

Sensors, Microphone Cartridges & Keypads

3 LEVELS OF SAVINGS
 NAME BRANDS HOUSE BRANDS SPECIAL BUY

Pololu Digital/Analog Distance Sensors PARALLAX

These sensors are small in size and can be placed just about anywhere on your project.

- 2136462: 3-pin header connection (included)
- 2150256: Connects with 3-pin JST connector (P/N 2143881, not included)



Part No.	Mfr.	Mfr. P/N	Digital/Analog	Detection Range	Res. Time	1	10
2150256	Parallax	28995	Analog	3.9" to 31.5"	38.0 ms	\$9.95	\$8.95
2136454	Sharp	1137	Analog	7.8" to 59"	38.0 ms	13.95	12.49
2143881	Pololu	117	3-pin female JST cable w/ stripped leads			1.35	1.19
2244404	ValuePro	13685-01	3-pin female JST cable w/ 0.1 conn terminals			1.49	1.35
2143419	Pololu	1799	3-pin female JST cable w/ 0.1" crimp terminals			1.25	1.09

* Web Code: PDS

Arduino Compatible Sensors

These plug and play sensors are ready for immediate installation and use.

- 2213270: • Operation voltage: 5V, 7-12V reg. at MCU for heating
- 2190741: • 2.0VDC to 3.6VDC
- SPI and I²C interface



Part No.	Description	1	5
2213270	CO ₂ gas sensor, single digital output (MG-811)	\$55.95	\$53.95
2190741	3-axis accelerometer ADXL345	8.95	7.95

* Web Code: ACS

For Arduino Boards and Sensors, see pages 139-140

JAMECO ValuePro Ultrasonic Sensor Sets

Motion or Distance Sensing, Transmitter/Receiver Set

- Frequency: 40kHz ±1.0kHz • Aluminum case
- 139492: • Capacitance: 2000pF ±20%
- Transmitter: bandwidth 5.0kHz @ 100dB, sound pressure level 112dB @ 40 ±1.0kHz
- Receiver: bandwidth 5.0kHz @ -75dB, min. sensitivity 67dB @ 40 ±1.0kHz (R=3.9kΩ)
- 136654: • Capacitance: 2000pF ±30%
- Transmitter: bandwidth 4.0kHz @ 112dB, sound pressure level 119dB @ 40±1.0kHz
- Receiver: bandwidth 3.5kHz @ -71dB, min. sensitivity 65dB @ 40±1.0kHz (R=3.9kΩ)

Part No.	Manufacturer	Product No.	Case Size	Lead Length/Spacing	1	10	100
139492	ValuePro	40TR12B	0.30"H x 0.43"Dia.	0.28"	\$6.95	\$6.25	\$5.59
136654	ValuePro	40TR16F	0.47"H x 0.62"Dia.	0.39"	6.95	6.25	5.59

* Web Code: CAU

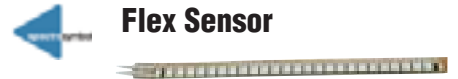


Flex Sensor

This flex sensor is perfect for applications that require the measurement of repeated bending.

- Maximum resistance: 30kΩ to 40kΩ, proportional to the degree of flexing or bending
- Applications: virtual reality data gloves, robotic, bio-metric, physics and engineering

Part No.	Nominal Res.	Length	1	10
150551	10kΩ	4.5"	\$12.95	\$11.49

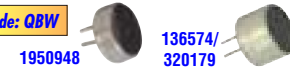


JAMECO ValuePro Omni-Directional Electret Condenser Microphone Cartridges

Applications: Tape recorders, intercoms, hearing aids, telephone and answering devices, sonic controlled toys and sensors

