

Theme Kits



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 getter, science projects or use your imagination and place our kit in models, robots, phasor guns, etc. Operates on 9V battery (not included). Size of board: 2 3/4" x 2". Complete with all parts, PC board and instructions. Skill Level 1.

C6406 \$6.95

Unique Kits

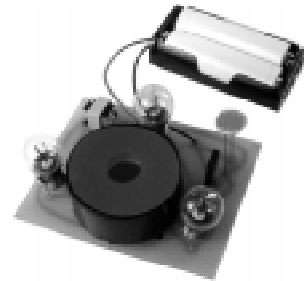


44 Second Kit

Here's a fun kit that won't go unnoticed by people in a room. Press the arming button and the kit gives you about 44 seconds (give or take) to get away before an electronic tone sounds and the number 44 lights up on the bright red display! Uses a unique circuit consisting of two transistors and a special shunt regulator. Operates from a 9V battery (not included). Size of PC board: only 1 7/8" square! Complete with all parts, PC board and instructions. Skill Level 1. This kit provides an interesting, economical and fun way to introduce students to digital displays, semiconductors, etc.

C6730 \$4.95

OPTIONAL PLASTIC BOX FOR ABOVE:
TYPE 1 BOX C6363 \$1.00



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.

C6893 \$6.95

OPTIONAL PLASTIC BOX FOR ABOVE:
TYPE 4 BOX C6364 \$2.50



Fish Caller Kit

This kit produces a clicking sound which is said to attract fish. We have had customers who have reported excellent results, but who knows?! Anyway, it's worth a try. Features very tiny circuit board and small piezo. Operates from 9V battery (not included). Size of board only 1" x 3/4" so it can be placed in almost any watertight jar and lowered into the water. Complete with all parts, PC board & instructions. Skill Level 1.

C4566 \$3.50

OPTIONAL PLASTIC BOX FOR ABOVE:
TYPE 1 BOX C6363 \$1.00



Unfiltered Blacklight Kit

This kit is similar to our filtered blacklight kits, however it uses a more economical 5 3/4" long unfiltered blacklight tube. This tube produces some visible light along with the blacklight. It can be used to detect fluorescent inks, certain fluorescent minerals, UV markings on genuine U.S. currency etc. Uses IC and transistor circuitry. Operates from a 9V battery (not included). Size of board 7 1/2" x 1 3/4". Complete with all parts, PC board, tube and instructions. Skill Level 1.

C6879 \$12.95

OPTIONAL TYPE "C" BASE FOR ABOVE:
C6364 \$1.50



Blue Brilliance Thin Light Kit

Our keychain size Blue Brilliance Thin Light Kit produces a bright blue light from a mini 3mm Blue LED. Use it as a mini flashlight to illuminate keyholes, find light switches or avoid obstacles in the dark. Very nice quality reliable kit is only 2 1/4" L x 1" W x 1/4" thick. Uses 2 long-life high capacity lithium coin batteries (included) that can provide up to 10 minutes of usage per day for every day for a year (of course, if you don't use it each day for 10 minutes the batteries will last even longer). Skill Level 1. Kit features reliable pushbutton momentary switch, batteries, blue LED, PC board and instructions.

C6850 \$6.95



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. Works on one 9V battery (not included). Size of PC board: 4" x 2". Comes with all parts, PC board & instructions. Skill Level 2.

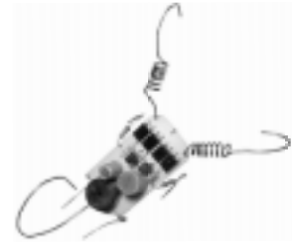
C6894 \$9.95

Unique Items

SolarBug Kit

This totally solar powered bug never needs batteries! It produces a sound similar to a cricket whenever the sun shines on it. Put it in your garden to surprise and entertain guests. It can be heard from quite a distance away. Your tiny SolarBug can even be placed under a lamp and will "chirp" happily. Your unique looking SolarBug can be "customized" or painted to look like a scorpion, strange beetle, etc. You'll never need to buy batteries for your SolarBug as it uses 4 tiny solar electric power generators. PC board is about 2" x 15/16". Complete with all parts, PC board & instructions. Skill Level 1.

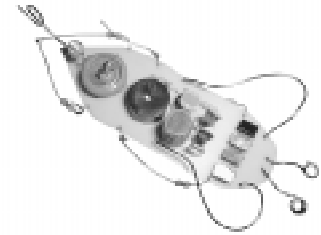
C6843 \$9.95



Solar Lightning Bug Kit

Our Solar Lightning Bug Kit soaks up sunshine during the day and then becomes active at night. When darkness comes its bright yellow-green tail light flashes and it emits a chirping noise for hours. If it is brought into the light it becomes silent again. Its operation is totally automatic and it does not require you to purchase a battery. Our Lightning Bug Kit is very unique and can be painted and customized to make your Lightning Bug unique from all others. Size of PC board is about 3 3/8" x 1 3/16". Complete with tiny nickel hydride rechargeable button cell, 4 solar electric generator cells, all parts and instructions. Skill Level 1.

C6851 \$12.95



Ultrasonic Kits

Deluxe Ultrasonic Sniffer Kit

Did you ever wonder about the limitation of human hearing? At best, we can only hear from about 20Hz up to 20,000Hz, and most of us can't even hear sounds past 15,000Hz. Our Deluxe Ultrasonic Sniffer Kit uses a frequency division 4 IC circuit to convert all ultrasonic frequencies up to 150kHz to an audible frequency we can hear. Now you can hear what a dog whistle sounds like. Shake several coins or keys and you'll be amazed at the sound! Early TV remotes and today's digital distance measuring devices use ultrasonic frequencies. It can even be used to check for high pressure air leaks and can be used to listen to some mammals that produce ultrasonic sounds. This deluxe kit comes complete with a case with speaker and operates on one 9V battery (not included). Comes complete with all parts, PC board, case and instructions. Size of PC board: 2.1" x 1.4". Size of case: 4.8" x 3.3" x 1.2". Skill level 2.

