25**
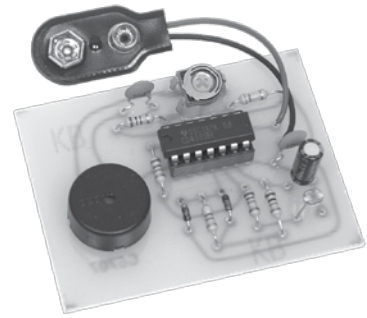
TOWS Kit ✐

The TOWS (Terribly Obnoxious Woodpecker Sound) Kit produces a very loud woodpecker sound. This small kit just can't be ignored as it generates the pecking sound of a crazed bird. Uses a small piezo and a two transistor electronic circuit that generates a high voltage to provide a terribly loud "rapping/tapping" sound from the piezo. Features include a small control to adjust the speed of the "tapping", and operation from a 9V battery (not included). Size of PC board: 2 3/4" x 1 3/8". Complete with all parts, PC board and instructions. Skill Level 1.

OPTIONAL PLASTIC TYPE 2 BOX C6364 $4.00

BULK SAVINGS AVAILABLE
SEE PAGE 23

TOWS Kit **C6712 $7.95**
*TOWS Kit - Bulk Package for 25 Students* **C8103 $159.00**
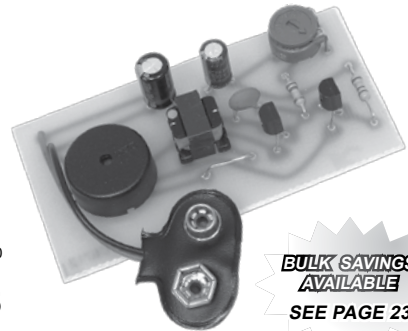
Phasor Sound And Light Kit ✐

This kit produces the sound and light you've seen in the futuristic weapons used in most space movies! Phasor Kit features a control to vary the frequency of the sound. Great for attention getters, science projects or use your imagination and place our kit in models, robots, phasor guns, etc. Operates from one 9V battery (not included). Size of board: 2 3/4" x 2". Complete with all parts, PC board and instructions. Skill Level 1.

OPTIONAL PLASTIC TYPE 5 BOX C6367 $6.00

BULK SAVINGS AVAILABLE

Phasor Sound & Light Kit...**C6406 $10.75**
Phasor Sound & Light Kit - Bulk Package for 25 Students.........**C8101 $170.00**
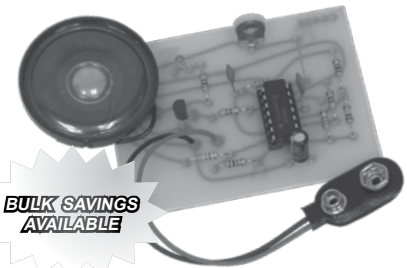
Crazy Chirper Kit ✐

BULK SAVINGS AVAILABLE
SEE PAGE 23

Here's the perfect kit to keep your unsuspecting guests entertained or should we say irritated. The chirper kit remains silent until the lights go out (just like a real cricket). The moment it gets dark the "chirper" starts to make its racket driving your guest crazy. Of course, when your guest turns the light on to look for the "chirper", it becomes quiet again. This fun kit features a CDS cell circuit with 2 transistors, piezo speaker and a flashing LED (which can be disabled). The built-in sound control allows you to adjust the sound from that of a crazy cricket to that of a chirping canary. Operates from one 9V battery (not included). Size of board: 3" x 2". Complete with all parts, PC board and instructions. Skill Level 1.

OPTIONAL PLASTIC TYPE 2 BOX C6364 $4.00

Crazy Chirper Kit..**C6470 $8.50**
Crazy Chirper Kit - Bulk Package for 25 Students..................**C8102 $115.00**

Jam Man Kit ✐✐

Jam Man and band are coming to rock your town. Uses a preprogrammed PIC16F88 microcontroller and a sensitive IC amplifier with an electret microphone to drive a 5" x 7" green LED matrix display. Jam Man is happy and sings along to the music. When its quiet for awhile he takes 5 (frowns and then goes to sleep) until he hears sounds again, then he gets back on stage! Operates on one 9V battery (not included). Size of PC board 2.8" x 1.25". Complete with all parts, PC board and instructions. Requires soldering. Skill Level 2.

Jam Man Kit...**C6987 $29.95**
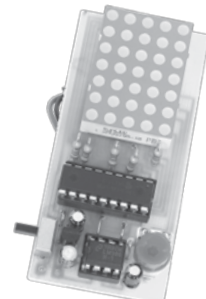
Persistence Of Vision (POV) Kit

Create words that appear in mid air from 7 bright LEDs as the kit is waved. The POV kit uses a microcontroller that is easy to program with a simple built in pushbutton switch. Complete with all parts, programmed PIC16F88, PC board, and instructions. Operates from a 9V battery (not included). Requires soldering. Skill Level 2.

*MicroControlled Digital Clock Kit...*C7029 $25.50

Rotating Persistence of Vision (POV) Message Kit

Create words that appear in a circle in mid air. This kit is similar to our C7029 POV kit, however you don't wave it -just turn it on and the words appear in a circle. Uses a microcontroller that is easy to program with a simple built in pushbutton switch. Complete with all parts, programmed PIC16F88, motor, 2 PC boards, instructions, and 6" x 8" attractive base. Operates on two 9V batteries (not included). Skill Level 2.

*Rotating POV Message Kit..*C7030 $32.75

MicroControlled Digital Clock Kit

Build your own Microcontrolled Digital LCD clock! This kit uses a programmed microcontroller to keep time and send data to a serial interfaced digital display. The LCD clock kit displays hours and minutes (12 hour format) on a 4 line LCD display. The clock digits are 7/8" tall and the second indicator blinks every second. A simple to use menu is controlled by two push button switches that allow you to set the hour and minute. Features an adjustable display contrast and a nice green back-light for the LCD display. The kit consists of a main chassis PC board and a separate LCD display PC board. Standoffs and front mount LCD display make a professional looking project and a great conversation piece. Size of each PC board is 3.75" x 2.5". Depth of assembled clock is about 15/8". This kit operates on an included AC power adapter (no battery required). Complete with all parts, PC boards and instructions. Requires soldering. Skill Level 2.

*MicroControlled Digital Clock Kit...*C7407 $30.25

IR Control Spinner Kit

BULK SAVINGS AVAILABLE SEE PAGE 23

Your classroom will be mesmerized with the dizzying effects of their IR Control Spinner Kit. Uses a motor and a sensitive IR module to allow it to operate with any brand or type of IR remote control (not included). Operates from one 9V battery (not included). Size of board: 3-1/8" x 1-1/4". Complete with all parts, 2 hypotic wheels, PC board & instructions. Skill Level 1.

