

## Bill of Materials

A - Allied Electronics  
 S - Spark Fun Electronics  
 B - BSD Micro RC  
 E - Electronics Goldmine  
 P - Pololu Robotics and Electronics

The legend to the left explains at which supplier each item can be found.

### Transmitter

Name	Description	A	S	E	P	Part#	Price
C1	.1uF Capacitor	*				852-1170	0.31
C2	22pF Capacitor	*				881-0422	0.2
C3	22pF Capacitor	*				881-0422	0.2
C4	100uF Capacitor	*				852-7080	0.199
IC1	PIC16F874A	*				383-0469	5.509
IC2	5V Regulator	*				288-0449	0.84
LCD	20x4 HD44780 Character LCD	*				670-1120	26.7
LED1	Blue LED	*				505-9717	1.29
LED2	White LED	*				749-3330	0.73
PW	9V DC Adaptor	*				653-0175	7.43
Q1	TIP31A	*				568-0545	0.295
R1	1k Ohm Resistor	*				840-0093	0.03
R2	333 Ohm Resistor	*				296-6429	0.07
R3	1k Ohm Resistor	*				840-0093	0.03
R4	333 Ohm Resistor	*				296-6429	0.07
XTL1	4Mhz Crystal	*				895-0604	0.383
KEYPAD	12 Key Numeric Keypad		*			COM-08653	3.95
TX	RF Link Transmitter - 315MHz		*			WRL-08945	3.95
SP1	8 Ohm Speaker			*		G7898	1

**Transmitter Subtotal**

**\$53.19**

### Blimp

Name	Description	A	S	B	P	Part#	Price
Batt2	9V Battery	*				729-4097	2.16
C1	22pF Capacitor	*				881-0422	0.2
C2	22pF Capacitor	*				881-0422	0.2
C3	22pF Capacitor	*				881-0422	0.2
C4	22pF Capacitor	*				881-0422	0.2
C5	100 uF Capacitor	*				852-7080	0.199
IC1	PIC16F88	*				383-0496	2.6
IC2	PIC 16F84A	*				383-0445	3.61
IC3	PIC 16F88	*				383-0496	2.6
IC4	PIC 16F874	*				383-0469	5.509
IC5	SN754410 Motor Driver	*				735-1803	1.419
IC6	5V Voltage Regulator	*				288-0449	0.84
Q1	4Mhz Crystal	*				895-0604	0.383
Q2	4Mhz Crystal	*				895-0604	0.383
R1	1k Ohm Resistor	*				840-0093	0.03
R2	1k Ohm Resistor	*				840-0093	0.03
R3	1k Ohm Resistor	*				840-0093	0.03

R4	1k Ohm Resistor	*			840-0093	0.03
R5	1k Ohm Resistor	*			840-0093	0.03
S1	SPST Mini Switch	*			870-0351	3.34
S2	SPST Mini Switch	*			870-0351	3.34
Batt1	3.3V Li-Po 10C Battery		*		PRT-00339	11.95
RX	RF Link 4800bps Receiver - 315MHz		*		WRL-08947	5.95
US	Maxbotix LV-EZ1 Range Finder		*		SEN-00639	24.95
M1	N20 Motor			*	610	2.25
M2	N20 Motor			*	610	2.25
	Thrust Propellers			*	651	4.5
IR1	Infrared Photodetector			*	837	2.5
IR2	Infrared Photodetector			*	837	2.5
IR3	Infrared Photodetector			*	837	2.5
IR4	Infrared Photodetector			*	837	2.5
SRVO	Hobby Servo			*	1041	9.95

**Blimp Subtotal**

**\$99.13**

**Beacon**

Name	Description	A	S	E	P	Part#	Price
C1	.01uF Capacitor	*				507-0210	0.12
C2	.01uF Capacitor	*				507-0210	0.12
C3	.1uF Capacitor	*				852-1170	0.31
C4	.1uF Capacitor	*				852-1170	0.31
IC1	555 Timer IC	*				288-0605	0.6
IC2	555 Timer IC	*				288-0605	0.6
IC3	5V Voltage Regulator	*				288-0449	0.84
PW	9V DC Adaptor	*				653-0175	7.43
R1	1k Ohm Resistor	*				840-0093	0.03
R10	1k Ohm Resistor	*				840-0093	0.03
R2	1k Ohm Resistor	*				840-0093	0.03
R3	1k Linear Pot	*				522-0049	4.52
R4	1k Linear Pot	*				522-0049	4.52
R5	1.8 Ohm Resistor	*				840-0206	0.035
R6	1.8 Ohm Resistor	*				840-0206	0.035
R7	1.8 Ohm Resistor	*				840-0206	0.035
R8	1.8 Ohm Resistor	*				840-0206	0.035
R9	1k Ohm Resistor	*				840-0093	0.03
T1	TIP32B Transistor	*				568-1156	0.295
T2	TIP32B Transistor	*				568-1156	0.295
T3	TIP32B Transistor	*				568-1156	0.295
LED1-16	Infrared LED			*		G2158	4

**Beacon Subtotal**

**\$24.52**

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**Total Price** **\$176.83**

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