

# Ordering Information

## PAYMENT OPTIONS

### Credit Card/Debit Cards

We accept PayPal, VISA, MasterCard, American Express and Discover. Your account will not be charged until your order is shipped.

### Check or Money Order

You may pay by check or money order in U.S. funds, drawn on a U.S. bank.

### Open Account

It is easy to open an account with Jameco. Contact us at 1-800-831-4242.

### International Orders

All international orders must be prepaid with a credit card or PayPal (see approved credit cards above), bank transfer, traveler's check, cashier's check or money order drawn on a U.S. bank in U.S. funds only. There is a \$15 charge to accept a bank transfer. Please do not send cash. Jameco cannot accept letters of credit as a form of payment. E-mail: [International@Jameco.com](mailto:International@Jameco.com).

## 5 EASY WAYS TO ORDER

**Telephone:** Toll-Free 1-800-831-4242



International orders, call 1-650-592-8097

**FAX:** US/Canada: 1-800-237-6948



Other Countries: 1-650-592-2503

[www.Jameco.com](http://www.Jameco.com)

Online catalog! Our complete offering of products is searchable on the Jameco website!

**E-mail/Mail:** E-mail orders to: [Sales@Jameco.com](mailto:Sales@Jameco.com) or print and fill out the order form at [www.Jameco.com](http://www.Jameco.com) then mail it to us at the address below.



**In-Person:** Visit Jameco at  
1355 Shoreway Road  
Belmont, CA. 94002.  
Will-call office hours are  
8 a.m. – 5 p.m. Monday–Friday.



## CONTACT INFORMATION

The following services are available at 1-650-592-8097 Monday through Friday 6 a.m. – 5 p.m. PST or via e-mail:

- International Sales ([International@Jameco.com](mailto:International@Jameco.com))
- Customer Service ([Custservice@Jameco.com](mailto:Custservice@Jameco.com))
- Credit Department ([Credit@Jameco.com](mailto:Credit@Jameco.com))
- Technical Support ([Tech@Jameco.com](mailto:Tech@Jameco.com))  
(Monday – Friday, 8 a.m. – 5 p.m. PST)

### Toll-Free Hotline!

Please call us at 1-800-831-4242.

## POLICIES

### Confirming Orders

Please do not send confirming orders. If company policy necessitates a confirming order, please mark "CONFIRMING" boldly on the first page of the order.

### Minimum Order

A \$5 processing fee will be added to non-web orders below \$25 and Web orders less than \$10.

### Order-Cancellation & Rescheduling

All cancellations and rescheduling are subject to the final approval of Jameco Electronics. Visit us at [www.Jameco.com/cancel](http://www.Jameco.com/cancel).

## SERVICES

### 30-Day Money Back Guarantee

If for any reason you are not completely satisfied with your purchase, simply return the product, in its original packaging, within 30 days for a refund, credit or exchange. Parts returned due to customer ordering error and parts that are returned over 30 days are subject to a restocking fee. Call our customer service department at 1-800-536-4316 or visit [www.Jameco.com](http://www.Jameco.com) to request an RMA#. The RMA should appear clearly on the outside of the box. Returns without an RMA# will not be accepted and no freight collect packages will be accepted. We're sorry, but books, kits, software, grab bags, some large quantity purchases and special orders cannot be returned. Special orders consist of products sold at an OEM quantity discount or products not listed in the Jameco catalog.

### Jameco Warranty

Jameco warrants all merchandise against defects in material or workmanship for a period of 90 days (One year for Jameco ValuePro, ReliaPro & BenchPro products) from the original purchase date unless otherwise stated in writing by Jameco. If Jameco receives the product considered to be defective within this warranty period and the product is determined to be defective, Jameco will, at its sole option and discretion, either repair or replace the product. The foregoing is your sole and exclusive remedy and states Jameco's entire liability arising out of this warranty. [However, Jameco will transfer to customer whatever transferable warranties and indemnities Jameco receives from the manufacturer of the products. Any claims arising from such manufacturer's warranties shall be the sole responsibility of the manufacturer and not of Jameco.] Moreover, Jameco's limited warranty is void if the damage or defect has resulted from improper customer assembly, failure by customer to follow instruction, product modification, negligent or improper operation, accident, abuse or misapplication. Products returned to Jameco pursuant to this warranty must be returned to Jameco prepaid.

### No Other Warranties

The limited warranty above is exclusive and in lieu of all other conditions and warranties for the products and documentation. Jameco makes no other conditions or warranties, express, implied, statutory or otherwise, and expressly disclaims all other conditions and warranties, including but not limited to: implied conditions or warranties of merchantability, fitness for a particular purpose and non-infringement of the products.