IR Control Spinner Kit... C6778 $10.25
IR Control Spinner Kit - Bulk Package for 25 Students............. C8108 $199.50
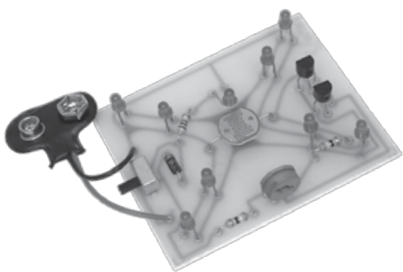
Laser Target Kit

Here's a kit that provides a fun use for your laser pointer. Aim your pointer at the small "CDS Bull's-eye" and if you strike it, you will see a bright red star (made from 8 LEDs). The kit features a red LED aiming spot that can be switched on at night for target practice. The target can also be used inside during daylight hours as it has a control to adjust for ambient room light. The range of use is only limited by the range of your laser pointer. Create contests and sharpen your skills with this fun kit. Operates from one 9V battery (not included). Size of board: 2 1/2" x 2". Complete with all parts, PC board & instructions. Skill Level 1.   *OPTIONAL PLASTIC TYPE 2 BOX* C6364 $4.00

*Laser Target Kit...*C6739 $8.75

9VDC Strobe Warning Flasher Kit

Compact strobe flasher produces brilliant flashes of white light from a Xenon horseshoe strobe tube. Features newly revised circuit for brighter output and less current drain. Operates from standard 9V alkaline battery (not included) and flashes approximately 40 times per minute. Great safety device and attention getter. Small board is only 1-7/8" x 1-1/2". Complete with all parts, PC board and instructions. Skill Level 2.

OPTIONAL PLASTIC TYPE 3 BOX C6365 $5.00

9VDC Strobe Warning Flasher Kit..**C5175**   **$17.25**
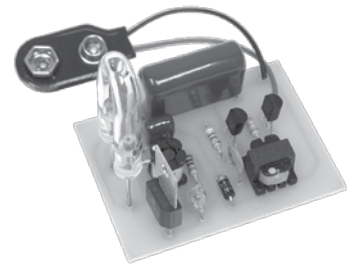
120VAC Variable Strobe Light Kit

One of our most popular strobe light kits - thousands of these are in use. Features variable flash rate and straight Xenon strobe tube. Speed can be varied from about 120 to 200 flashes per minute. Great for parties, dances, displays, etc. Operates from standard 120VAC. Size of board: 3" x 2". Complete with all parts, PC board and instructions. Skill Level 2.

OPTIONAL PLASTIC TYPE 4 BOX C6366 $5.75

120VAC Variable Strobe Light Kit..**C3071**   **$15.25**
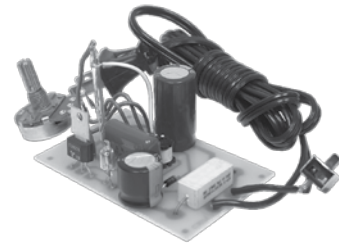
120VAC Brilliant Strobe Light Kit

Good medium priced strobe light kit which features variable speed and brilliant flashes of white light from a horseshoe shaped Xenon flashtube. Great for parties, dances, etc. Reliable design circuit has control to vary flash rate from about 120 to 200 flashes per minute. Another very popular strobe kit which will be the hit of the party. Operates from standard 120VAC. Size of board: 3" x 5". Complete with all parts, PC board and instructions. Skill Level 2.

OPTIONAL PLASTIC TYPE 4 BOX C6366 $5.75

120VAC Brilliant Strobe Light Kit..**C4823**   **$19.25**
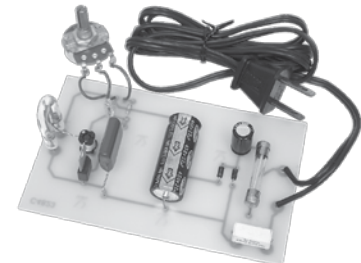
Tiny Strobe Light Kit

Tiny Strobe Light Kit operates from 3 AAA batteries (not included) and produces a bright white flash of light from a 1" long Xenon strobe tube. The flash rate with fresh batteries is about 60 per minute (rate will slow down as the batteries get weaker). Great for warning flashers on bikes, RC airplanes, hiking, etc. Can be seen even in bright sunlight! Uses 2 transistors and an efficient inverter circuit to produce the high voltage necessary for the xenon tube. Size of PC board is 1.8" square. Complete with all parts, battery holder, and instructions. Skill Level 1.

OPTIONAL PLASTIC TYPE 2 BOX C6364 $4.00

Tiny Strobe Light Kit...**C6995**   **$13.50**
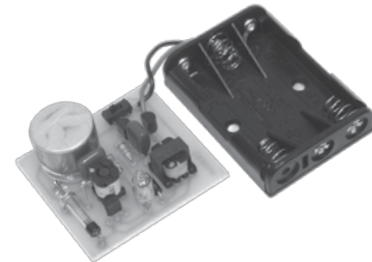
Unfiltered Blacklight Strobe Kit

Light up blacklight inks and posters with this unique Unfiltered Blacklight Strobe Kit (great for Halloween effects). Uses 3 large (10mm) UV LEDs that flash at a rate adjustable from about 80 up to 300 flashes per minute. In a darkened room the output is amazing. Operates from one 9V battery (not included) and features an IC circuit with "on board" adjustable speed control. Size of PC board 3 3/8" x 2 1/4". Complete with all parts, PC board and instructions. Skill Level 2.

OPTIONAL PLASTIC TYPE 2 BOX C6364 $4.00

Unfiltered Blacklight Strobe Kit..**C6973**   **$14.95**
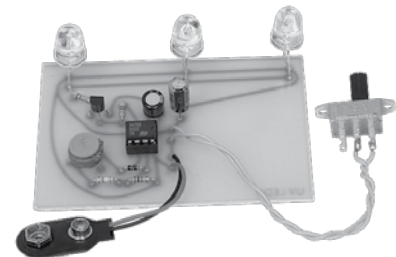
Battery Operated Blacklight Kit

Here's an unusual kit that is just the thing for finding fluorescent minerals, detecting insects that glow under black lights, reading invisible fluorescent inks, etc. Completely portable kit comes with an unfiltered large U shaped black light tube and efficient solid state drive circuitry. Features control to vary the brightness and lightweight portable design. Size of board: 7" x 1.8". Operates from 6VDC (battery not included). Complete with all parts, PC board and instructions. Skill Level 1.

Battery Operated Blacklight Kit...**C6889**   **$13.25**

Secret Alarm Kit 🖊
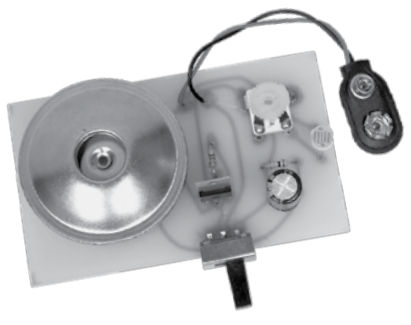
This is the perfect device to scare off someone who opens your desk, dresser, file cabinet, lunch box, etc. Simply turn the arming switch to the on position. You have a couple of seconds to put your Secret Alarm in a desk and close the drawer. The next time someone opens it, a loud obnoxious noise comes from the horn until unit is reset. Uses sensitive CDS and SCR circuit to respond to light. As long as it is kept in the dark it is quiet, but when light hits the sensor, WATCH OUT!   Size of board: 3.75" x 2.25" Operates from one 9V battery (not included). Complete with all parts, PC board and instructions. Skill Level 1.

