**KITS**

**A NOTE ABOUT KITS....**

Kits cannot be returned or exchanged once assembly has begun.
All parts supplied EXCEPT batteries.

**100 IN 1 STEM LAB KIT**

New Item

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

**EM4 ROBOT KIT**

Owikit# 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. 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

**LINE-FOLLOWING CAR KIT**

Very cool smart tracking robot car kit. Once assembled it will zip along a 15mm wide black line drawn on the ground. Designed to help kids or electronic enthusiasts learn about soldering and simple circuits (photoelectric sensor circuit, voltage comparator, motor driving, IR sensor, etc.). There is no programming involved, and all of the soldering is beginner-friendly. All the parts you need are included in the kit, except two AA batteries that must be purchased separately.

**CAT # KT-203**

$9.95 each

**2X5W AMPLIFIER FOR MP3 PLAYER KIT**

Vellerman® MK190.

Features big sound from a small unit. Low distortion. Stereo 3.5mm jack input. Volume adjust complete with attractive knob. Slide on/off switch. Blue indicator led. 2 x 5Wrms (10% THD @ 4ohm / supply 14V). Sensitivity: 400mVrms for full output. 30Hz-100kHz (-3db / 8 ohm) frequency response. Requires 6-14 Vdc / 1A max. power supply (not included). Speaker impedance: 4-32 ohm speaker impedance.

**CAT# MK-190**

$14.95 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

**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

**ADJUSTABLE LED FLASHER**

Two potentiometers adjust the flash rate of two LEDs. 9V operation. Battery not included.

**CAT# MK-1021**

$4.95 each

**VISIT OUR WEBSITE - WWW.ALLELECTRONICS.COM**
40 EDUCATIONAL ELECTRONIC PROJECTS, BOOK & PARTS KIT
The Basics: 40 Exciting Labs eTron Circuit Labs. An immersive, hands-on curriculum of fun and illustrative electronics projects that teaches the fundamentals of electronics. Designed to be STEM (Science, Technology, Engineering, Math) Education Compliant for use in school curriculum. Beautiful color photos and illustrations lead you through a wide variety of labs covering a lot electronic fundamentals. Projects are designed to be breadboarded, taken apart and reused.

Complete Lab includes The Basics v2.0 manual (112 pages), and all the parts necessary for the 40 projects in this book, the basics parts kit, solderless circuit board and 9-Volt battery. CAT# KT-40 $24.95 each

If you only wish to purchase the book, use CAT# BK-52 $15.95 each

14 EDUCATIONAL ELECTRONICS PROJECTS, BOOK & PARTS KIT
The Basics Lite: 14 Exciting Labs eTron Circuit Labs. 28 page booklet. Includes a solderless breadboard and parts to complete 14 educational electronics labs. CAT # KT-95 $17.95 each

ADJ. INTERVAL TIMER KIT
Velleman # MK111. For intermittent operation of circuits and equipment. Use for blinking light control, slide projector control etc. Pulse time adjustable between 0.5 and 5 seconds. Pause time adjustable between 2.5 and 60 seconds. 3 Amp output relay. Power supply 12-15 Vdc @ 100 mA (not included). CAT # MK-111 $6.95 each

2-DIGIT COUNTER WITH POWER SUPPLY
Large, two digit counter assembly. Advances one digit at a time. From 0 to 99 each time button is pushed. Each digit is 2.75" high and consists of 21 red 5mm LEDs. 5" x 4.18" black display board connected to 4.25" x 2" controller board. Five 4" pigtail wires. Included is a 9 Vdc power supply and a momentary, normally-open pushbutton switch. CAT# CTR-92 $6.00 each 10 for $5.65 each

ARDUINO COMPATIBLE PRODUCTS
Arduino is an open-source physical computing platform based on a simple i/o board and a development environment that implements the Processing/ Wiring language. Arduino can be used to develop stand-alone interactive objects or can be connected to software on your computer (e.g. Flash, Processing, MaxMSP). The open-source IDE can be downloaded for free (currently for Mac OS X, Windows, and Linux). We carry Arduino microprocessors and related products. See our online store for full descriptions.