- Max current: 0.5mA • Impedance: >2.2kΩ • Terminals: PC pin leads

* Web Code: QBW

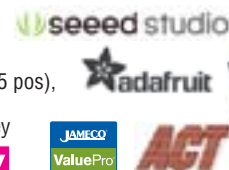


Part No.	Cross Ref. No.	Sensitivity	Frequency (Hz)	Max. Op. Volt.	Stand Op. Volt.	Sensitivity Reduction	S/N Ratio	Size (H x Dia.)	Pricing		
									1	10	100
1950948	AMF-097A40-NB1-LF	-60 ±3dB	50-16,000	10VDC	3.0VDC	-3dB @ 3V	>58dB	.27" x .39"	\$0.65	\$0.55	\$0.49
2202095	F9767AP*	-38 ±3dB	20-16,000	10VDC	3.0VDC	-3dB @ 1.5V	>58dB	.26" x .38"	.99	.89	.79
2188633	AOM-6545P-R*	-45 ±2dB	20-20,000	10VDC	4.5VDC	-3dB @ 3V	>60dB	.26" x .37"	.65	.59	.49
2126141	EC928P-602	-40 ±2dB	20-12,000	10VDC	4.5VDC	-3dB @ 1.5V	>75dB	.26" x .38"	.75	.65	.55
136574	WM-60PC	-54 ±2dB	20-12,000	12VDC	4.5VDC	-3dB @ 3V	>40dB	.30" x .38"	.99	.89	.75
320179	EM-99	-64 ±2dB	20-12,000	12VDC	4.5VDC	-3dB @ 3V	>40dB	.27" x .39"	.99	.75	.65

* Manufacturer: Arndt

1x4 & 12-Button 4x3 Numeric Keypads

- Contact resistance: 200Ω to 800Ω
- Recommended connector: Receptacle housing: P/Ns 163686 (5 pos), 2259753 (7 pos), 103203 (8 pos); Crimp pin: P/N 100766
- Life test: 2237802/2230467: 500,000 to 1 million cycles per key
- 20-pin break away male header: P/N 2229036
- Compatible with MOS, TTL, and DTL (10Ω max.)



Part No.	Manufacturer	Mfr. Part No.	Description	Size (L" x W" x H")	1	10	100
2217609	Seesed Studio	COM62229M	Membrane, 7-pin female conn.	2.4 x 3.0 x 0.05	\$5.95	\$5.35	\$4.75
2237802	ValuePro	KPD-34-521-R-BLACK	8-pin header	3.0 x 2.2 x 0.6	4.95	4.49	3.95
2230467	ACT Components	041002-ASSY-000	7-pin header	2.7 x 2.0 x 0.3	6.95	6.25	5.59
2246338	Adafruit	419	Membrane, 7-pin header	2.75 x 3.0 x 0.035	4.95	4.49	3.95
2246354	Adafruit	1332	1x4 membrane, 5-pin header	2.72 x 0.79 x 0.05	4.95	4.49	3.95

16-Button 4x4 & 2x8 Numeric Keypads PARALLAX

- Contact resistance: 200Ω to 800Ω
- Life test: 2131055/169245: 1 to 3 million cycles per key
- 152063/196171: >500,000 cycles per key
- Recommended connector: Receptacle housing: P/Ns 103203 (8 pos) and 2259761 (9 pos); Crimp pin: P/N 100766
- 8-pin male header: P/N 153702 (straight)
- Compatible with MOS, TTL, and DTL (10Ω max.)



Part No.	Manufacturer	Mfr. Part No.	Description	Size (L" x W" x H")	1	10	100
2131055	ValuePro	AK-1604-N-BWB	8-pin solder pad	2.5 x 2.6 x 0.4	\$6.95	\$6.25	\$5.59
169245	ValuePro	AK-1607-N-BBW-R	8-pin solder pad	3.0 x 2.8 x 0.6	9.25	8.25	7.49
2161473	Parallax	27899	Membrane, 8-pin header	2.7 x 3.0 x 0.06	7.95	7.49	6.95
152063	ACT Components	07-30008-000	9-pin header	2.6 x 2.9 x 0.4	16.95	14.49	12.95
196171	ACT Components	07-30009-000	2x8, 9-pin header	4.6 x 1.7 x 0.4	16.95	15.49	13.95