C6897 \$24.95



Deluxe Bat Detector Kit

Bats use echolocation which allow them to navigate, detect objects, and find their prey in total darkness. This "echolocation" consists of ultrasonic signals (signals above the range of human hearing that the bats send and receive like radar). Our amazing Deluxe Bat Detector Kit uses a 4 IC frequency division circuit to convert these ultrasonic frequencies to audio frequencies (in the range of our hearing). Not only does our Deluxe Bat Detector Kit have a built-in speaker to produce the sounds, but it also flashes a bright green LED that is in sync with the sound. Our bat detector works with all bats and operates on one 9V battery (not included). Complete with all parts, PC board, attractive 3.5" x 2.5" x 1.4" case, and instructions. Skill level 2.

C6899 \$29.95



Ultrasonic Remote Control Kit

Complete ultrasonic remote control kit consists of a powerful small hand held transmitter kit and a sensitive ultrasonic receiver kit. When you press the transmit button on the transmitter it lights a LED indicator and transmits a 24KHz ultrasonic signal to the receiver kit which can be located up to 50 feet away! At the receiver, a relay closes its contacts and a red LED comes on as long as the transmit button is pressed on the transmitter. Great for robotic applications, remote turn on of lights, alarm systems, etc. Each kit requires one 9 volt battery (not included). Size of transmitter PC board is 2 1/8" x 1 7/16". Size of receiver PC board is 3 1/8" x 1 3/8". Complete with all parts, 2 PC boards and instructions. Skill Level 3.

C6816 \$14.95

OPTIONAL PLASTIC BOX FOR ABOVE:
TYPE 2 BOX C6364 \$1.50



Kit Boxes & Bases

CHANEY ELECTRONICS, INC. now 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 include a general information sheet outlining methods you can use to customize your box. 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 BOX	2"L x 2"W x 1 1/8"D	C6363	\$1.00
TYPE 2 BOX	3 9/16"L x 2 9/16"W x 1"D	C6364	\$1.50
TYPE 3 BOX	3 9/16"L x 2 9/16"W x 2"D	C6365	\$1.95
TYPE 4 BOX	5 1/8"L x 3 1/8"W x 3 1/2"D	C6366	\$2.50
TYPE 5 BOX	6"L x 4"W x 2"D	C6367	\$2.75

Press-Apply RUBBER FEET for above Boxes

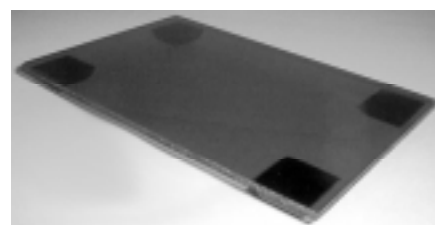
C6397 Package of 8 for \$1.00



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	\$1.75
TYPE B BASE	4" x 7"	C6621	\$2.25
TYPE C BASE	6" x 8"	C6622	\$2.50
TYPE D BASE	5" x 10"	C6623	\$3.00

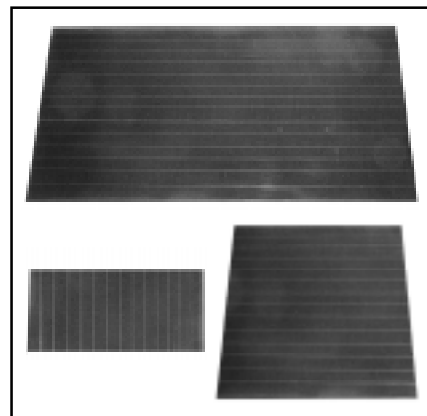


Kit Boxes & Bases / Solar Panels

Solar Panels

Compact High Quality Silicon 0.12" Thick Solar Panels

Each are designed for years of trouble-free generation of electricity from the sun. Perfect for charging batteries, powering small motors, small water pumps, radios, portable TVs, robots, etc. These are much easier to use than individual solar cells when your application requires a higher voltage than .5V as these have the "cells" connected internally. You'll still need to connect up the + and - power leads to these panels but this is much easier than connecting 10 to 36 individual cells in series. With each panel we give you a short piece of special solder and an instruction sheet on how to make the connections of your power leads (use any thin gauge flexible insulated wire) to the panel. Note: you may wish to install your glass panel in a weatherproof plastic case or mount it in a wooden frame for permanent outdoor installations. Although these panels are much sturdier than individual silicon solar cells they will break just like a regular pane of glass if you drop them or hit them with a rock. Also note you can make several panels out of one panel using a regular glass cutter. By the way you cut the panel you can maintain the voltage but have two smaller current panels or maintain the current and have two lower voltage panels. Voltages shown are minimum open circuit output and some panel may produce a higher voltage. The current is usually about the average short circuit current available but sometimes a panel may have a slightly higher or slightly lower current. If using the panel for charging batteries a diode such as a 1N4001 is usually placed in series with one of the output leads to prevent the battery from discharging through the panel at night. The diode will reduce the voltage available from the panel by 0.6 volt.



