**KITS**

**A NOTE ABOUT KITS....**
*Kits cannot be returned or exchanged once assembly has begun.*
All parts supplied EXCEPT batteries.

**EDUCATIONAL MOTOR KIT**
Easy to assemble working DC motor kit illustrates the basics of electric motors and electromagnetism. Rugged plastic and colorful metal parts. Operates on 5-12 Vdc. 5.5” x 3.5” x 4.0” assembled.
CAT # KT-49  $9.90 each

**PLUG-IN SOLAR RECHARGEABLE PENGUIN KIT**
Owkit® MSK691. The kit consists of a powerful solar cell, rechargeable battery (included), igloo, and penguin. It is easy to assemble: no screws, nuts, or fuss. Just simply plug-in the penguin into the igloo, solar energy converts into electric power for storage and application. Once released from the igloo, the penguin will venture and waddle for you for approximately 3 minutes. For ages 8+. Approximately 4” x 4” x 3”. Thirty-nine pieces in kit.
CAT # MSK-691 $21.95 each

**SOLAR WILD BOAR KIT**
Owkit® MSK682. OWI's Solar Wild Boar is a solar kit that smiles as it kippity-klocks around any mess. Building the 3.56” x 1.85” x 2.24” size figure is ideal for a do-it-yourself science fair, after-school, or summer workshop project with the bonus gift of learning mechanical transmission and electrical motor theory. With 47 assembly parts, it's great for the beginner enthusiast ages 8+.
CAT # MSK-682 $15.95 each

**EM4 ROBOT KIT**
Owkit® OWI-891
Fun & easy-to-assemble Educational motorized robot kit with four modes: 6-leg walking cricket, motorized transmission trailer, grand rolling Beast and gear driven walking Grandpa-Bot! This 32 piece, 3 speed kit provides entertainment, imagination and education. Multi Ratio Gear Box. Requires one AA battery. No soldering required. Easy assembly and only requires a diagonal cutter and screwdriver. No soldering required. Assembled dimensions: 10.50" x 7.25" x 3.50". For ages 8+.
CAT# OWI-891 $20.95 each

**100 IN 1 STEM LAB KIT**
100 STEM experiments in one box. For ages eight and up, kids will learn about basic circuit connections as they construct four initial units (Maze Challenge, Flying Disc, Turbo Air, and Alarm System). Maze challenge allows children to build a carnival classic hand eye coordination game where a metal loop is maneuvered around a metal wire without making contact; difficulty of the wire can be adjusted. Flying Disc allows children to launch a disc spinning into the air. By using the auxiliary pieces designed for Turbo Air children will use the air flow to create a bubble machine (bubble solution not included), vacuum cleaner, or a floating foam ball! Alarm system lets children build a functioning spinning LED light with a loud beeping audio display.
CAT # OWI-38917 $39.95 each

**6-IN-1 EDUCATIONAL SOLAR KIT**
An excellent building kit for beginners, teaching children the benefits of solar energy while they create a toy that is fun to play with and requires no batteries. Children use the snap-together plastic parts to build six different motorized working models including an airboat, windmill, puppy, car, and two different planes. No tools required for assembly. Diagonal cutter may be needed to separate plastic parts. Kit includes plastic parts, 75mA solar cell, 1.2V electric motor, wires, springs and instruction book. For children 10+. May require adult assistance.
CAT # KFK-2 $6.50 each

**L.E.D. FLASHER KIT**
This kit includes parts and instructions to make a simple 2-Led flasher circuit. A quick and easy project for anyone with basic soldering skills. Requires 9V battery (not included).
CAT# LEDKIT $2.50 each 100 for $2.25 each

**LED CHASER KIT**
Build this variable speed LED chaser. 10 leds flash sequentially at whatever speed you set them for. Easy to build kit includes pc board, parts and instructions. Ideal for special lighting effects, costumes, etc. Operates on 3 to 9 volts. PC board is 5” x 2.25”.
CAT# AEC $6.95 each • 10 for $65.00
FLASHING LEDS 5mm  Built-in flashing unit. 3-5 Vdc. Diffused. High-brightness.