### Limitation of Liability

Jameco shall not be liable for any incidental, special or consequential damages for breach of any warranty, expressed or implied, directly or indirectly arising out of Jameco's sale of merchandise, including any failure to deliver any merchandise, or arising out of customer's installation or use, whether proper or improper, of the product, separately or in combination with other equipment, or from any other cause. Products sold by Jameco are not authorized for use as critical components in life support devices or systems.

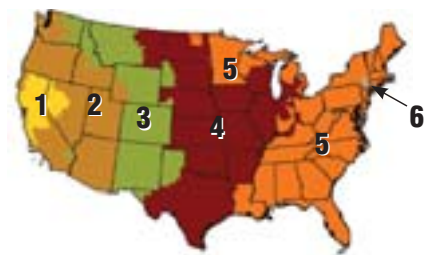
## RoHS & CONFLICT MINERALS COMPLIANCE

Jameco obtains all RoHS and conflict minerals compliance from each manufacturer and supplier. If you require documentation, please work with our sales department to obtain unique product status.

## PRICES

In the unlikely event that you find a lower published price for products that are in stock from one of our competitors, simply call us and we'll beat that price by 10% all the way down to our cost. Prices and discounts are subject to change without notice. Jameco is pleased to occasionally offer promotional discounts to our customers, but these are to be applied to published pricing for stocked products and may not be combined with other discounts nor can they be applied to special or scheduled orders. Occasionally we make a typographical error and unfortunately we cannot honor erroneous prices. Photos in the catalog are representative but many products may vary in appearance.

## SHIPPING INFORMATION



### Delivery Time for UPS Ground (Business Days)

1 day 2 3 4 5 6 days

Orders placed on business days by 6 p.m. Eastern time for products in stock will ship the same day. Orders placed on weekends and holidays will ship the following business day. All orders ship FOB California. Additional shipping time may be required for orders requiring credit approval or for products not in stock.

### Shipping Options

Jameco offers shipping options from FedEx, UPS and the United States Post Office.

UPS/FedEx Ground Shipping  
UPS/FedEx 3-Day Shipping  
UPS/FedEx 2-Day Shipping  
UPS/FedEx Overnight PM  
UPS/FedEx Overnight AM  
USPS Delivery



Jameco offers its business customers the option to charge the customer's shipping account. Jameco offers private carrier LTL shipments on orders typically in excess of 50 pounds. Call Jameco for more information. For more shipping information, visit [www.Jameco.com/shippingrates](http://www.Jameco.com/shippingrates).

### Tracking Your Order

Jameco will email tracking information upon shipment or you can track your order by visiting [www.Jameco.com](http://www.Jameco.com) and clicking the Track Orders link in the top right side of the page.

### International Orders

You'll be presented with shipping options during the check out process. Ground shipping to Canada will include brokerage fees that are billed separately. Customers that would like to ship via a specific carrier or using an existing account number should note these requirements online in the comments box upon checkout. All returns require an RMA and pre-paid shipping back to Jameco.