Type	Size	Description	Stock#	Price
P1	5 13/16" L x 2 7/32" W	Panel designed for 6V applications. Output 9V 70ma	C6681	\$4.95
P2	6 1/4" L x 2 7/32" W	Panel designed for 6V to 9V applications. Output 10V 70ma.	C6682	\$5.25
P3	12" L x 2 5/16" W	Special dual panel consists of two solar panels on one continuous piece of glass. The panels can be connected in series to give an output of 19V 70ma or in parallel to give an output of 9V 140ma. The other option is to use a glass cutter to cut them into 2 separate panels with 9 to 10V 70ma output.	C6683	\$9.00
P4	5 15/16" L x 3" W	Panel designed for 12V applications. Output 18V 48ma.	C6684	\$7.95
P5	6" L x 5" W	Panel designed for 6V applications. Output 7.5V 175ma.	C6685	\$9.00
P6	6" L x 6" W	Panel designed for 6V applications. Output 10V 185ma.	C6686	\$12.00

Misc. Items

2" Round Speaker

This small 2" speaker is the same one that we use in most of our project kits that use a speaker. Rated 16Ω 1 watt. Only .4" thin. Has solder eyelets.

C7320 \$2.00 ea.



Tiny Mylar Speaker

Very tiny thin speaker features 8Ω impedance and mylar cone. Great for producing sounds in small projects. Overall size about .80" Dia. x .10" Thick. Has 2 solder pads for connection. Package of 2.

C7270 \$2.00



Ultra Thin Square Speaker

Ultra thick speaker features 8Ω impedance and good sound. Size 1.58"sq. x .16" Thick. Has 2 terminals on back for connection.

C7267 \$2.00 ea.



9VDC Tiny Tone Alarm

Operates on 6VDC up to 12VDC and produces a loud electronic tone. Uses very little current and is very efficient. Size only .5"Dia. x .4"H. No external driver parts needed— just connect to voltage observing polarity.

C7100 \$2.49 ea.



Blinking Incandescent Lamp

Type 401X by GE features operation from 1.5V up to 2.5VDC (will operate on one "AA" battery). Flashes brightly. We use these in our Cosmic Poppers Kit (C6893). Package of 3.

C7136 \$2.00



Neon Lamps with Resistor

Handy neon lamps glow bright orange when connected to 120VAC. Has built in dropping resistor. Package of 5.

C7131 \$2.00



Unique Green Neon Lamp

Tiny neon lamp has a special white phosphor internal coating that causes it to glow a bright green when 120VAC is applied. Features built in dropping resistor to allow direct connection to AC voltage. Package of 5.

C7132 \$5.00



"U" Tube Unfiltered Blacklight Tube

Unfiltered "U" Shaped fluorescent blacklight tube gives off a light purple glow when powered. Size about 5 7/8" Tall x 1 3/4" (at base). Brand new part # FTB8T6BL.

C7117 \$2.00 ea.



Blacklight Tube

Filtered straight blacklight tube is 5 1/4" long and is black in color. Shows dark purple when powered.

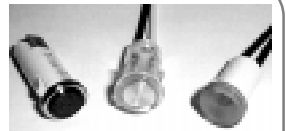
C6527 \$5.95 ea.



120VAC Panel Indicator Lamp Assortment

Snap in indicators operate from 120VAC. Great for making "on" indicators for AC projects. No dropping resistor needed— just connect directly to 120VAC. Package of 3.

C7275 \$2.00



Grey Lens IR LED

Great for all types of IR remote control and robotic applications. Features 5mm grey lens and produces a good amount of IR energy (invisible to human eye) when 2.8VDC is applied. Package of 4.

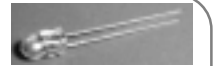
C7108 \$2.00



T1 3/4 Jumbo LEDs

Prime jumbo LEDs for replacement or new construction.

C6500	100 Red LEDs	\$15.00
C6501	100 Green LEDs	\$22.00
C6502	100 Yellow LED	\$22.00



5mm UV LED

Powerful 5mm LED can light up invisible inks such as in newer U.S. currency, some insects, certain glass products, blacklight posters, etc.

C7130 \$2.00 ea.



Giant 10mm White LED

Giant size clear lens LED lights up bright white when 3.8VDC is applied.

C7278 \$1.99 ea.



Giant 10mm Blinking Red LED

Super large 10mm LED features crystal clear lens. Blinks bright red when 5 to 9VDC is applied. Prime, full length leads.

C7319 \$2.00 ea.



3000 MCD Ultrabright White LED

Crystal clear lens 5mm T1 3/4 LED lights up with such a brilliant beam that you can't look directly at it. These are factory prime LEDs with full length leads. Current 20ma, forward voltage 3.2V to 4.3V, min MCD 2000 - maximum 3500 (typical 3000). Viewing angle 15°. InGaN white color.

C6690 \$3.00 ea.



3000 MCD Ultrabright Blue LED

Crystal clear lens 5mm T1 3/4 LED lights up with such a brilliant beam that you can't look directly at it. These are factory prime LEDs with full length leads. Current 20ma, forward voltage 3.2V to 4.3V, min MCD 2000 - maximum 3500 (typical 3000). Viewing angle 25°. Wavelength= 470nm.

C6691 \$2.75 ea.



Bright Red Flashing LED

Diffused lens T1 3/4 (5mm) size red LED flashes brightly (blinks) when 5VDC is applied. To use with 9VDC just connect an 82Ω resistor in series with 1 LED. Pkg of 2.

C7103 \$2.00



Misc. Items



Super LED Assortment

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

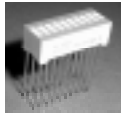
C6515 \$7.00



Various Color Ultra Bright LED Assortment

These brilliant LEDs all feature a crystal clear lens however they light up a brilliant color. You get red, yellow and green colors. All feature 5mm (T1 3/4) lens and long leads. These operate from about 2.8VDC up to 3.5VDC. Use a 82Ω dropping resistor in series with one lead for operation from a 9V battery. Package contains 9 LEDs.

C7118 \$2.00



HP Green 10 Segment Bargraph Display

Bright green high quality 10 segment bargraph display is perfect for audio or power level meters. Type hp 3489 is about 1" long x 3/8" wide. Long wire leads! Prime.