<table>
<thead>
<tr>
<th>Color</th>
<th>CAT#</th>
<th>Price</th>
<th>100</th>
<th>1000</th>
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<tr>
<td>RED</td>
<td>LED-4</td>
<td>.50</td>
<td>.45</td>
<td>.40</td>
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<tr>
<td>GREEN</td>
<td>LED-4G</td>
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<td>.45</td>
<td>.40</td>
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<tr>
<td>WHITE</td>
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<td>.40</td>
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<tr>
<td>BLUE</td>
<td>LED-4B</td>
<td>.50</td>
<td>.45</td>
<td>.40</td>
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<tr>
<td>YELLOW</td>
<td>LED-4Y</td>
<td>.50</td>
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</table>

5MM RGB COLOR CHANGING LEDS
Cycles through red-green-blue and combinations of RGB, yielding purple, white and other hues. 5mm water-clear package. Great for attention-getting displays, and jewelry.

Slow Rate -- fades in and out of each color approximately every 5 seconds. Operates on 3.5Vdc.
CAT# LED-276  65¢ each  • 10 for 55¢ each  • 100 for 40¢ each

Rapid Rate -- changes color every second for ten seconds, then changes color three or four times per second for ten seconds.
CAT# LED-231  60¢ each  • 10 for 50¢ each  • 100 for 40¢ each

Fluttering -- cycles through RGB colors at a very fast rate, giving the impression of a fluttering red / blue light. Milky-white in off-state.
CAT# LED-232  2 for $1.00  • 100 for 40¢ each

PRESS-FIT MOUNTING CLIPS FOR LEDS
2 PIECE HOLDER FOR 5MM LEDS  Black plastic. Mounts in 6.3 mm hole.
CAT# HLED-4  10 for $1.20  • 100 for 9¢ each  • 1000 for 8¢ each

CLIPPLITE HOLDERS FOR 5MM LEDS  Colored polycarbonate lens diffuses and increases viewing angle. Mounts in 0.25” hole in panels of 0.06” to 0.125” thickness.
X= R (RED), G (GREEN), Y (YELLOW), C (CLEAR)
CAT# HLDCL-X  3 for $1.05  • 100 for 28¢ each  • 1000 for 23¢ each

CLIPS FOR 3MM LEDS  1 piece holder. Mounts in 4.5mm hole.
CAT# HLED-5  10 for $1.00  • 100 for 8¢ each  • 1000 for 7¢ each

3 WATT LEDS ON HEATSINK
Ultra-bright, high-power, long-life LEDs mounted on 20mm dia. star-type aluminum disc which serves as a heatsink and provides solder spots to simplify connection.

Note:  Sensitive to misuse.  No guarantee after voltage has been applied.

3 WATT

<table>
<thead>
<tr>
<th>Color</th>
<th>Description</th>
<th>CAT#</th>
<th>Each</th>
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<tbody>
<tr>
<td>COOL WHITE</td>
<td>18000-20000K. 3.2-3.4V, 700mA.</td>
<td>LED-248</td>
<td>1.68</td>
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<tr>
<td>WARM WHITE</td>
<td>3500-4200K. 3.2-3.4V, 700mA.</td>
<td>LED-249</td>
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<tr>
<td>AMBER</td>
<td>600-610nm. 1.9-2.3V, 700mA.</td>
<td>LED-253</td>
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<td>LED-250</td>
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<td>BLUE</td>
<td>460-470nm. 3.2-3.4V, 700mA.</td>
<td>LED-261</td>
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<td>IR</td>
<td>940nm. 1.5-1.7V 700 mA.</td>
<td>LED-256</td>
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</table>

DRIVER FOR 3W LEDS
The 3 watt LEDs above can be operated on 12 Volts using this driver. Operate on 12 Vac or 12 Vdc.
CAT# LD-3  $3.25 each  • 10 for $3.00 each

LENSES FOR 1W, 3W & 5W LEDS
20mm lens in a 23mm plastic holder. Works well with our 1W, 3W and 5W LEDs, with & without star pc board ie. LED-248, LED-249, LED-5BL.
60° viewing angle CAT# LNS-57  $1.50 each  • 10 for $1.35 each
45° viewing angle CAT# LNS-58  $1.50 each  • 10 for $1.35 each

LED ASSORTMENTS  in divided clear plastic boxes with locking lids

5MM ASSORTED COLORS – 500 PCS
100 each, red, green, blue, yellow, white.
CAT# LED-K2  $10.00 per kit