<b>A-B</b>	<b>C</b>		
A/D CONVERTERS..... 7	CABINETS/ENCLOSURES ..... 26,129,130,133	Hubs ..... 133	DIGITAL PANEL METERS..... 115
ACTUATOR, MOTOR DRIVEN..... 83	CABLE AND CABLE ASSEMBLIES	Power Cords ..... 101,102	DIN CONNECTORS..... 55
ADAFRUIT..... Inside Front Cover,	Accessories..... 43-45	Power Supply..... 133	DIN-RAIL POWER SUPPLIES..... 108,109
..... 14,22,24,74,134,139-141	Adapter..... 47,134	Switch Boxes..... 44,133	DIN-RAIL TERMINAL BLOCK & RAIL ..... 57
ADAPTERS	Audio/Video..... 42,47,58	Trackball..... 133	DIN-RAIL TIMER..... 133
Apple iPhone/iPod/iPad..... 134	BNC..... 58,117	CONNECTORS	DIN-RAIL UPS MODULE ..... 109
Audio/Video..... 47,56,57,98	Category 5e..... 43	Audio/Video..... 47,56,98,99	DIODES
BNC..... 56,57	Category 6..... 43	BNC..... 56	Assortments ..... 13,26,27
Cables..... 134	Coaxial..... 42,58	Brackets..... 133	Germanium ..... 12
Cigarette Lighter..... 99	Communication..... 42	Card Edge..... 54	Kits/Grab Bags..... 13,26,27
Couplers..... 44,47,56,57,82,134	Computer..... 42,43,134	Coax..... 56,57	Laser..... 21,149
Gender Changers..... 48	Extension..... 99,134	Computer..... 48,50,55,133	LEDs..... 21
HDMI..... 46	Hard Disk Drive..... 134	Contacts..... 48-50,52-55	Rectifiers, Bridge, SCR..... 13
Modular Telephone..... 43,44	HDMI..... 46	Couplers..... 56	Small Signal..... 13
Network..... 43,44	Hook-up..... 41	CPC Circular, Cylindrical..... 55	Switching..... 12
Power..... 98,99	IEEE 488..... 134	D-Sub..... 47,48,54	Triacs..... 13
Power Cord Adapters..... 101	Keyboard..... 134	DIN..... 55	Ultrafast..... 12
Prototype..... 128	Management..... 43-45	F Type..... 56	Zener..... 12
RF..... 57	Modular Telephone..... 42,43	Friction Lock Headers..... 52,53	DIP & SIP RELAYS..... 72
Serial..... 7	Monitor..... 134	Gender Changers..... 48	DIP SOCKETS..... 9,10
SMA..... 57	Multi-Conductor..... 42	Grab Bags..... 27,51	DIP SWITCHES..... 68-69
Telephone..... 43,44	Network..... 43,58,134	Hardware..... 48	DISPLAYS, LED & LCD..... 21,23-25,27,115
Terminators..... 56	Paired..... 41,42	Headers..... 51-54	DRILL/DRILL BITS..... 27,120
USB..... 99	Panel Bracket..... 133	Housings..... 50-54	EARBUD..... 134
Wall Transformers..... Inside Front Cover,	Printer..... 43,134	IDC Connectors..... 53,54	EDUCATIONAL ELECTRONIC LABS..... 129
..... 91-95,99,149	Ribbon..... 43,133,134	Jacks..... 56,57,98,99	EEPROMS..... 5
ALLIGATOR CLIPS/CONNECTORS ... 117,118	Serial..... 134	Jones Plugs and Sockets..... 54	ELECTRONIC KITS..... Inside Front Cover,
ANDROID ACCESSORIES..... 134	SMA/SMB..... 58	JST..... 50	..... 114,135-142
ANNUNCIATORS..... 75	Speaker..... 42	LED..... 15	EMI SUPPRESSION CORE..... 99
ANTI-STATIC PRODUCTS..... 5,121	Splitter..... 99	Modular/Telephone..... 43,44	ENCLOSURES
APPLE PRODUCTS..... 110,133,134	Telephone..... 43	Network..... 43,44	Prototype Builder Board..... 130
ARDUINO..... 139-141	Tools..... 44,52,119	Pins..... 48-50,52-55	Rack Mount..... 133
AUDIO/VIDEO	USB..... 133,134	Plugs..... 6,46,54-57,98,99	Storage..... 129,130
Adapters..... 47	CABLE SLEEVES..... 45	Power..... 49,50	EPROM PROGRAMMERS/ERASERS..... 132
Audio Plugs/Jacks..... 46,47	CABLE TESTERS..... 113	Receptacles..... 53-55	EPROMs..... 5
Audio Transformers..... 99,143	CABLE TIES AND CLAMP..... 44	Ribbon Cable..... 54,133	ETHERNET SWITCH..... 44
Earbud..... 134	CALIPERS..... 121	Shorting Blocks..... 50	FANS & ACCESSORIES
HDMI..... 46	CAMERAS AND ACCESSORIES..... 133	Shrouded..... 53	AC Tubeaxial..... 90,Back Cover
Microphone (XLR)..... 47	CAPACITORS	SIMM..... 10	Blowers..... 84-89