OPTIONAL PLASTIC TYPE 5 BOX C6367 $6.00

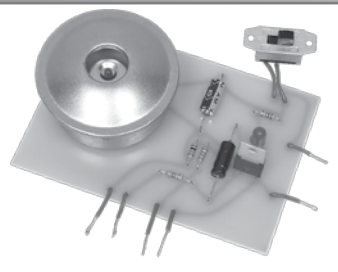*Secret Alarm Kit*..**C6455 $11.25**
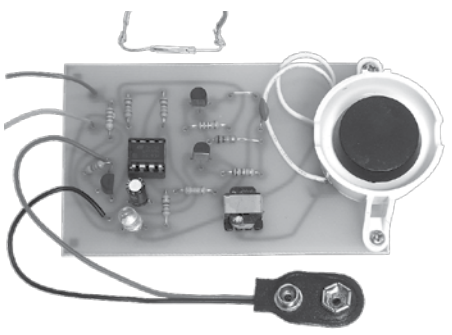
Burglar Alarm Kit 🖊

Universal type burglar alarm kit has on board horn and red LED "ON" indicator. Can be used with either normally closed and/or normally open loops. This allows you to use reed switches, foil, lever switches, mat switches or just about any type and quantity of switches (switches not included). With the ability to use N.C. and N.O. switches many areas can be protected by this one kit. Operates from 9VDC (battery not included). Size of board: 3.6" x 2.5". Skill Level 1.

OPTIONAL PLASTIC TYPE 5 BOX C6367 $6.00

Burglar Alarm Kit..**C6280 $11.50**

Window/Door Burglar Alarm Kit 🖊🖊

This kit makes a great burglar alarm for your home. Whenever anyone attempts to open your window, this kit produces a loud pulsating electronic sound from the built in piezo speaker and it also flashes a bright red LED. The sound won't stop, even if the window is closed again. Only you can shut it off. The kit will protect a window or door. It is very simple to install as only a small magnet (included) needs to be attached (glued) to the movable window or door. Uses IC, SCR and transistor circuitry. Operates on a 9V battery (not included). Size of PC board: 2 1/8" x 3 7/8". Complete with all parts, PC board, reed switch, magnet and instructions. Skill Level 2.

OPTIONAL PLASTIC TYPE 5 BOX C6367 $6.00

Window/Door Burglar Alarm Kit...**C6703 $12.75**

Insanity Alarm Kit 🖊
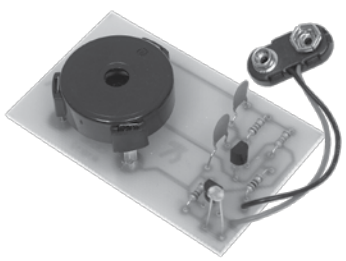
Set this kit in an inconspicuous place with light shining on it and it remains perfectly silent, however, as soon as the light is turned off the kit emits a high pitched irritating tone! When they turn the light on again to look for the culprit it keeps silent again! Easy to build and loads of fun to use. Operates from one 9V battery (not included). Size of board: 2.9" x 1.8". Complete with all parts, PC board and instructions. Skill Level 1.

OPTIONAL PLASTIC TYPE 2 BOX C6364 $4.00

Insanity Alarm Kit..**C6240 $8.25**

Manual Siren Kit 🖊

This kit produces upward and downward wail of a "police siren" as a push-button is depressed then released. Good for sound effects, parties, etc. Kit is small in size but produces a loud tone from a small speaker. Kit features transistor and IC circuitry which operates from one 9V battery (not included). Size of PC board: 2 3/4" x 2". Complete with all parts, PC board and instructions. Skill Level 1.

OPTIONAL PLASTIC TYPE 3 BOX C6365 $5.00

Manual Siren Kit...**C6382 $10.25**

Super Siren Kit ✎✎

When you need a real irritating siren, you need the Super Siren Kit. It features one special IC that contains 3 separate transistors and a high gain power amp. Great for getting everyone's attention in the classroom! Siren sound is the pulsating automatic electronic type and features 2 separate sound adjustments. Size of board: 2.5" x 2.75". Operates from one 9V battery (not included). Complete with all parts, speaker, PC board & instructions. Skill Level 2.

OPTIONAL PLASTIC TYPE 4 BOX C6366 $5.75

*Super Siren Kit...***C6474 $12.50**
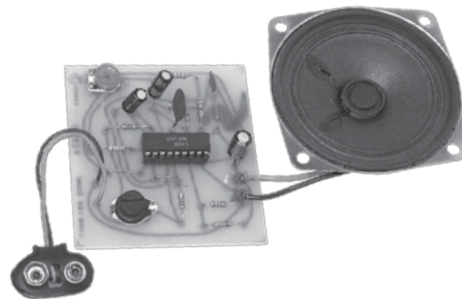
10 Note Sound Synthesizer Kit ✎✎

Very unique synthesizer features 10 adjustable notes, variable pitch, variable speed, flashing LED and individual or flowing notes. Make "robot" sounds, space war, computer effects, etc. One of our most unusual kits! Circuit features three ICs and 12 trimmer resistors. Size of board: 2 13/16" x 4". Operates from one 9V battery (not included). Complete with all parts, PC board and instructions. Skill Level 2.

OPTIONAL PLASTIC TYPE 5 BOX C6367 $6.00

*10 Note Sound Synthesizer Kit...***C4722 $16.50**
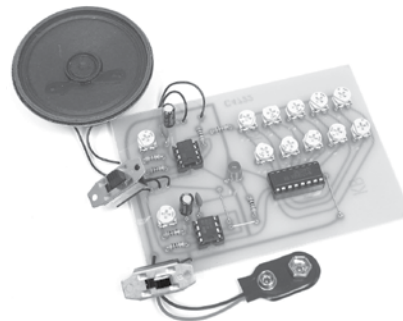
Sci-Fi Sound Effects "Theremin" ✎

Produce all kinds of weird sound effects with this small simple to build kit. Utilize 2 light sensors: one controls the frequency and the other modulates (varies) the sound. Simple one IC circuit with built in speaker and an RCA jack so you can send the sound to your amplifier if desired. Simply use your hands to produce some of the strangest, spookiest sounds you'll ever want to hear! Operates from one 9V battery (not included). Size of PC board 3 1/2" x 1 1/4". Complete with all parts, PC board and instructions. Skill Level 1.

OPTIONAL PLASTIC TYPE 5 BOX C6367 $6.00

*Sci-Fi Sound Effects "Theremin".......................................***C6841 $12.50**
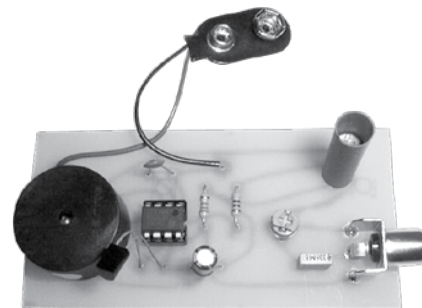
8 Note Tunable Electronic Organ Kit ✎

Tunable 8 note organ features IC oscillator and Darlington transistor output stage to provide clear loud tones. Play simple compositions, favorite tunes, etc. Uses reliable push-button switches for continuous trouble-free performance. Each note is fully tunable with on board trimmer controls. Operates from 3V to 9VDC. Size of board: 2" x 5". Complete with all parts, PC board and instructions. Skill Level 1.

OPTIONAL PLASTIC TYPE 5 BOX C6367 $6.00

*8 Note Tunable Electronic Organ Kit..................................***C4736 $13.50**

Light Sensitive Sound Generator Kit ✎

Simple to build kit creates a tone which varies depending on the amount of light you allow to strike on a CDS cell. Kit features IC circuitry and small speaker to create this unusual effect. In total darkness the unit emits clicks or is silent; as light increases the kit emits clicking sounds then with more light a continuous tone. Operates from 9V battery (not included). Size of board: 1 1/4" x 1". Complete with all parts, PC board and instructions. Skill Level 1.