3MM AND 5MM ASSORTED COLORS – 300 PCS
All are clear in off-state.  Red, green, blue, yellow, white. 5mm LEDs – 20 each color.  3mm LEDs – 40 each color.
CAT# LED-K1  $8.00 per kit

VISIT OUR WEBSITE - WWW.ALLELECTRONICS.COM
12 VDC LED LIGHT STRIPS
Adhesive-backed ribbon with surface-mount ultrabright LEDs. Ideal accent lighting in auto or home. Dimmable. Can be cut every third LED or 50mm (approx. 0.2”) and each segment can be lit independently. Wires can be soldered directly to solder spots on ribbon tape. 5 Meters, 100 segments per continuous strip. Can be connected end-to-end for longer strips. Can be purchased in 2” (3-led) segments.
- Cool-white  CAT# LS-12-CW  $1.00 each  •  2 segments for $1.00
- 10 segments  $0.40 per segment
- Warm-white  CAT# LS-12-WW  $1.50 per 3-led segment
- 10 segments  $1.30 per segment
- Neutral-white  CAT# LS-12-NW  $1.00 per 3-led segment
- 10 segments  $1.00 per segment

ECONOMY MODULES  COOL-WHITE
Very bright, but less bright than our other modules. 3.5” wires between modules. 20 modules per string. 0.72W per module
- CAT# LS-200CW  $1.40 per module
- 20 modules for $1.10 per module
- 100 modules for $0.85 per module

12-24 VDC 8A DIMMER
Designed for 12-24 VDC strip lights like our CAT#s LS-12-CW, NW, WW. Clearly-marked screw-clamp input/output terminals. Rotary adjustment. 3.5” x 2.35” x 2.25” high. Mounting holes on 1.6” x 3.1” centers.
- CAT# DMR-8  $19.95 each

POCKET-SIZED LED TESTER
Handy device for testing LEDs (2-150mA). Simply plug your LED into the correct holes and push the button to test its brightness, illuminant color, etc. The top row is for 2 pin LEDs with currents ranging from 2mA - 30mA. The bottom row is for 4 pin LEDs (super-flux LEDs) with currents ranging from 20mA -150mA. Powered by a 9V battery (included).
- CAT# LT-100  $8.95 each

FUSE LAMPS
Popular lamps which are the same size as a 3AG 1/4” x 1 1/4” (AGC) fuse.

<table>
<thead>
<tr>
<th>VOLTS</th>
<th>CAT#</th>
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<tr>
<td>12</td>
<td>LPFS-12</td>
<td>$1.65</td>
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</tbody>
</table>

LED FEASTOON LAMPS
6 LED festoon lamps operates on 12 AC/DC 45ma.
120° radiance angle. 10.7mm dia. x 44mm L.
- Cool-white  - 45 lumen. 6000 CCT(K).
- CAT# HFL-12CW  $4.50 each
- 10 for $4.35 each
- Warm-white  - 40 lumen. 3000 CCT(K).
- CAT# HFL-12WW  $4.50 each
- 10 for $4.35 each

Festoon socket for 44mm lamps. Fits CAT#s HFL-12CW and HFL-12WW. Can be used with other 37-44mm festoon based lamps and LEDs.
- CAT# FLS-3  $0.75 each  •  10 for 70¢ each

120 VAC LED LAMP
- Earthtronics # LEDX485090
- 120Vac, 60Hz, 0.062A, 3.5W
- Off-white (beige), 7.5” diameter
- 6” diameter x 1.25” depth behind bezel
- 61 LED array, cool-white 5000K
- Comparable to 50-60W incandescent lamp
- Designed to snap into 6” dia. recessed can
- Pigtail leads
- CAT# LED-485  $4.75 each

120 VAC RETROFIT LED DOWNLIGHTS, 4-PACK
- 120Vac, 9W LED lamps for 5”-6” recessed cans
- Dimmable 10%-100%
- Standard medium screwbase
- Normal-white, 4000K color temp
- 650 lumens
- Energy Star, cULus, FCC.
- Reduced Price
- CAT# LMP-56NW  $19.95  •  $16.00 pack of 4 lamps