Microphones..... 74	Assortment/Kits/Grab Bags..... 26-29	SMA/SMB..... 57	Brushless DC..... 84-89
Power Plugs/Jacks..... 98,99	Ceramic Disc..... 26,27,29,31	Sockets..... 9-11,53,54	Cords..... 89
RCA Plugs/Jacks..... 46,47	Ceramic, Axial Leaded..... 30	Solderless Terminals..... 59	Filters..... 89
Speakers..... 75,76	Ceramic, Monolithic Radial..... 26,31	Strain Reliefs..... 44,54	Guards..... 89
AUTOMOBILE PRODUCTS	Ceramic, Trimmer..... 29	Telecom Splice..... 58	Screw..... 89
Housings & Crimp Terminals..... 50,52,53	Dipped Silver Mica..... 32	Telephone..... 43,44	Thermoelectric Coolers..... 14
Power Plugs..... 99	Dipped Tantalum..... 26,27,29,30	Terminal Blocks..... 57,58	FILTERS, PWR. ENTRY/LINE/AC PLUG ... 101
Sockets & Accessories..... 50	Electrolytic..... 26-30	Terminators..... 56	FORCE-SENSING RESISTOR..... 74
USB Chargers..... 134	Memory Back-Up..... 31	Tools..... 48-50,52,53,59,119	FORREST MIMS III BOOKS & KITS ... 142,143
BANANA PLUGS/JACKS..... 118	Metallized Polyester..... 32	USB..... 6,55	FREQUENCY COUNTERS..... 114
BASIC STAMP CONTROLLERS..... 6,141	Mylar..... 26,32	Wire..... 58	FUME EXTRACTOR & ACCESS. .... 123,125
BASIC SWITCHES..... 59,60	Surface Mount..... 29	XLR..... 47	FUNCTION GENERATORS..... 113
BATTERIES & ACCESSORIES	Thermistors..... 32	YESC..... 52	FUSES & ACCESSORIES
Alkaline..... 111	Tools..... 121	CONTROL KNOBS..... 39	Blocks..... 39
Battery Pack..... 110,111	Varistors..... 32	CONTROLLERS..... 6	Circuit Breakers..... 39,40
Chargers..... 110,111	CAR POWER ADAPTER..... 99,134	Micro..... 4-6	Clips..... 39
Clips/Holders/Snaps..... 112	CARD-EDGE CONNECTORS..... 54	Motor..... 6,7,82,83	Fast Acting..... 40
Lead Acid..... 111	CELL PHONE ACCESSORIES..... 110,134	PIC..... 6	Holders..... 39
Li-Ion..... 110	CHARGERS..... 110,111,134	Robotics..... 6	Kits..... 40
Lithium..... 110	CHEMICALS & ACCESS. .... 14,127,132	Servo..... 6,83	Resettable Fuses..... 40
NiCd..... 110	CHOKES..... 27,29,34	Stepper..... 7,82	Slow Blow..... 40
NiMH..... 110	CIRCUIT BOARD MTG. HARDWARE..... 77,78	CONVERTERS, DC-DC..... 109	
Rechargeable..... 110,111	CIRCUIT BOARDS..... 132	CORDS, POWER..... 89,95,101,102	<b>G-H</b>
Silver Oxide..... 111	CIRCUIT BREAKERS..... 39,40	COUPLERS, SHAFT..... 82	GALs..... 6
Zinc Chloride..... 111	CLEANERS/DEGREASERS..... 127	CPC CONNECTORS & CONTACTS..... 55	GEAR HEAD MOTORS..... 80
BINDING POSTS..... 118	CLIPS	CPUs..... 4,5	GEARS..... 27,82
BNC CABLES/CONNECTORS/ADAPTERS.....	Alligator..... 117,118	CRIMPING TOOLS..... 48,50,52,53,59,119	GENDER CHANGERS/ADAPTERS..... 48
..... 56-58,117,118	Test..... 118	CRYSTALS..... 27,40	GIPB (IEEE-488) CABLE..... 134
BOOKS..... 143	CLOCK CHIPS..... 4,6	<b>D-F</b>	GLUE GUN..... 122
BOTTLE..... 127	CLUB JAMECO KITS..... 142	D-SUB CONNECTORS..... 47,48,54	GRAB BAGS..... 27,29,51,143
BOXES..... 129,130	COAX CABLES..... 58	D/A CONVERTERS..... 7	HALL EFFECT SENSORS..... 8,73
BRACKETS/MOUNTING RAILS..... 107,133	COAXIAL CABLE/WIRE..... 42,58	DATA LOGGERS..... 111	HARD DRIVE ACCESSORIES..... 134
BREADBOARDS..... 128-129,132	COMPONENT ASSORTMENTS..... 2-4,8,11,	DC MOTORS..... 79	HARDWARE
BRUSH..... 127	..... 13,26-29,33,34	DC-DC CONVERTERS..... 109	Assortments/Grab Bags..... 26,27
BRUSHLESS FANS..... 84-89	COMPONENT CABINETS..... 27,129	DESIGN LABS..... 129	Cable Mounting..... 44
BZZERS..... 75	COMPUTER	DESIGN PLASTIC..... 127	Fan Mounting..... 78
	Adapter..... 48,134	DESOLDER STATION & EQUIP..... 123,125	Handle..... 78
	Cables..... 43,46,99,133,134	DFROBOT PRODUCTS..... 82,129,139-141	Heat Sink Mounting..... 14
		DIGITAL MULTIMETERS..... 114,115	Knobs..... 39
			LED Mounting..... 15,26