UNO R3
Everything needed to support the onboard ATmega328 microcontroller; connect to a computer with a USB cable or power it with a AC-to-DC adapter or battery. It has 14 digital input/output pins (6 can be used as PWM outputs), 6 analog inputs, a 16 MHz ceramic resonator, a USB connection, a power jack, an ICSP header, and a reset button. This version of the board has a socketed / replaceable ATmega328 chip (see CAT# ARD-24). Recommended operating voltage, 7-12 Vdc. CAT# ARD-21 $14.00 each

ATMEGA328 W/ ARDUINO OPTIBOOT (UNO), DIP
Pre-loaded with the Arduino Optiboot (Uno 16MHz) Bootloader, to use Arduino code in a custom embedded project without using an actual Arduino board. CAT# ARD-24 $5.50 each 10 for $4.95 each

MICRO SD CARD READER / WRITER MODULE
Read and write Micro SD cards with your Arduino or favorite microcontroller. Great for adding storage space to any Arduino project. Features on board level shifting IC to go from 5v to 3.3v and uses standard SPI interface. 6-pin header. CAT # SDR-7 $2.85 each

PRO MINI 328
For users that understand the limitations of system voltage (3.3 or 5V), lack of connectors, and USB off board. Not populated with connectors so you can solder any connector or wire with any orientation you need. We recommend first time users start with the Uno R3 (CAT# ARD-21).

3.3V / 8MHz Pro Mini 328 CAT# ARD-14 $4.90 each 10 for $4.75 each

5V / 16MHz Pro Mini 328 CAT # ARD-18 $4.90 each 10 for $4.75 each
CLOCK MODULE
The DS1302 trickle-charge timekeeping chip contains a Real-Time Clock/calendar. It communicates with a microprocessor via a simple serial interface. On-board CR2032 backup battery. Operates on 2-5.5VDC @ 300mA. 44mm x 23mm x 11mm.
CAT # ME-48
$3.00 each

LOGIC LEVEL CONVERTER, BI-DIRECTIONAL
Bi-directional logic level converter safely steps down 5V signals to 3.3V and steps up 3.3V to 5V at the same time. This level converter also works with 2.8V and 1.8V devices. 0.63 x 0.52” (16.05 x 13.33mm).
CAT# LLC-46
$2.95 each

ARDUINO STACKABLE HEADER KIT
Works with Arduino Main Board, Pro & Mega. They clear the USB-B connector and enable stacking of multiple shields. This kit includes four headers (2 8-pin and 2 6-pin).
CAT# HDR-07
$1.50 each

16 X 2 LCD W/ KEYPAD
For Arduino compatible boards for user input and menu selection in custom applications. Features a 1602 white character LCD with blue LED backlight and 4-bit Arduino LCD library. Character size: 2.95 x 4.35mm. Keypad consists of 6 keys: select, left, up, down, right and reset. Potentiometer for dimmable backlighting, LED indicator. Operates on 5Vdc. 80mm x 58mm x 13mm.
CAT# ST-1113
$7.95 - $5.95 each

ARDUINO UNO R3 STARTER KIT
A very useful, not to mention economical, kit including an Arduino Uno R3 microcontroller and a large selection of devices you will want for a number of projects using the Arduino microcontroller. Includes an expansion board, extra breadboards, motors, motor drivers, a relay board, a remote control keypad, joystick, LCD, LED displays, LEDs, jumpers, headers, sensors, switches, pots, battery holder and more. All of this packaged in a well organized, divided plastic case. You can’t go wrong with this. These items purchased separately would be considerably more.
CAT # SKA-47
$36.99 each

RFID READ AND WRITE KIT
Allows you to both read and write MiFare-type cards. Includes one credit-card style tag and one key-fob style tag.
CAT # ME-138
$6.95 - $5.75 each

JOYSTICK SHIELD
Turn your Arduino into a gamepad. Features the Nokia 5110 LCD / nRF24L01 interface. 7 pushbuttons (four big, two small, joystick select button) and a two-axis thumb joystick. Operates on 3.3-5Vdc.
CAT# ST-1124
$4.95 - $4.00 each