C7114 \$2.00 ea.



1 1/2V Screw Base Lamp

Small incandescent lamp will light up from any 1 1/2V battery such as "AAA", "AA", "C" or "D". Has built in magnifying lens. Package of 2.

C7102 \$2.00



Disposable 25 Watt Pencil Soldering Iron

Comfortable grip pencil soldering iron is perfect for building several electronic projects or light repair work. The tips on these do not last a long time before they start degrading. You can re-file them several times to extend the use, but basically the iron is meant to be disposed of. If this meets your needs, it is a cost effective way to build several kits.

C6652 \$4.50 ea.



Handy Tube 60/40 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 8 ft.

C6650 \$1.25 ea.



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 \$4.75 ea.



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 \$4.95 ea.



Adjustable 5" Wire Stripper

Handy rubberized handle wire stripper is an indispensable item to have when building any electronic project. Fully adjustable to strip various gauges of insulated wire.

C6698 \$1.89 ea.



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 \$3.50 ea.



Large 10x Power Loupe Magnifier

Powerful 10X glass optics loupe features chrome plated case. Very nice item - you won't believe how useful this is when looking at tiny SMD parts. Loupe retracts into protective metal cover so you can put it in your pocket. Size about 3/4" dia. lens and about 1 1/4"L x 7/8"H metal case. Brand new in protective plastic box.

C7280 \$5.00 ea.



Handy Solder Wick

Great for desoldering 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 that you can easily remove the component. 5 ft long—in a handy dispenser.

C6651 \$1.29 ea.

Deluxe Digital Soldering Station

High quality soldering station has adjustable temperature range of 302° to 842°F (150 to 450°C). Features large LCD display that shows the temperature of the iron and the set temperature. Has stand to hold iron and sponge for cleaning tip. Operates from standard 120VAC and is the perfect soldering iron for the classroom. Our technicians and engineers use this at our company when building and designing the Chaney Kits. It has a comfortable grip, a nice digital temperature control system, and replaceable tip if it should wear out. This soldering station is of course much higher quality than the disposable iron that we sell and is suited for long term use.

C7272 \$89.95

Replacement Tip for above:

C7273 \$4.95



Misc. Items

6 Piece Precision Screwdriver Set

4 flathead sizes: 1mm, 1.2mm, 1.8mm, & 2.4mm and 2 slotted (3mm & 3.5mm) screwdrivers. Each screwdriver has a hardened and tempered rustproof blade and a bright plated handle. The entire set is housed in a snap closure type plastic case.



C6699 \$1.49/Set

Hex Type Tuning Tool

Made for adjusting trimpots, coils and some adjustable caps, this 2 1/2" long plastic tuning tool features a 2mm hex end. Handy item to have in your electronic tool kit.



C7288 \$2.00 ea.

4 in 1 Handy Penlike Screwdriver

Handy small screwdriver features two slotted and two phillips heads to tackle most small jobs. This is about the same size as a ball point pen. Just remove the cover and select the size screwdriver head you want to use.



C7281 \$2.00 ea.

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, a small soldering iron holder and a sponge in the base. Just provide a soldering iron, wet the sponge and you're ready to go.



C6694 \$6.98 ea.

Need an Extra Hand?

This helping magnifier is like having two extra hands. This unit includes a 2 1/2" magnifying glass and two alligator spring clips to hold objects at any angle to each other leaving both hands free. With this unit, you can glue, solder, repair, and assemble thousands of kits or objects with ease! The 6 ball joints are capable of locking at any angle desired. Features nickel-plated fittings and a heavy cast-iron base.



C6830 \$5.98 ea.

PC Board Drill Bit Assortment

Assortment of 10 different tungsten carbide drill bits. These are re-sharpened bits that are perfect for making PC boards. The smallest sizes should be used in a drill press as they will break if flexed in a handheld hobby drill. You get 10 different common bits for making PC boards. Sizes vary from very tiny to larger sizes.



C7127 \$10.00

Set of 20 Mini Drill Bits

Set of 20 tiny drill bits perfect for hobby and PC board use with the hobby drill **C6658**. You get 1 each of all sizes from 61 to 80 packaged in a small metal box. These are made in China so they aren't as good as their U.S. equivalents but they do perform reasonably well and they are indispensable if you are making your own PC board.



C6659 \$5.95/Set

Small LCD Digital Multimeter

Now your students can make accurate measurements with our low cost accurate digital meter. It has features and specs of digital meters costing much more. Not only is it accurate and simple to use but also its small size allows it to be stored in tool kits, briefcases, etc. Check out these features and ranges:



DC Volts 0-1000V in 5 selectable ranges, DC Amps 0-10 amp in 4 selectable ranges, AC Volts 0-750V in 2 selectable ranges, Resistance 0-2 megohm in 5 selectable ranges: Diode Test Position, Continuity Buzzer Test Position, NPN/PNP Transistor hFE Test Position. This meter comes with a temperature probe and measures -40°C to 1000°C The accuracy is excellent and is ± 0.5% on higher ranges and ± .25% on the lowest range for DC voltages. Resistance accuracy is ± 0.8% on low ranges and ± 1% on higher ranges! Our digital multimeter comes with the 9V battery already installed and nice flexible color coded test leads so it's ready to operate. Size about 5" L x 2 5/8" W x 1" deep. The display is a standard 3 1/2 digit with easy to read 1/2" tall digits.

C6687 \$29.95 ea.

Hobby Drill / Grinder

Small handheld hobby tool drills, cuts, deburs, grinds, routes etc. Has fully adjustable 1/8" chuck and comes with carrying case, AC adapter, 3 different chuck adapters, 1 tiny drill bit (perfect size for PC board holes), 2 grinding wheels and 1 router tip tool. This compact, easy to use drill comes packed with the accessories shown in convenient reclosable storage case. Size of drill about 4 7/8" L x 1 1/4" dia.