# Product Index

## HARDWARE (Continued)

Magnet.....	78
Mounting Brackets.....	78,107
Panel Mounting.....	46,63-65,78
PCB Mounting.....	78,131
Screws, Nuts, Washers.....	26,27,48,77,78,131
Spacers.....	26,27,131
Standoffs.....	27,48,77,131
Thumbscrews.....	48
HDMI CABLES.....	46
HEADER PLUGS.....	54
HEADERS.....	27,51-53
HEAT GUNS.....	45,122
HEAT SHRINK SOLDER SLEEVE.....	45
HEAT SHRINK TUBING.....	45
HEAT SINKS & ACCESSORIES.....	14,127
HELPING HANDS.....	125-126
HOODS, D-SUB.....	48
HOOK-UP WIRE.....	41
HOUSING.....	51-54
HUBS.....	133

## I-K

IDC CONNECTORS.....	53,54
INDUCTORS.....	27,29,34
INTEGRATED CIRCUITS	
Amplifiers.....	7,8
Anti Static.....	121
Basic Stamp.....	6
Buffer.....	6
Clock Chips.....	4
Comparators.....	7
Controllers.....	6,7
Converters.....	7
Digital Potentiometers.....	8
Diodes.....	12,13
Display Drivers.....	6
Encoders/Decoders.....	7
Interface.....	6
J-FETs.....	12
Linear Series.....	8,26,27
Logic.....	2-4,26,27
Memory.....	4-6
Microcontrollers.....	6
MOSFETs.....	12
Processors.....	4-6
Programmable 555 Timers.....	4
Propeller Chips.....	6
RS-232 Drivers/Receivers.....	7
RS-422/423/485 Drivers/Receivers.....	7
Serial Adapters.....	7
Sockets.....	9-11
Storage Rails/Tubes.....	121
Transistors.....	11
Voltage Regulators.....	9
Z80 MPUs.....	5
iPHONE ACCESSORIES.....	110,134
ISOLATION TRANSFORMER.....	99
JACK SCREWS/HEX NUTS.....	48
JUMPER LEADS/WIRES.....	128
KEYLOCK SWITCHES.....	68
KEYPADS.....	Inside Front Cover,74
KITS, COMPONENTS	
Assorted Components.....	22,50,128-129
Capacitors.....	26
CMOS, CD4000 Series.....	4
Diodes.....	12,13,26
Fuses.....	40
Grab Bags.....	27,29,51
Hardware.....	26,78
Heat Shrink Tubing.....	45
ICs, IC Kit, 74LS00 Series & Linear... 2-4,8,26	
LEDs & LED Mounting Hardware.....	22,26
Potentiometers.....	26
Rectifiers.....	13
Resistors.....	26,33,34
Solderless Terminal.....	59
Switches.....	26
Transistors.....	11,26

## KITS, ELECTRONICS

Alternative Energy.....	138
Audio Amplifier.....	135,136
BASIC Stamps.....	141
Distance & Light...Inside Front Cover,137,142	
Educational.....	Inside Front Cover,
.....	114,116,128,129,135-143
Experimentation Kit.....	135,138,142
Forrest M. Mims III.....	142
LED.....	Inside Front Cover,135,137,142
Power Supply & Motor.....	137,142
Propeller.....	141
Raspberry Pi.....	142
Robotic & Computer Control.....	.....
.....	Inside Front Cover,135,136
Sensors, Modules & Accessories.....	.....
.....	116,128,141
Starter Kit.....	128,135,139,142-143
Test & Measurement.....	114,136,142
Time & Clock.....	Inside Front Cover,138
KNIFE SET.....	120
KNOBS.....	39

## L-M

LAMPS AND ACCESSORIES	
Ballast.....	20
Incandescent.....	20
LED.....	20,22,116,125
Magnifier/Desktop.....	116,125
Neon.....	20
Panel Mount.....	20
Ultraviolet (Purple).....	18
LASER PRODUCTS.....	21,149
LCD DISPLAYS/MODULES.....	24,25,115
LEAD ACID BATTERIES/CHARGERS.....	111
LEAD FORMING TOOLS.....	121
LEADS, TEST.....	117
LED ACCESSORIES.....	15,20,22
LED DISPLAYS	
Alphanumeric.....	24
Bar Graph Arrays.....	24
Dot Matrix.....	24
Multi-Digit Arrays.....	21
Numeric.....	23,24
Organic (OLED).....	24
LED HARDWARE.....	15
LED MODULES.....	22
LED STRIPS.....	22
LED TESTER.....	15
LEDs	
Assortments.....	22,26,27
Backlight.....	15,22
Circuit Board Indicators.....	19
Detectors.....	21
Dimmer.....	22
Displays.....	21,23,24,27
Electronic Kits.....	Inside Front Cover,
.....	135,137,142
Emitters.....	21
Fastoon LEDs.....	22
Grab Bags.....	27
High Output.....	18,19,22
High Power.....	22
Interconnect.....	15
Lamps.....	20,22
Lens.....	15
Light Bar.....	22
Medium Output.....	18
Module.....	22
Mounting Hardware.....	15
Panel Mount Indicators.....	20
Phototransistor.....	21
Power Supplies.....	107
Programmable.....	22
Replacement Lamps.....	20
RGB & RGB Controller.....	19,22
Sockets.....	22
Soldering Iron.....	122
Standard Output.....	16,17,19