OPTIONAL PLASTIC TYPE 2 BOX C6364 $4.00

*Light Sensitive Sound Generator Kit.................................***C4164 $7.75**
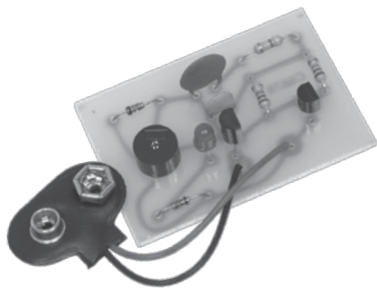
Chirp Chirp Kit

When you are in the mood for some disturbing, irritating chirping sounds, this kit will meet your needs. Not only does it produce a sharp chirping racket, but it also flashes a bright LED along with the noise. Operates on one 9V battery (not included). Size of PC board 2" x 1.25". Complete with all parts, PC board and instruction. Skill Level 1.

OPTIONAL PLASTIC TYPE 1 BOX C6363 $3.00

*Chirp Chirp Kit...*C6878 **$6.50**
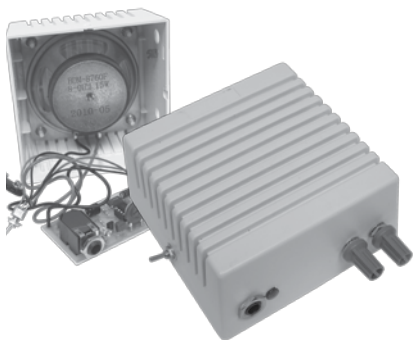
Guitar Practice Amp Kit with Case

The Guitar Practice Amplifier Kit with Case is perfect for any aspiring guitar musician! Operates on one 9V battery (not included) and delivers up to 1Watt of guitar music from a built in 3-1/2" speaker. Features standard 1/4" female jack for guitar cord, volume control, tone control, on/off switch, "on" indicator and compact case of 4.25" square x 2.25" high. Comes with all parts, PC board, case and knobs. Skill Level 2.

*Guitar Practice Amp Kit with Case *C7058 **$26.75**
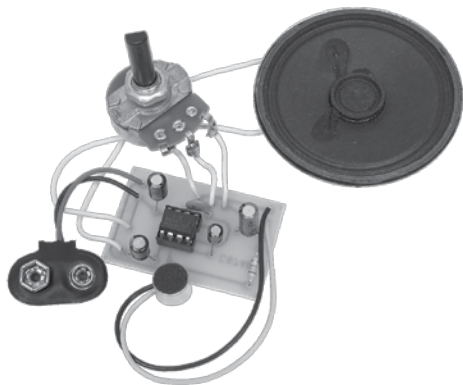
Megaphone Kit

With this Chaney kit you can build a useful megaphone or PA system to amplify your voice. This kit is small and self-contained and includes a high-gain electret microphone, an IC audio amplifier, a volume control and a speaker. You will really be amazed with the clarity of sound and power of this little amplifier system. Ideal for use as a megaphone, PA system, one-way intercom, or many other applications where sound needs to be amplified. Approximate size of board: 1 3/4" x 1 1/4". Operates from a standard 9V battery (not included). Complete with all parts, PC board, and instructions. Skill Level 1.

OPTIONAL PLASTIC TYPE 5 BOX C6367 $6.00

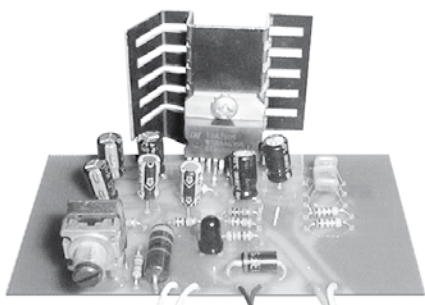*Megaphone Kit..*C6746 **$10.75**

20 Watt RMS Mono Amp Kit

High power amp for various booster applications. Kit features short circuit and open circuit protection and has very low distortion (1% or less). Amplifier has red LED "on" indicator and will boost any tuner, radio, cassette, CD player to room filling volume out of your speaker! Size of board: 3.75"x 2.1". Operates from 12VDC. Complete with all parts, PC board and instructions. Skill Level 2.

OPTIONAL PLASTIC TYPE 5 BOX C6367 $6.00

*20 Watt RMS Mono Amp Kit..*C6444 **$23.25**
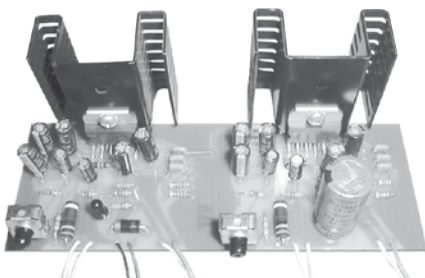
20W + 20W Stereo Amp Kit

Two separate high power amps on one PC board. Each amp has its own Level control and puts out an incredible 20 Watts RMS. Features red LED "on" indicator and low distortion circuitry. Great stereo booster amp for your car sound system. Use with any speakers capable of handling at least 20 watts. Size of board: 6" x 2.25". Operates from 12VDC. Complete with all parts, PC board and instructions. Skill Level 2.

OPTIONAL PLASTIC TYPE 5 BOX C6367 $6.00

*20W + 20W Stereo Amp Kit..*C6442 **$31.50**

TOL (Temperature, Ohm, Light) Kit

Our Temperature, Ohm, Light (TOL) Kit makes a great introduction to programmable integrated circuits (PIC) by demonstrating 4 specific functions being handled by a single pre-programmed PIC. This kit measures three different parameters and displays them on a 3.5" LCD. This kit uses a PIC16F88 pre-programmed IC to allow you to measure resistance from 30 Ohms up to 470k Ohms, temperature from 35ºF to 130ºF and light intensity from 0% up to 100% (full sunshine). The PC board is about 4.4" long x 1.6" wide and comes with the LCD display already soldered in (the pins on the display are very close together so we solder and test the connections to prevent solder bridges). Operates on one 9V battery (not included) and uses a built in thermistor to measure ambient temperature, a CDS cell to measure relative light intensity (when the light intensity drops below 10% a bright yellow LED lights up). Finally, the kit uses clip leads that you can attach to resistors to display their values in ohms. Complete with all parts, pre-programmed PIC, PC board with display installed and instructions. Skill Level 2.

OPTIONAL PLASTIC TYPE 5 BOX C6367 $6.00

*TOL Kit...***C6996 $27.75**

Continuity Tester Kit

OPTIONAL PLASTIC TYPE 2 BOX C6364 $4.00

Handy kit is a must for anyone working with electronic circuits. Traces circuit paths for continuity, checks for broken wires, shorted contacts, etc. Uses small piezoelectric speaker which emits a pleasant tone and features a bright red LED visual indication. Operates from one 9V battery (not included). Size of board: 2 1/4" square. Complete with all parts, PC board and instructions. Skill Level 1.

*Continuity Tester Kit...***C6385 $6.25**

CMOS/TTL Logic Probe Kit

The Chaney C6722 CMOS/TTL Logic Probe Kit is handy, reliable, and inexpensive. Designed to operate with voltages between 5 and 20 volts, this logic probe is the ideal tool for troubleshooting CMOS and TTL digital circuits. It has a visual indicator that consists of a red LED and a green LED. The red LED indicates a High (1) logic state, and the green LED indicates a Low (0) logic state. This logic probe is small, easy to build, and easy to use. Operates from the power of the circuit being tested. Size of PC board: 3 5/8" x 1 1/4". Complete with all parts, PC board and instructions. Skill Level 1.