C6658 \$29.95 ea.

Small Inverter Transformer

This small .40"sq. inverter transformer is the same one we use in our kits to convert low voltages to over 200V. Also works well in stepping up audio signals for color organs. Has 4 leads (2 primary and 2 secondary).



C7271 \$5.00 ea.

Medium Inverter Transformer

This inverter is more powerful than our small inverter transformer. We use this in our **C5175 9V Strobe Kit** to change 9 volts to over 200 volts. Size about .5" sq. x .31"H. Has 4 leads.



C7285 \$6.00 ea.

Powerful Transformer

High quality power transformer features 120VAC primary and 2 secondaries. One secondary is 24 VAC at 2amps and the other is 36VAC (center tapped) rated 750mA. Open frame with metal mounting ears and flexible color coded wire leads. Size about 2.35"L (without mounting ears) x 2.26"W x 1.96" Tall. Brand new made by EPEC transformer.



C7274 \$5.00 ea.

12VDC Adapter

Wall adapter plugs into standard 120VAC and provides up to 500mA of current which is enough to power most projects. Has long flexible cable with 5mm female barrel plug on end (center is +).



C7110 \$5.00 ea.

6VDC Adapter

Small AC adapter plugs into standard 120VAC and produces a 6VDC @ 100mA output. Great for powering small electronic kits, charging batteries or operating small DC motors.



C7277 \$2.99 ea.

Misc. Items



SPDT Mini Panel Mounting Toggle Switch

Miniature toggle switches with panel mounting nut. Brand new with chrome plated bat handle. 3Amp contact rating. Package of 2.

C7291 \$2.00



DPDT Mini Panel Mounting Toggle Switch

Miniature toggle switches with panel mounting nut. Brand new with chrome plated bat handle. 3Amp contact rating. Package of 2.

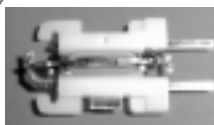
C7292 \$3.00



Small Thermal Switch for Battery Packs

These are brand new thermal switches that are designed to be placed in contact with your rechargeable cells. If the battery pack gets too hot during charging these can open the charging circuit until the pack cools down. Small size (about 0.63"L x 0.11" x 0.20" (excluding leads). Brand new by Pepin. Package of 3

C7286 \$2.00



Our Smallest Reed Switch

One of the smallest tiny reed switches made. Consists of a 9/16" long glass magnetic operated N.O. contact reed switch in a rigid plastic holder. Contacts of switch close when magnet is brought near. Great for alarms, robots, etc. Package of 2.

C7284 \$2.00



Special Magnet and Reed Switch

Nice quality reed switch rated 1 amp and matching magnet is enclosed in an off white case which is 1.5"L x 0.5"W x 0.72"H and has mounting ears which extend 0.41" on either end. The reed switch is 1.42"L (excluding leads) and is rated 1Amp. When the magnet approaches within 1/2 inch of the reed switch, the contacts close.

C7287 \$2.00/Set



Pushbutton Mini Panel Mount Switch

Nice quality panel mounting push button switch features SPDT contacts rated 6 amp @ 125 VAC. Momentary action type. Size about .52"L x .33"W (body) x 1" Long from bushing to end of body. Mounts in 0.25" hole. Complete with 2 nuts and washers. Shaft is chrome plated .39"L x .12" Dia. No knob available.

C7293 \$2.00 ea.



SPST Push On/Off Switch

Easy to use push on/push off switch mounts in a .45" Dia. hole (comes with mounting nut). Contacts are rated 3Amp @ 250VAC. Has square pushbutton on top. Makes a great on/off switch for projects.

C7294 \$2.00 ea.



Easy Mount Snap-In Rocker Switch

Round rocker switch snaps into a 0.8" dia. hole in your panel or chassis. Features SPDT contacts with a 10 Amp @ 125VAC or 6Amp @ 250 VAC rating. Nice positive click action. Matte black finish. Package of 2.

C7279 \$2.00



Dip Switch Assortment

Assortment of various types of small PC mount Dip switches. Positions vary from 2 up to 8. Contains right angle and straight mounting types. Package of 5.

C7269 \$2.00



106D SCR

Sensitive gate SCR as used in many of the strobe kits and color organs we sell. Rated 400V 4amp. Package of 2.

C7305 \$2.00



Transistors

Package of 100 2N3904 NPN Transistors.

C6504 \$25.00

Package of 100 2N3906 PNP Transistors.

C6505 \$25.00



Semiconductor Treasure Bag!

We have a fantastic surprise bag filled with ICs, transistors, voltage regulators, power transistors, etc. You get 50 pieces of quality, standard marked semiconductors for \$5.00! Each assortment is different. An incredible bargain!

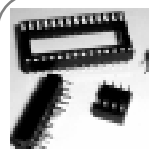
C7304 \$5.00



555 Timer IC

555 timer intergrated circuit. We use these in many of our kits. Package of 10.

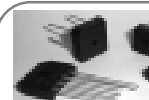
C6544 \$8.00



IC Sockets

Standard low profile IC sockets are what we use in almost all of our kits that use IC's.

8 pin	C7298	5 for \$2.00
14 pin	C7299	4 for \$2.00
16 pin	C7300	4 for \$2.25
18 pin	C7301	4 for \$2.50
20 pin	C7302	4 for \$2.50
28 pin	C7303	4 for \$2.50



Bridge Rectifier Assortment

Assortment containing various bridge rectifiers for changing AC into DC. Various current and voltage ratings. Package of 4 bridge rectifiers.