Strip.....	22
Tester.....	15
LOGIC ANALYZER.....	114
LOGIC PROBE AND PULSER.....	114
MADLAB.....	Inside Front Cover,135
MAGNET.....	78
MAGNETIC TRANSDUCERS.....	75
MAGNIFYING GLASSES/LAMPS.....	116,125
MEMORY	
Capacitors.....	31
DRAM.....	5
EPROMs/EEPROMs.....	5
SRAM.....	5
METERS	
DMM.....	114,115
Energy Consumption.....	113
LCR.....	113
Panel.....	115
MICRO:BIT.....	Inside Front Cover,135
MICROCONTROLLERS.....	Inside Front Cover,
.....	4-6,135,139
MICROPHONE CARTRIDGES.....	74
MICROPROCESSORS.....	5,6
MODULAR ADAPTERS.....	43
MODULAR CABLE/WIRE.....	42,43
MODULAR JACKS & PLUGS.....	43,44
MOSFETS.....	12
MOTION SENSORS.....	69
MOTOR CONTROLLERS.....	6,7,82,83
MOTORS	
AC.....	80
Accessories.....	83,141
Controllers.....	6,7,82,83
DC.....	27,79
Gear & Gear Head.....	80
Grab Bag.....	27
Robotics.....	82,83
Servo.....	83
Stepper.....	81,149
Stepper Controllers.....	6,7,82
Vibrating.....	81
MULTIMETER TEST PROBES.....	117
MULTIMETERS.....	114,115
MUSCLE WIRE.....	143

## N-Q

NETWORK PRODUCTS.....	44,133,134
NIBBLING TOOL.....	120
NUTS.....	27,48,78
OLED DISPLAYS.....	24
OPTICAL SWITCHES.....	15
OPTOCOUPERS.....	15
OPTOISOLATORS.....	15
ORDER INFORMATION.....	144
OSCILLATORS.....	27,40
OSCILLOSCOPES/ACCESS.....	113,114
PALS.....	6
PANEL METERS.....	115
PANEL MOUNTING HARDWARE.....	46,63-65,78
PARALLAX PRODUCTS.....	6,83,141
PATCH CORDS.....	117
PC BOARDS/EXTENDERS.....	131,132
PC PHOTO ETCH.....	132
PCB DEV. TOOLS/ACCESS.....	132
PELLIER THERMOELECTRIC COOLERS... 14	
PHONE JACKS/PLUGS.....	43,44
PHONE LINE TESTERS.....	113
PHOTO TRANSISTORS.....	15
PHOTOCELLS.....	27,32
PIC MICROCONTROLLERS.....	6
PIEZO TRANSDUCERS.....	75
PLCC SOCKETS.....	9
PLUGS	
Audio.....	46,47,56
DC Power.....	99
DIN.....	55
DIP.....	54
IDC.....	54
Jones.....	72

Modular.....	43
Power Entry.....	101
RCA.....	46,47
POTENTIOMETERS	
Adjustment Tool.....	37
Audio Taper.....	35,148
Cermet.....	26,36-38
Digital.....	8
Kits/Grab Bags.....	26,27,29
Knobs.....	39
Linear Taper.....	35,148,149
Multi-Turn.....	26,27,29,36-37
Single-Turn.....	26,27,29,35,38,149
Slide.....	34
Trimmer.....	27,29,35-38,149
Vertical Mount.....	35
Wirewound.....	38,148
POWER ADAPTERS.....	98,99
POWER BANK.....	110
POWER CONNECTORS/PINS	
AC Plug.....	101
Disk Drive, Power Supply.....	50
Kits.....	49
Pins.....	49,50,52,53
Plugs/Receptacles.....	49,101
POWER CONVERTERS.....	109
POWER CORDS & ADAPTERS.....	89,95,98,
.....	99,101,102
POWER ENTRY & LINE FILTERS.....	101
POWER JACKS/PLUGS.....	98,99
POWER PROTECTION/STRIPS.....	133
POWER RELAYS.....	72
POWER SUPPLIES	
AC Variable Transformers.....	99
AC/DC.....	95-97,103-107,129
Benchtop.....	116
Brackets.....	107
Breadboard.....	129
Charger.....	111
Computer.....	133
DIN-Rail.....	108,109
Enclosed.....	104-107, Back Cover
High Voltage.....	143, Back Cover
Interchangeable Plug.....	93,109
LED.....	107,109
Medical.....	95,103,105
Open Frame.....	103
Power Cords.....	102
Switching.....	95-97,103-108
Table-Top.....	95-97
Unregulated Linear.....	96
Wall Adapters.....	Inside Front Cover,
.....	91-95,99,109,149
POWER TRANSFORMERS.....	100
PRINTED CIRCUIT BOARD.....	131,132
PRINTER ACCESSORIES	
Cables.....	134
Switch Boxes.....	133
PROBES.....	114
PROGRAMMERS.....	129,132,134
PROTOTYPE ADAPTER.....	128
PROTOTYPING BOARDS/ACCESSORIES.....	.....
.....	41,127,131,132
PROXIMITY SENSORS.....	73
PUSHBUTTON SWITCHES.....	61,62
R-S	
RACKS/RACK MOUNT EQUIP.....	133
RAM.....	5
RANGE FINDERS.....	73
RASPBERRY PI ACCESSORIES.....	142
RCA, JACKS/PLUGS/CABLES.....	46,47
RECEPTACLES.....	55
RECTIFIERS.....	13
RELAYS	
Blade and Octal.....	72
Circuit Breaker.....	39,40
Contractor.....	72
DIP & SIP.....	72