*CMOS/TTL Logic Probe Kit...***C6722 $9.25**

Plant Soil Monitor Kit

OPTIONAL TYPE 1 PLASTIC BOX C6363 $3.00

Time saving kit allows the user to determine if the plant soil needs more watering or is wet enough. Features IC circuitry and two bright LEDs. Green LED indicates ample moisture, red LED indicates more water is needed. Kit comes with simple moisture probe and has trimmer control to adjust kit to a "standard" of moisture content. Helps prevent over-watering or under-watering of plants, gardens, etc. Operates on 9V battery (not included). Size of board: 2" x 1.8". Complete with all parts, PC board and instructions. Skill Level 1.
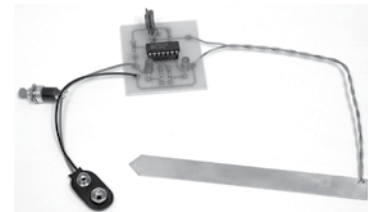
*Plant Soil Monitor Kit...***C4744 $8.75**

Temperature Warning Kit

OPTIONAL TYPE 2 PLASTIC BOX C6364 $4.00

The Temperature Warning Kit can be set to indicate a rise or drop in temperature. You simply adjust the control knob on the kit for the ambient control temperature that the thermistor is sensing. Now as the temperature changes, a red or green LED indicates over or under temperature from the standard. Features an IC circuit and operation from one 9V battery (not included). Use this kit to warn of garden temperatures below 32˚ or refrigerator/freezer temperatures above normal, etc. Order optional wire to allow for remote location of thermistor sensor if desired. Size of PC board 2" x 1.8". Comes complete with all parts, PC board, 9" of wire, and instructions. Skill Level 1.
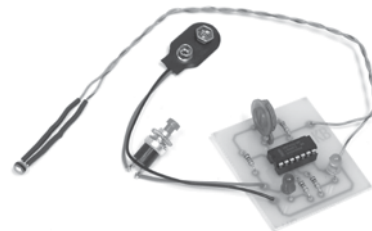
*Temperature Warning Kit...***C6908 $7.75**

Battery Tester Kit

OPTIONAL PLASTIC TYPE 5 BOX C6367 $6.00

Our Battery Tester Kit is just the answer to test all types of common batteries. Simple to use–just select the battery voltage to be tested by rotating the selection switch and connect the clip leads to the battery. If the battery is good, the green LED lights. If it's bad the red LED lights. Kit features 5 calibration trim pots to allow you to set up your tester to test any 5 different type batteries that you frequently use. Size of board: 2.6" x 3.5". Operates from one 9V battery (not included). Complete with all parts, PC board and instructions. Skill Level 1.
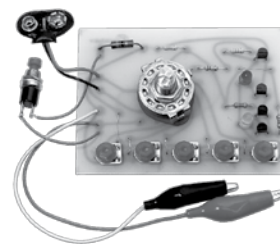
*Battery Tester Kit...***C6414 $14.95**

Make: Electronics by Charles Platt

A great introduction to electronics if you are new to the subject or field is the Make: Electronics Second Edition book by Charles Platt (Sold in bookstores). "In this book, you'll see for yourself how components work and what happens when they don't. You'll short out a battery and overheat an LED. You'll also open up a potentiometer and a relay to see what's inside. No other book gives you such an opportunity to learn from real-life experiences."

Make: Electronics 2nd Edition - Entry Level Kit (Exp 1 - 11)..........................CM1001   **$56.95**
Make: Electronics 2nd Edition - Soldering Kit (Exp 12- 14)..........................CM1002   **$20.50**
Make: Electronics 2nd Edition - Supplemental Kit (Exp 15 - 24)....................CM1003   **$40.50**
Make: Electronics 3rd Edition - The Basics (Exp 1 - 5)...................................CM3001   **$17.95**
Make: Electronics 3rd Edition - Switching (Exp 6 - 11)...................................CM3002   **$36.95**

Make: Electronics
Second Edition
Charles Platt
Entry-Level Kit (For Experiments 1-11)

Thermoelectric Generator Demonstrator Kit

A unique lab demonstration for thermoelectric power uses a Peltier Thermoelectric Generator that produces enough electricity from a cup of hot water and a cup of cold water to cause a small DC fan motor to spin. Relies on the Seebeck-Peltier effect by which multiple PN thermoelements are sandwiched between two ceramic plates. The Peltier module is sandwiched between 2 metal L-brackets. Great demonstration of an application of non-polluting "green energy". Use over and over again. No soldering required – just plug in fan to generator, place across cup of ice water and cup of hot water. Note: Mugs not included. You need only supply 2 foam cups or mugs, water, and ice as all other items are included!

Thermoelectric Generator Demonstrator Kit *C7602*   **$14.95**

MISC ITEMS

9V Battery Snaps
(Pack of 100) 9V battery snaps. We use these in our kits.

C6539 $46.00

555 Timer IC (Package of 10)
555 timer integrated circuit. We use these in many of our kits.

C6544 $5.75

Super LED Assortment
Assortment of all types, colors, sizes and shapes of prime high quality LEDs. Assortment contains 100 pieces in a reclosable bag.

C6515 $8.25

Bag of Electronic Parts
Zip close plastic bag containing about 40 popular electronic parts. You'll get 5-red LEDs, a Green LED, a Yellow LED, 5-2N3904 NPN transistors, 5-2N3906 Transistors, a 106 SCR, a 386 IC, 2-555 ICs, a 4001 IC, a 4011 IC, a 4017 IC, a 4093 IC, 2-Diodes, 2-9V snaps, plus several popular resistor and capacitor values!

C6831 $10.00

Workaholic 9V Batteries
Brand new sealed 9VDC Workaholic Alkaline Batteries.

Pkg of 4   G20084 $10.95
Pkg of 12   G20083 $28.00

Transistors
Our most commonly used transistors

2N3904 NPN Transistors
C6504   (Pkg 100) $23.00

2N3906 PNP Transistors
C6505   (Pkg 100) $23.00

SMD Tweezer Magnifier
This is one of the most useful items for working with SMD parts. Tweezer folds out from magnifying glass so that you can get a clear view of the tiny part you're picking up. Size about 3 1/2" long.

C6513 $6.00

Large Universal Breadboard
Handy breadboard for making prototype circuits. White 6 1/2" x 2 1/8" quick connect breadboard accepts almost all types of electronic components and wires. Consists of 126 groups of 5 connected terminal points and 8 bus lines of 25 connected terminals. High quality.

C7113 $10.00

Digital Multimeter with Cable Tester
Digital VOM measures DC and AC voltages, resistance, and current, plus RJ11, RJ12, and RJ45 cables. This meter measures 0-200 millivolt up to 0-600VDC in 5 ranges, ac voltages of 0-200 millivolt up to 0-600V. DC current from 0-2000uA up to 0-10A in 4 ranges, and hFE plus diodes. Has 5 resistance measuring ranges spanning from 0 to 2 Megohms. Complete with test leads and instructions in retail package. Model# MM7300.

G20107 $14.95

Mystery Surprise Box
We stuffed 100's of various components in the 5" x 6" mysterious component surprise box. You will find lots of LEDs in addition to many other new and valuable component types. It's an incredible value and an exciting mystery box to explore.

G22665 $5.95

Power Point Courses (CD or USB)

C7800   The Atom
C7801   Current, Voltage & Resistance
C7802   Ohm's Law
C7803   Resistor Color Code
C7804   Component Identification
C7805   Learn to Solder

$29⁹⁵ each

C7806   All Six Courses $159.95

For more details see Website.