12 VDC FLASH ASSEMBLY
- Bright xenon strobe assembly for highway emergency signal. Approximately 80 flashes per minute. 12Vdc operation.
- Horseshoe flash tube (31.5 x 16 x 6mm) mounted on 65 x 75mm pc board. On/off switch. Easy to connect. See hook-up diagram on-line spec sheet.
- CAT# FSH-13  $4.50 ea.  •  10 for $4.00 ea.
**INCA NDESCENT LAMPS**

- **3MM GRAIN-OF-WHEAT, T-1**
  1.5V, 40mA 10" insulated wire leads
  **CAT# LP-3** $1.35 each • 100 for $1.10 each

- **3MM, T-1 SPECIAL**
  14V, 40mA 3mm, bare wire leads
  **CAT# LP-23** 3 for $1.00 • 100 for 20¢ each

**T-1 3/4 5MM DIAMETER LAMPS**

- **T - 1 3/4 BI-PIN LAMP**
  VOLTS AMPS CAT# EACH
  14 .080 LP-7382 $1.00
  $90.00

- **T-1 3/4 MIDG E FLANGE LAMP**
  14 .08 LP-382 $1.00
  $90.00
  28 .040 LP-327 $1.00
  $90.00

**14V MINI BAYONET BASE LAMP**

- #1815 lamp. 14.0 volts, 0.200 amps.
  **CAT# LP-1815** 75¢ each
  100 for $67.50

**BAYONET BASE LAMP SOCKETS**

- PC / solder leads.
  **CAT# LS-17** 2 for $1.00

- For use with #44, 47, 1815 etc... standard mini-bayonet base lamps.
  **CAT# LHL-37** 2 for $1.00

**1.2" X 2.6" EL BACKLIGHT**

- Electroluminescent (EL) Backlight. 30 x 67mm (1.2" x 2.6"). Glows green when energized.
  Ivory off-state. Solderable pin. Operates on 80-120Vac. Will operate from 120v “house” electricity or inverter. For control panels, LCD, special effects and model lighting.
  **CAT# EL-26** 3 for 99¢ • 100 for 20¢ each

**1W LED W/ REFLECTOR IN HOUSING**

- Great beginning for a shelf or display lighting project.
- Bright, white 1 Watt LED enclosed in a rugged black and yellow hard plastic housing with a conical reflector and a clear plastic front lens. Overall dimensions, 2.16" diameter x 3.45" long. Two wire leads. Operates on 3 Vdc @ 300 mA. For higher voltages use a dropping resistor.
  **CAT# LMP-26** $2.50 each
  10 for $2.25 each

**HI-INTENSITY UV LAMP ASSEMBLY**

- High-intensity UV light light source in the 400nM spectrum. Sixteen 1W LEDs on a two-piece curved 1.6" wide pc board assembly approximately 6” long. 4" pigtail leads. Operates on 30Vdc @ 1A.
  **CAT # LED-16UV** $5.95 each

**LIGHTS**

- **170 LUMEN WORK LIGHT -- BRIGHT**
  Nebo 6327 LarryC. EXTREMELY BRIGHT! Equipped with new C-O-B LED technology, it outputs 170 lumens of intense light. The 180° rotating magnetic clip allows for hands-free lighting. The reinforced plastic body design is water and impact-resistant. Top-positioned, ON/OFF button. Powered by 3 AAA batteries (included). 6.375" long. Includes retail box. Comes in red, blue, black or yellow (no choice of color).
  **CAT# FL-170** $8.99 each

- **FLASHING ROAD HAZARD FLARE**
  Flashing roadside emergency LED flare with flashlight. Features ten different flashing patterns. Contains a hook and strong magnet for placement on vehicle. Powered by 3 AAA batteries (not included). 6.375” long. Includes retail box. Comes in red, blue, black or yellow (no choice of color).
  **CAT# ERL-1** $9.95 each

- **PORTABLE LED LANTERN LIGHT**
  Battery operated, light-weight portable LED lantern light. Ultra-bright led light is useful for camping, hiking and emergency situations. Features: 360-degree illumination, adjustable light setting. Easily collapses to 5” high, expands to approximately 7.40” high. 3.4" dia. magnetic base conveniently attaches to metal fixtures. Requires 3 AA batteries (not included).
  **CAT # PLL-1** $6.95 each