RELAYS (Continued)	Relay.....71	TELEPHONE ACCESSORIES.....43,44	TRANSISTORS
Enclosed Contraction.....71	SIMM.....10	TELEPHONE CABLE/WIRE.....42,43	Assortments.....11,26-27
General Purpose.....72	Single-In-Line.....10	TELEPHONE CONNECTORS.....43,44	Hexfet MOSFET.....12
High Voltage DC Contactor.....72	Solder Tail.....9,10	TELEPHONE LINE TESTERS.....113	J-FETS.....12
OptoMos.....71	Wire Wrap.....10	TEMPERATURE SENSORS.....8	Kits/Grab Bags.....11,26-27
PC Mount.....70	Wire Wrap ID Labels.....10	TERMINAL BLOCK JUMPERS.....58	MOSFETs.....12
Power.....70,72	ZIF.....10,11	TERMINAL BLOCKS.....57,58	N-Channel MOSFETs.....12
Reed.....71	SOLAR KITS.....138	TERMINALS	NPN Bipolar.....11
Sockets.....71,72	SOLAR PANELS.....143	Crimp.....49,50,52-55	P-Channel MOSFETs.....12
Solid State.....71	SOLDER/DESOLDERING EQUIPMENT	Solderless.....59	PNP Bipolar.....11
RESETTABLE FUSES.....40	Accessories.....Inside Front Cover,	Wire Wrap.....54,131	Radio.....135
RESISTORS	50,116,122-127,149	TEST EQUIPMENT	TRIACS.....13
Assortments.....26,27,29,33,34	Fume Extractors.....123,125,149	Benchtop Power Supplies.....116	TUBEAXIAL FANS.....84-90, Back Cover
Carbon Film.....33,34	Pots.....125	Clamp Meters.....115	TWEEZERS.....121
Chip.....34	Desolder Pump.....125	Data Loggers.....111	UARTs.....5
Kits/Grab Bags.....26,27,29,33,34	Sponges.....122,123,149	Environmental.....113	ULTRASONIC SENSORS.....74
Network.....27,29,34	Solder.....126	Frequency Counter.....114	USB PRODUCTS
Surface Mount.....34	Stations/Irons/Kits.....Inside Front Cover,	Function Generator.....113	Adapters/Connectors.....6,55,99
Tools.....121	122-124,149	LAN Tester.....113	Cable.....133,134
Wirewound.....34	Tips.....Inside Front Cover,122-125,149	LED Tester.....15	Chargers.....110,134,142
RESONATOR, CERAMIC.....31	Tools.....Inside Front Cover,	Logic Analyzer.....114	Hubs.....133
RFID PRODUCTS.....141	50,116,122-127,149	Logic Probe.....114	Programmable.....129,134
RIBBON CABLE.....43,134	SOLDERLESS BREADBOARDS.....128	Multimeter, Analog/Digital.....113-115	Servo Controller.....83
ROBOTICS.....Inside Front Cover,74,82-83,	SOLDERLESS TERMINALS.....59	Oscilloscopes.....113,114	Video Borescope.....133
116,133,135,136-142	SOLENOID VALVE.....83	Pattern Generator.....114	
ROCKER SWITCHES.....65-67	SOLENOIDS.....83	Plugs & Clips.....118	
ROTARY DIP SWITCHES.....69	SOLID STATE RELAYS.....71	Power Supply.....116	
ROTARY SWITCHES.....68	SOUND DEVICES/BUZZERS.....74-76	Probes.....114,117	
RUBBER FEET.....27,78	SPACERS.....26,27,131	Programmers/Testers.....129,132,134	
SCREWDRIVERS.....121	SPEAKER WIRE.....42	Signal Generators.....113	
SCREWS.....27,48,77	SPEAKERS.....75,76	Test Leads.....117	
SCRs.....13	SPEED SENSORS.....73	TEST LEADS/PROBES/CLIPS.....114,117,118	
SECURITY.....133	SRAMs.....5	THERMISTORS.....32	