C7268 \$2.00



Popular ICs

These CMOS and linear ICs are used in our various project kits. Note sometimes the prefix of LM is KA or is not shown or the IC may have a different prefix.

LM339	C7137	5 for \$5.00
LM386	C7138	5 for \$5.00
555 (8 pin Dip)	C7139	10 for \$8.00
555 (SMD)	C7140	5 for \$5.00
4001 CMOS IC	C7141	5 for \$5.00
4011 CMOS IC	C7142	5 for \$5.00
4017 CMOS IC	C7143	4 for \$5.00
4018 CMOS IC	C7144	4 for \$5.00
4023 CMOS IC	C7145	4 for \$5.00
4024 CMOS IC	C7146	4 for \$5.00
4028 CMOS IC	C7147	4 for \$5.00
4511 CMOS IC	C7148	3 for \$5.00

Misc. Items

Super Disc & Mono Capacitor Assortment

Super assortment of high quality disc ceramic and some mono capacitors. You will find values Pf up to .1µf and higher. Most have full length leads but some will have cut and formed PC leads. All are prime with the capacitance value marked or in cases of real small caps they are color coded. This is a tremendous value. Full bag of 100 pieces!



C7111 \$8.00

Super Power Photoflash Capacitor 100µF 330VDC

Compact photoflash capacitor for use in strobe flash units. Size only 1.54"L x .45"Dia. Radial type with long leads.



C7107 \$2.00 ea.

Radial Electrolytic Capacitor Assortment

Assortment containing 5 different popular value radial electrolytic capacitors. All marked and with full length leads.



C7129 \$2.00

High Voltage Film Capacitor Assortment

This tremendous assortment contains 8 powerful high voltage film capacitors. Capacitors may range anywhere from .1µf to 3.3µf and higher with voltage ratings from 200 to 400V. DC and AC types will be in the mix. This is a great opportunity to stock up and save! All caps are brand new. Package of 8.



C7317 \$6.00

Knob Assortment

Assortment of various types of knobs. You will find push on and set screw types and types for 1/8" and 1/4" Dia. shafts. Very useful to have around the shop. Pkg. of 8.



C7126 \$8.00

Deluxe Potentiometer Assortment

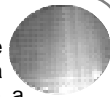
Package of 4 different potentiometers (variable resistance controls). All are panel mount and come with hardware. Various size shafts, diameters & resistance.



C7119 \$2.00

Large Silicon IC Wafer

These beautiful processed wafers have IC die that were to be processed into IC's. These are fascinating to study under a magnifying glass or microscope. Great to pass around in a classroom when educating students about IC's and how IC's are made. Makes a great art object to frame and put on your classroom wall.



C7282 \$10.00 ea.

1/4 Watt Carbon Resistors

Prime color coded 1/4W carbon resistors. Select values from table at right (no mixing). Order by stock number.

100/\$5.00 Quantites of any one value (no mixing)

1.0Ω C7150	27Ω C7163	180Ω C7176	620Ω C7189	3.9K C7202	12K C7215	51K C7228	220K C7241	1.0Meg C7254
2.7Ω C7151	33Ω C7164	200Ω C7177	680Ω C7190	4.3K C7203	15K C7216	56K C7229	240K C7242	1.5Meg C7255
3.9Ω C7152	36Ω C7165	220Ω C7178	750Ω C7191	5.1K C7204	16K C7217	62K C7230	270K C7243	1.6Meg C7256
4.7Ω C7153	39Ω C7166	240Ω C7179	820Ω C7192	5.6K C7205	18K C7218	68K C7231	300K C7244	2.0Meg C7257
5.1Ω C7154	47Ω C7167	270Ω C7180	1.0K C7193	6.2K C7206	20K C7219	75K C7232	330K C7245	2.2Meg C7258
5.6Ω C7155	51Ω C7168	300Ω C7181	1.5K C7194	7.2K C7207	22K C7220	82K C7233	390K C7246	3.3Meg C7259
10Ω C7156	68Ω C7169	330Ω C7182	1.6K C7195	7.5K C7208	24K C7221	91K C7234	470K C7247	4.7Meg C7260
11Ω C7157	82Ω C7170	360Ω C7183	1.8K C7196	7.8K C7209	30K C7222	100K C7235	510K C7248	10Meg C7261
12Ω C7158	100Ω C7171	390Ω C7184	2.0K C7197	8.2K C7210	33K C7223	110K C7236	560K C7249	15Meg C7262
15Ω C7159	120Ω C7172	430Ω C7185	2.2K C7198	8.8K C7211	36K C7224	120K C7237	620K C7250	
16Ω C7160	130Ω C7173	470Ω C7186	2.4K C7199	9.1K C7212	39K C7225	160K C7238	680K C7251	
22Ω C7161	150Ω C7174	510Ω C7187	2.7K C7200	10K C7213	43K C7226	180K C7239	750K C7252	
24Ω C7162	160Ω C7175	560Ω C7188	3.3K C7201	11K C7214	47K C7227	200K C7240	820K C7253	

Electronic Suprise Box

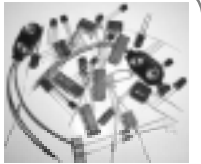
Here's a way to help students learn to identify and study various electronic components while also providing a good source of resistors, capacitors, LEDs, diodes, IC's, electronic assemblies, etc. This 8" x 6" x 3" box is loaded with all kinds of electronic "goodies". You will be amazed at the variety and quality of these electronic parts. It's a tremendous value!



C6654 \$10.00

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, several popular resistor and capacitor values!



C6831 \$10.00

Prism Assortment

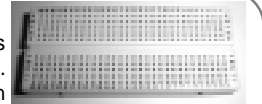
Variety of 3 small glass prisms for optical experimentation. Some may have a slight chip on edge, however these are very nice- precision made.