Computer Based Training Courses

C9004   Component Identification
C9001   Current, Voltage & Resistance
C9002   Ohm's Law
C9003   Resistor Color Code
C9005   Learn to Solder

BEST VALUE!

$34⁹⁵ each

C9006: All Five Courses Only $164.95

CHANEY ELECTRONICS offers a complete line of enclosures for your electronic projects. For economy and simplicity, we offer several sizes of crystal clear hinged plastic boxes. To give you more variety, we also offer four Display Base Mounting Kits.

PLASTIC BOXES

These boxes can be drilled, painted and custom finished by you, or you can take the plain box and simply place your project in it with a minimum effort. We have listed the recommended box size below each electronic project kit. The complete box list is shown below if you wish to compare sizes.

TYPE 1   TYPE 2

TYPE 3   TYPE 4

TYPE 5

TYPE 1 BOX	2" L x 2" W x 1-1/8" D	**C6363**	$3.00
TYPE 2 BOX	3-9/16" L x 2-9/16" W x 1" D	**C6364**	$4.00
TYPE 3 BOX	3-9/16" L x 2-9/16" W x 2" D	**C6365**	$5.00
TYPE 4 BOX	5-1/8" L x 3-1/8" W x 2-3/4" D	**C6366**	$5.75
TYPE 5 BOX	6" L x 4" W x 2" D	**C6367**	$6.00
Press-Apply RUBBER FEET for above Boxes (Package of 8)		**C6397**	$1.00

DISPLAY BASE MOUNTING KITS

These attractive grey acrylic mounting bases are perfect for finishing off your kit. Each Display Base comes with 4 press apply rubber feet and a piece of double-stick foam mounting tape to mount your kit to the base.

TYPE A BASE	4" x 6"	**C6620**	$3.00
TYPE B BASE	4" x 7"	**C6621**	$3.55
TYPE C BASE	6" x 8"	**C6622**	$3.85
TYPE D BASE	5" x 10"	**C6623**	$4.40

Display Base
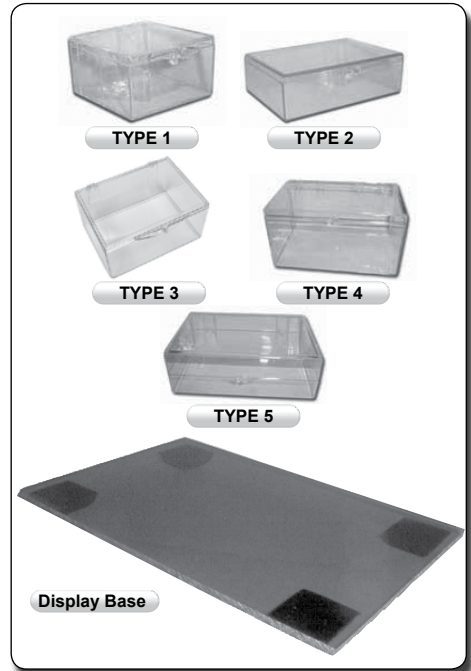
30 Watt Pencil Soldering Iron
Comfortable grip pencil soldering iron is perfect for building several electronic projects or light repair work. The tip on this iron does not last as long as the tip on the soldering station below. You can re-file it several times to extend the use.

C6652 $8.95

Deluxe Digital Soldering Station
High quality soldering station has adjustable temperature range of 302˚ to 842˚F (150º to 450˚C). Features large LCD display, has stand to hold iron and sponge for cleaning tip. Operates from standard 120VAC. It has a comfortable grip, a nice digital temperature control system, and replaceable tip if it should wear out.

Replacement Tip for C7272

C7273

C7272 $89.95

Side Cutting Pliers
High quality, chrome-plated, side cutting small type pliers. Sharp cutting jaws with spring type insulated grips. Very handy for kit building and very good quality. Made in China. Size: 4-1/4" long.

C6511 $6.50

Needle Nose Pliers
High quality, chrome-plated, needle nose miniature pliers for precision electronic work. Precision made with spring type insulated grips. Handy and precision made in China. Size: 5-7/8" long.

C6512 $6.50

Variable Temperature Soldering Iron Station
This soldering station has front panel control to adjust temperature from 302° F to 842° F to match most soldering requirements. Operates on standard 120VAC 60Hz. Has built in tip cleaner sponge and sturdy soldering iron holder. Supplied with a pointed tip.

G22784 $39.95

Special Soldering Helping Hands
This is the most useful of the "helping hands" series for anyone building or repairing electronic kits. It comes with fully adjustable clips for holding your circuit board, a quality magnifying glass, and a small soldering iron holder. Just provide a soldering iron and you're ready to go.

C6694 $10.25

Handy Tube of Rosin Core Solder
Perfect for all types of electronic kit construction or repair. Slip it into your pocket or tool chest. No hassle - easy way to have the right solder available when you need it. Tube is about 3 1/2" long. Solder is about .031 diameter and is perfect for almost every electronic application! Length about 6 ft.

C6650 $3.95

Handy Solder Wick
Great for de-soldering components from a PC board. Simply lay end of solder wick braid on top of PC solder pad and heat with solder iron. The solder "wicks up" into the braid so you can easily remove the component. 5 ft long–in a handy dispenser.

C6651 $3.75

Handy R.O.H.S Solder
This specially formulated rosin core solder contains no lead and meets R.O.H.S. requirements. This solder is perfect for use in building any of our R.O.H.S. kits. You get a 6ft coil (ample supply to build several kits).