SENSORS	STANDOFFS.....27,48,77,131	THERMOELECTRIC COOLERS.....14	
Accelerometer.....74	STATIC CONTROL.....5,121	TIE MOUNTS.....44	
Arduino Compatible.....Inside Front Cover,	STATIC RAM.....5	TOGGLE SWITCHES.....63-65	
74,140-141	STEPPER MOTOR CONTROLLERS.....6,7,82	TOOL KITS.....45,50,119,124,125	
Airflow.....73	STEPPER MOTORS.....81,149	TOOLS	
CO2.....74	STORAGE, CABINETS.....129,130	Anti-Static.....5,121	
Distance.....73,74	SUPER COMBOS.....116,124,128	Bottle.....124,127	
Environmental.....74	SUPPRESSION CORE.....99	Brush.....124,127	
Flex.....74	SURFACE MOUNT	Cable Cutter.....119	
Gear Tooth.....73	Adapter.....128	Calipers.....121	
Hall Effect.....8,73	ICs.....4,5,7-9,27	Cases.....129	
Infrared.....73	LEDs.....19	Crimping/Stripping/Cutting.....48,50,52,	
Motion.....69	Rework Stations.....124	53,59,116,119	
Position.....73	Tools.....121,123	Drills/Bits/Stand.....120	
Pressure.....73	SURGE PROTECTORS.....133	File Set.....121	
Proximity.....69,73	SWITCH BOXES/CABLES.....133,134	Glue Gun/Glue Sticks.....122	
Resistor.....74	SWITCHES	Hand Tools.....48,50,52,53,59,116,119-121	
Solid State.....73	Accessories.....63,69	Heat Guns.....45,122	
Sonar Range Finder.....73	Basic.....59,60	Hemostat.....120	
Speed.....73	Binary.....69	IC.....121	
Ultrasonic.....73,74	Caps/Covers.....63,69	IDC Connector.....53	
SERVO MOTORS.....83	Centrifugal Force.....69	Insertion/Extraction.....49,50,52,121	
SERVOS & CONTROLLERS.....6,83	Cord.....69	Kits/Sets.....50,119-122,124,125,129	
SHAFT COUPLERS.....82	DIP.....26,27,68	Knives.....120	
SHIELDS.....Inside Front Cover,82,128,139	Keylock.....68	Lead Forming.....121	
SHORTING BLOCKS.....50	Keypad.....Inside Front Cover,74	Miscellaneous.....37,44,50,120,121,123,125	
SHRINK TUBING.....45	Kit/Grab Bag.....26,27	Nibbling.....120	
SIMM SOCKETS.....10	Magnetic Proximity/Reed.....69	Pliers.....120	
SIRENS.....75	Optical.....15	Reamer.....120	
SLIDE SWITCHES.....60	Pushbutton.....26,27,61,62	Screw/Nut Drivers.....116,121	
SMA/SMB CONNECTORS.....57,58	Reed Alarm.....69	Soldering.....50,122-126	
SOCKETS & ACCESSORIES	Rocker.....27,65-67	Tweezers.....116,121	
Assortment/Kits.....27	Rotary.....68	Vises.....125,126	
Connectors.....53	Rotary DIP.....69	Wire Wrap/Strip.....121	
Crimp Terminals.....50	Sensors.....73,74	Work Center/Helping Hands.....125,126	
DIN.....55	Slide.....27,60	TRANSUDERS.....75	
DIP.....9,10,54	Tactile.....69	TRANSFORMERS	
Grab Bag.....27	Thumbwheel.....69	Audio.....99,143	
Header Plugs.....54	Toggle.....26,27,63-65	International Step Up/Down.....100	
IC.....9-11,54	Voltage Selector.....69	Isolated.....99	
Low Profile.....9,10		PC Mount.....99	
Machine Tooled.....10		Power.....100	
Markers.....10		Quick Connect.....100	
Oscillator.....40		Split-Bobbin.....100	
PLCC.....9		Variable.....99	
		Wall (AC & DC).....Inside Front Cover,91-95,99	

## V-Z