C7128 \$5.00

Super Breadboard

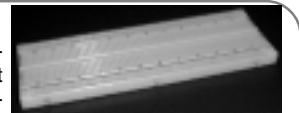
Compact breadboard for making prototype circuits features 60 groups of 5 connected terminal points. Handy for prototyping thousands of circuits. Each terminal firmly grips the lead or IC pin inserted into it. Reusable over and over again. Size 3 1/4" L x 1 3/8" W. White color plastic with peel and stick foam tape on base so you can mount it on a chassis if desired.



C7112 \$5.00 ea.

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 \$7.49 ea.

Ring Magnet

Small .5" Dia. x .20" Thick ring magnet has a small hole in center. Stack these on a toothpick or stiff copper wire and the disks will appear to "levitate" as they repel each other. Package of 5.



C7149 \$2.00

Misc. Items



120VAC Negative Ion Generator

Compact negative ion Generator cleans air impurities and provides a fountain of fresh air. These negative ions are the same type that are produced in a thunderstorm. Very simple to use simply-just connect any AC line cord to the black and white power leads and a tremendous quantity of negative ions will be emitted by the 4 needle emitter assembly shown. Fully encapsulated module is about 2" x 1 5/8" x 7/8". Brand new!

C7318 \$12.00 ea.



Sensitive Electret Microphone

Small electret microphone is perfect for use when making FM microphones, audio transmitters, PA system, etc. Simply connect a 10K resistor to red lead and the other end to a +9VDC to provide power for microphone. Size only .235" Dia. Has black and red leads.

C7109 \$2.00 ea.



Small Thermister

Small thermister features a room temperature resistance of about 1500 ohms. When heated the resistance drops to about 25 ohms (negative temperature coefficient). Great for many temperature sensing projects or thermister study. Package of 2

C7289 \$2.00



24kHz Ultrasonic Transducer

High output ultrasonic transducer. Brand new metal case/units. Size: 7/8" diameter x 3/8" thick. Manufacturer part # 0D24K2. Has metal posts for connection.

C7283 \$2.00 ea.



IR Receiver Module Assortment

Consists of 5 different factory new IR modules. All very sensitive to IR signals from remote controls. Great for experimentation, remote control, robots etc. We have no specs or data for these but we will include one representative schematic for driving a relay with one of the modules (using this you should be able to figure out the rest of them as each has only 3 leads).

C7116 \$10.00



Light Sensitive CDS Cell Assortment

CDS cells vary their resistance with light. When light strikes it the resistance is low. In darkness the CDS has high resistance. Assortment of 5 different types.

C7104 \$5.00



Mini 4kV Trigger Coil

Designed to fire Xenon strobe tubes, these are perfect for any strobe tube we sell. Size only 6mm (Dia.) x 12mm (L). Has three leads. Brand new.

C7295 \$2.00 ea.



Enclosed 4kV Trigger Coil

Compact fully enclosed 4 lead trigger coil to fire xenon strobe tubes. Size only .47" Tall x .31" sq. Has 3 pins on bottom and high voltage pin on top.

C7296 \$2.25 ea.



Mini Strobe Tube & Reflector

Bright Xenon strobe tube and reflector is about .96" L x .89" W x .74" D. Brand new with 2 copper tabs for anode & cathode and 1 aluminum tab for trigger lead.

C7297 \$2.00 ea.



Bright Xenon Strobe Tube

Micro xenon strobe tube features a brilliant flash. Requires about 200V cathode to anode voltage and any 4KV trigger coil. Package of 2.

C7290 \$2.50



Strobe Tubes

Single straight strobe tube

C6565 \$4.25



Single Horseshoe strobe tube.

C6566 \$5.00



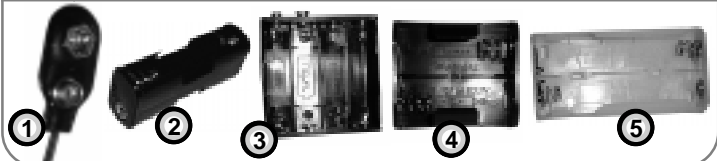
9V Battery Snaps

Pack of 100 9V battery snaps. We use these in our kits.

C6539 \$15.00

Battery Snaps and Holders

fig. 1	9V Battery Snap	C7120	5/\$2.00
fig. 2	2 "AA" Battery Holder (3VDC)	C7121	2/\$2.00
fig. 3	8 "AA" Battery Holder (12VDC)	C7122	\$2.00 ea.
fig. 4	2 "C" Battery Holder (3VDC)	C7123	\$2.00 ea.
fig. 5	4 "C" Battery Holder (6VDC)	C7124	\$2.49 ea.



Universal Fused Cigarette Plug

This assembly is ready for you to add your wire leads. It screws apart to allow you to make your own custom power cord. Fuse is 3amp. Black plastic body with strain relief.

C7105 \$2.00 ea.



3.6V 50MaH Nicad Battery

Made for cordless phones, this battery is great for use with miniature robots. Size only 1.2"L x 0.41"W x 0.61"H. Has white shrink wrap and color coded wires with tiny 2 pin female connector. New - Prime.

C7315 \$2.00 ea.



Assortment of Panel Mount Nuts

Assortment containing at least 5 different size panel mounting nuts for pots, switches, etc. Metric and standard types. You get a total of 20 nuts.

C7125 \$2.00



Nylon Spacers Assortment

Various length and diameter white nylon spacers. Handy for use with robot wheels and axles. At least 5 different types. Package of 20 in assortment.

C7101 \$5.00

Nylon Circuit Board Standoff Mount Assortment

Handy assortment of mounts made to mount circuit boards to metal chassis. These are insulated nylon types. Some of these have quick mount heads on each end and some have threaded female fitting on one end. Several different sizes, diameters and colors. Bag of 14 pieces.