C7329 $3.00

Visit www.ChaneyElectronics.com for hundreds of Electronic Components & Supplies

Stock#	Description	Pg#	Qty.	Cost	Total	Stock#	Description	Pg#	Qty.	Cost	Total
C1225	LTS - "Mesmerizing Christmas Tree"	29		12.95		C6739	Laser Target Kit	32		8.75	
C3071	120VAC Strobe Light Kit	33		15.25		C6740	The Tingler Kit	28		13.50	
C3287	LED Flasher Kit	24		5.75		C6746	Megaphone Kit	36		10.75	
C3806	Wheel of Fortune Kit	28		15.75		C6756	Flashing Alien Robot Kit	17		10.25	
C4164	Light Sens. Sound Generator Kit	35		7.75		C6758	Universal Learn To Solder Kit	14		12.50	
C4407	Super LED Flasher Kit	24		7.75		C6761	IR Vision Robot Kit	20		39.95	
C4432	Fascination Star Kit	18		16.75		C6762	34 in 1 Deluxe Robotic Lab	4		73.50	
C4516	Time Reaction Kit	27		6.50		C6763	44 in 1 Communications Lab	9		55.95	
C4530	3 Channel Color Organ Kit	19		17.50		C6772	Hypnotic Bars Kit	30		8.75	
C4567	Jumbo LED Flasher Kit	24		5.75		C6773	Magic Christmas Tree Kit	29		7.95	
C4657	Lie Detector Kit	27		8.25		C6774	Classroom Solder Practice w/ PP	22		131.25	
C4722	10 Note Sound Kit	35		16.50		C6778	IR Control Spinner Kit	32		10.25	
C4736	8 Note Organ Kit	35		13.50		C6780	Deluxe Decision Maker Kit	26		11.25	
C4744	Plant Soil Monitor Kit	37		8.75		C6783	Haunted Pumpkin Kit	29		12.95	
C4823	Brilliant Strobe Kit	33		19.25		C6784	Screaming Turkey Kit	29		12.95	
C5175	9VDC Warning Flasher Kit	33		17.25		C6788	Flashing Stop Sign Kit	16		13.95	
C6240	Insanity Alarm Kit	34		8.25		C6792	Red Mysterious Pyramid Kit	18		17.50	
C6280	Burglar Alarm Kit	34		11.50		C6793	Yellow Mysterious Pyramid Kit	18		17.50	
C6353	3 Channel Sound Activated Kit	19		29.95		C6794	Green Mysterious Pyramid Kit	18		17.50	
C6354	Coin Tosser Kit	28		6.25		C6795	Blue Mysterious Pyramid Kit	18		17.50	
C6359	Binary Counter Kit	13		15.75		C6810	Giant LED Traffic Light Kit	16		10.25	
C6360	Decimal Display Kit	13		16.75		C6815	Bright Star Color Organ Kit	19		10.95	
C6362	Macho Meter Kit	26		12.25		C6818	Exploding Star Color Organ Kit	19		22.95	
C6373	Fantastic ATOM Expander Kit	18		39.95		C6819	25 in 1 Magnetism Exploration Lab	11		31.75	
C6382	Manual Siren Kit	34		10.25		C6825	Super LED Chaser Kit - Red	18		6.50	
C6385	Continuity Tester Kit	37		6.25		C6826	Super LED Chaser Kit - Green	18		6.50	
C6398	Red Arrow Kit	16		25.25		C6827	Super LED Chaser Kit - Yellow	18		6.50	
C6399	Green Arrow Kit	16		25.25		C6828	Super LED Chaser Kit - Super Bright Red	18		6.95	
C6400	Yellow Arrow Kit	16		25.25		C6829	Super LED Chaser Kit - Super Bright Grn	18		6.95	
C6406	Phasor Sound and Light Kit	31		10.75		C6836	Additional Solder Practice Parts	22		26.95	
C6410	Heart Throb Kit	29		13.50		C6840	Aggravator Kit	30		8.75	
C6412	Rolling Dice Kit	28		17.25		C6841	Sci-Fi Sound Theremin Kit	35		12.50	
C6414	Battery Tester Kit	37		14.95		C6845	Learn to Solder Robot Kit	14		12.50	
C6437	3D Shimmering Pyramid Kit	17		34.95		C6853	10 in 1 Solar Exploration Lab	6		36.75	
C6439R	Magic Light Sweep Kit (Red)	17		14.50		C6861	SMD Flashing Initials Kit	13		19.50	
C6439Y	Magic Light Sweep Kit (Yellow)	17		14.50		C6864	Learn to Solder Rocket Kit	14		12.50	
C6439B	Magic Light Sweep Kit (Blue)	17		14.50		C6876	Grab the Gold Game Kit	26		12.50	
C6439RWB	Magic Light Sweep Kit (RWB)	17		14.50		C6878	Chirp Chirp Kit	36		6.50	
C6440	Flashing Triangle Kit	24		8.75		C6880	4 in 1 Package A Solder Kits	25		22.00	
C6442	20W + 20W Stereo Amp Kit	36		31.50		C6881	4 in 1 Package B Solder Kits	25		21.50	
C6444	20W RMS Mono Kit	36		23.25		C6891	Blinder LED Flasher Kit	17		7.25	
C6445	Learn to Solder Kit	14		11.95		C6893	Cosmic Popper Kit	30		8.95	
C6446	Shimmering Color Organ Kit	19		12.25		C6894	Gravity Detector? Kit	30		13.25	
C6454	Electronic Fireworks Kit	16		11.25		C6898	Introduction to Kit Building	22		41.50	
C6455	Secret Alarm Kit	34		11.25		C6902	Unstoppable Bug Robot Kit	20		25.50	
C6470	Crazy Chirper Kit	31		8.50		C6908	Temperature Warning Kit	37		7.75	
C6474	Super Siren Kit	35		12.50		C6912	Red White & Blue Star Strobe Kit	WEB		15.75	
C6491	Deluxe Learn to Solder Kit	15		13.95		C6919	Brilliant 3D White Cube Kit	16		39.25	
C6701	IC Decision Maker Kit	26		6.95		C6923	Flashing Arrow Kit	16		8.25	
C6703	Window/Door Burglar Alarm Kit	34		12.75		C6927	Racing Robot Learn to Solder Kit	21		19.95	
C6707	Electronic Cricket Kit	31		8.25		C6934	4 in 1 Package "C" Solder Kits	25		21.25	
C6708	SMD IC Star Flasher Kit	13		9.75		C6935	4 in 1 Package "D" Solder Kits	25		22.50	
C6709	33 in 1 Deluxe Electronic Exploration Lab	5		36.75		C6936	Electro Spinner Kit	19		19.75	
C6711	Flashing Christmas Trees Kit	29		11.00		C6944	Bulk Brilliant Blinker Kit (Pkg 25)	22,23		146.25	
C6712	TOWS Kit	31		7.95		C6945	Brilliant Red & Blue SMD Flasher Kit	13		7.75	
C6716	Super Time Reaction Kit	28		11.95		C6953	Ultra-Bright RGB LED Flasher Kit	24		10.75	
C6719	Deluxe SMD Learn To Solder Kit	15		12.95		C6955	Rock Star Kit	18		19.50	
C6721	35 in 1 Digital Lab	8		47.25		C6958	Customizable Brilliant Blinker Kit	22		6.50	
C6722	CMOS/TTL Logic Probe Kit	37		9.25		C6959	Magical LED Learn to Solder Robot Kit	14		11.95	
C6723	Cliff-Hanger Game Kit	27		16.00		C6972	Learn to Solder 9V Battery Tester Kit	15		12.50	
C6725	Intro to SMD Technology	12		32.95		C6973	Unfiltered Blacklight Strobe Kit	33		14.95	
C6726	Digital Racquetball Game Kit	26		19.25		C6984	Little Jitterbug Robot Kit	20		7.95	
C6727	Alien Attack Game Kit	27		19.25		C6987	Jam Man Kit	31		31.45	

Column A Total [ ]   **Column B Total** [ ]