C7106 \$2.00

Bag of Heat Shrink

Assortment of 25 pieces of various color, diameter and length heat shrink tubing. Length ranges from about 1" to 3", and diameter ranges from 3/32" to 3/4". Very useful.



C7115 \$2.00

Universal Deluxe Project Case

Attractive sturdy beige case features 2 halves that screw together from the bottom. Size is 6 1/8"W x 2 1/8"H x 6 3/4"Deep. Comes with 2 clear 2 1/8" x 6 1/8" plastic lenses (for front and back). Brand new, has built in vent holes/speaker grille to accommodate a 2 1/2" speaker if desired. These make great project cases for professional strobes, amplifiers, radios, etc. Comes with screws.



C7313 \$7.95 ea.

Roll of 10,000 Bare Wire Jumpers

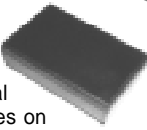
Factory reel of 2.5" Long 24 gauge bare wire jumpers. These are very handy when assembling circuit boards. Each jumper is perfectly straight and is a shiny silver color- ready to be soldered in. Full reel containing 10,000 jumpers.



C7316 \$29.95

Serpac Project Case 110-I

Model 110-I black plastic case features a top lid with a smooth depression for flush membrane/label surface or printing. Size is 3.61"L x 2.27"W x 1.01"Thick. Has internal circuit board mounting bosses and has four recessed holes on bottom for screws to hold case together (screws for this are included). These are very nicely made. See the Serpac website for a PDF drawing of this case.



C7314 \$4.00 ea.

Test Clips

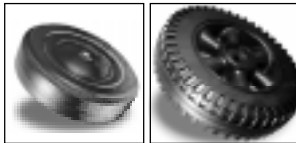
Package of 5 red and 5 black alligator jaw test clips with vinyl insulating boots. These are great for connecting to your wire to make test leads. You get 10 clips total.



C7135 \$3.00

Giant Robot Wheels

Great for making larger robots, these hollow plastic wheels feature a 0.3" internal diameter hole for your axle and an outer diameter as shown. Even though these plastic wheels are hollow, they can support a heavy load. New! Black in color.



4 3/4"Dia. x 1 1/2" Thick **C7306 \$2.00 ea.**

6"Dia. x 1 5/8" Thick **C7307 \$2.50 ea.**

Ball Bearing Swivel Coaster

Great for use in larger robots, this coaster features a hard black plastic 1.25" diameter wheel attached to a freely rotating ball bearing type 360° metal swivel plate which is 1 3/16" x 1 3/4" with 4 mounting holes. The dimension from the surface of the plate to the bottom of the coaster wheel is about 1 1/2". The width of the black wheel is about 1/2". Very smooth action makes a great omni directional wheel on a three wheel robot! New.

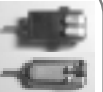


C7308 \$2.00 ea.

Misc. Items

Micro Motor

Tiny motor is only .45"L x .19" Dia. Operates from 1VDC up to 5VDC. Has a rubber boot that can be removed. This is a great motor for making tiny robots. Shaft is about .15"L x .025" Dia.



C7266 \$2.00

Small Pager Motor

Small pager motor has a weight attached to the shaft that produces a vibration when 1.5VDC up to 6VDC is applied. Provides motion in small robots or can be used to provide a silent notification in electronic projects. Size about .47"L x .26" Dia.



C7264 \$2.00 ea.

High Speed Motor with Gear

Small high speed motor is 1.25"L x .60" Dia. Has .28"L shaft with .15" metal gear attached. Operates on 3VDC up to 9VDC.



C7263 \$2.00 ea.

Small DC Motor

Small yet powerful DC motor is about .95" Dia. x .5" Thick. Features .4"L x .08" Dia. shaft. Has solder terminals and flexible leads for power input (you can use either). Operates from 1.5VDC up to 9VDC.



C7265 \$2.00 ea.

Small Mabuchi Motor RF-500TB 1.5VDC Up to 9VDC

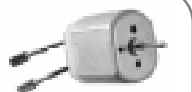
Very smooth running small motor made for CD players, DVD players and VCRs is perfect for making small robots. At 3VDC its speed is 1800 RPM (no load) @ .022Amp. At maximum efficiency its speed at 3VDC is 1430 and the current is .085. Torque is 8.4 g-cm. Stall current is .33amp at Torque of 41g-cm. Size is 1.28" Dia. x .98" L. Shaft is .38" L x .08" Dia. This is one of the best motors around for use in robotics or solar applications! Brand new with solder eyelets.



C7312 \$2.49 ea.

Small 12VDC Johnson Motor

Small 0.94" Dia. x 1.21"L Johnson motor operates from 6VDC up to 24VDC and features a 0.08" Dia. x 0.40"L shaft. has 2 color coded flexible 1.5"L leads with "push on" quick connect terminals. New!



C7310 \$2.00 ea.

Small DC Motor Assortment

Assortment containing different small DC motors. Handy for selecting the right motor for a small robot or motorized project. All new and prime, one may have gear attached. Picture is for illustration only -styles may vary.



C7309 \$3.00

Heavy Duty 12VDC Motor with Pulley

Nice precision made heavy duty motor by Buehler features yellow 2 wire sinusoidal encoder output (you can use in speed measurement circuitry if desired). The red and blue wires are used for DC in and can be connected to 3VDC up to 18VDC. High power output for its size. To reverse direction simply reverse battery polarity. Great for making robots with rubber band drives because the pulley is already attached to the shaft. Size of motor: 2.2"L x 1.33" Dia. Size of pulley about 0.39" in overall dia. x 0.25" Wide. New.



C7311 \$3.49 ea.