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Stock#	Description	Pg#	Qty.	Cost	Total
C6994	4 in 1 Package "E" Solder Kits	25		23.75	
C6995	Tiny Strobe Light Kit	33		13.50	
C6996	TOL Kit	37		27.75	
C7012	Electric Slider LTS Robot Kit	15		14.95	
C7019	Adj Flashing Bright Light LED Kit	18		6.75	
C7029	Persistence of Vision (POV) Kit	32		25.50	
C7030	Rotating POV Kit	32		34.75	
C7041	Solar House "Green Energy" Lab	10		62.95	
C7045	Ultimate Learn to Solder Kit	15		9.95	
C7049	Light Spider Robot II Kit	20		17.25	
C7058	Guitar Practice Amp Kit with Case	36		26.75	
C7074	Samurai Koji Kit	22		12.50	
C7075	"Flash" The Robot Kit	17		12.50	
C7084	Shaky Jake's Steady Kit	27		14.95	
C7089	21 in 1 Electronic Discovery Kit	7		24.75	
C7098	The RoboNote Kit	30		13.50	
C7407	Microcontrolled Digital Clock Kit	32		30.25	
C7410	3 in 1 Sportscar Racer Kit	21		15.75	
C7411	Super Capacitor BreadboardRacer	21		20.95	
C7601	Learn to Solder Flashing Star	24		14.95	
C7602	Thermoelectric Demo Kit	38		14.95	
C7603	Learn to Solder Shark	21		5.50	
C7604	Learn to Solder Clown Fish	21		5.50	
C7605	Learn to Solder Angler Fish	21		5.50	
C7606	Learn to Solder Cactus	Web		6.50	
C7800	The Atom PP Course	38,Web		29.95	
C7801	Current, Voltage & Resistance PP	38,Web		29.95	
C7802	Ohm's Law PP Course	38,Web		29.95	
C7803	Resistor Color Code PP Course	38,Web		29.95	
C7804	Components Identification PP Course	38,Web		29.95	
C7805	Learn to Solder PP Course	38,Web		29.95	
C7806	All Six PP Training Courses	38,Web		159.95	
C8100	(Pkg 25) Blinder Kit Bulk	17,23		139.00	
C8101	(Pkg 25) Phasor Sound & Light Kit	31		130.00	
C8102	(Pkg 25) Chirper Kit Bulk	31,23		150.00	
C8103	(Pkg 25) TOWS Kit Bulk	31,23		159.00	
C8104	(Pkg 25) Jitterbug Kit Bulk	20,23		180.00	
C8106	(Pkg 25) Chaser Kit Bulk	18,23		130.00	
C8107	(Pkg 25) Alien Robot Kit	17,23		205.00	
C8108	(Pkg 25) IR Control Spinner Kit	32,23		199.50	
C8109	(Pkg 25) Magic Christmas Tree Kit	23		159.95	
C8110	(Pkg 25) Cosmic Popper Kit	30,23		179.00	
	COMPUTER BASED TRAINING				
C9001	Current, Voltage & Resistance CBT	38,Web		34.95	
C9002	Ohm's Law CBT	38,Web		34.95	
C9003	Resistor Color Code CBT	38,Web		34.95	
C9004	Component Identification CBT	38,Web		34.95	
C9005	Learn to Solder CBT	38,Web		34.95	
C9006	All 5 Computer Based Training	38,Web		164.95	
	PARTS/SUPPLIES				
C6363	TYPE 1 PLASTIC BOX	39		3.00	
C6364	TYPE 2 PLASTIC BOX	39		4.00	
C6365	TYPE 3 PLASTIC BOX	39		5.00	
C6366	TYPE 4 PLASTIC BOX	39		5.75	
C6367	TYPE 5 PLASTIC BOX	39		6.00	
C6500	(100) Standard 5mm Red LEDs	Web		15.00	
C6501	(100) Standard 5mm Green LEDs	Web		15.00	
C6502	(100) Standard 5mm Yellow LEDs	Web		15.00	
C6504	2N3904 Transistor(100)	38		23.00	
C6505	2N3906 Transistor(100)	38		23.00	
C6511	Side Cutting Pliers	39		6.50	

Stock#	Description	Pg#	Qty.	Cost	Total
	PARTS/SUPPLIES CONT.				
C6512	Needle Nose Pliers	39		6.50	
C6513	SMD Tweezer Magnifier	38		6.00	
C6515	Super LED Assort (Pkg 100)	38		8.25	
C6539	9V Battery Snap (Pkg 100)	38		46.00	
C6544	555 Timer IC (Pkg 10)	38		5.75	
C6620	4 X 6 Base Type A	39		3.00	
C6621	4 X 7 Base Type B	39		3.55	
C6622	6 X 8 Base Type C	39		3.85	
C6623	5 X 10 Base Type D	39		4.40	
C6650	Solder-Handy Tube Rosin Core	39		3.95	
C6651	Handy Solder Wick	39		3.75	
C6652	30Watt Pencil Soldering Iron	39		8.95	
C6694	Soldering Helping Hands	39		10.25	
C6831	Bag of Parts	38		10.00	
C7113	Large Universal Breadboard	38		10.00	
C7272	Deluxe Digital Soldering Station	39		89.95	
C7329	R.O.H.S Solder	39		3.00	
G20083	(12) Workaholic 9V Alkaline Battery	38		28.00	
G20084	(4) Workaholic 9V Alk. Battery	38		10.95	
G22665	Mystery Surprise Box	38		5.95	
G22784	Vari. Temp. Soldering Iron Station	39		39.95	
G23903	Deluxe USB Solar Panel	Web		8.95	
	ADD PRODUCTS BELOW				

ORDERING   CALL: 1- 800-227-7312 / FAX: (480) 451-9495

PAYMENT METHODS: We accept American Express, Discover, Mastercard, Paypal, Visa, Money Orders, and School Checks.

We accept Open Account Purchase Orders from schools in good standing with our Credit Department. Terms are NET 30.

All Purchase Orders must be authorized by the School District, email Info@ChaneyElectronics.com for information.

SHIPPING CHARGES, RETURNS AND REPAIRS
Please see detailed return and repair policy on our website:

www.ChaneyElectronics.com

Column C Total [　　]

Column D Total [　　]

CHANEY ELECTRONICS

P.O. BOX 4116
SCOTTSDALE, AZ 85261
Office: 1-480-451-9407

School Name_____

Teacher Name _____

Address_____

City_____ State_____ ZIP_____ Phone_____

Purchase Order #:

☐ **Check/Money Order**
☐ **VISA/Mastercard**
☐ **AMEX**
☐ **Open Account**
    (Schools Only)
    PO#_____

PLEASE INDICATE METHOD OF PAYMENT

Credit Card Information

Card Number: _____ **Exp Date:** _____

Card Holder Name (Please Print)**:** _____

Billing Address for Card:_____

        City: _____ **State:** ____ **Zip:** _____

To facilitate the selection of our products, we have designed a **QUICK CHECK ORDER FORM** for you to use when placing an order. Each product that we sell is listed on the **QUICK CHECK ORDER FORM** located on page 40-41. Since we have over 220 kits and many more parts and supplies, we recommend using this form to keep track of what you want. Please fill in the boxes below to complete your order.

Take the Total from each Column on the QUICK CHECK • • • • • ORDER FORM on page 48, 49 and enter the amounts in the appropriate boxes.

	TOTAL COLUMN A
	TOTAL COLUMN B
	TOTAL COLUMN C
	TOTAL COLUMN D

Add the totals from each column box above to get the subtotal • • • • •

	SUBTOTAL (minimum $25)
	TAX (AZ SCHOOLS ONLY)

Please add 7% of subtotal to estimate the shipping cost. Exact shipping charges are determined based on weight and distance of your order. • • Please call for a quote if you need an exact shipping amount.

	SHIPPING CHARGES

For special express service charges, see the center box on page 2. • • • •

	RUSH CHARGES ☐ 1 DAY ☐ 2 DAY
	GRAND TOTAL

MINIMUM ORDER $25.00

Add total plus tax (if applicable) and shipping charges to come up with the Grand Total.

Please Remember:
1. There is a **minimum order of $25.00**.
2. We **ship** most orders within 24-48 hours.
3. Phone orders **must** be placed by the Teacher, Purchasing Agent, or Administrative Personnel.
4. To order by phone, use our Toll Free Number: **1-800-227-7312**.
5. For **Technical**, **Billing**, **Shipping**, or any other Questions, call **(480) 451-9407**.
6. Any technical questions must be made by the Teacher. *Please do not have students call.*

21 in 1 Electronic Discovery Kit
C7089 - Page 7

Electro Spinner Kit
C6936 - Page 19

3 in 1 Non-Soldering Sportscar Racer Kit
C7410 - Page 21

The Tingler Kit
C6740 - Page 28

Thermoelectric Generator Demonstrator Kit
Mugs Not Included   C7602 - Page 38