

ROV Parts for Cornerstone Electronics & Robotics III

Updated 9/25/12

Part Description	Source	Part #	Unit Cost	Quant.	Total Cost	Notes:
<b>Control Box and Tether:</b>						
DPDT Center Off Momentary Switch Solder	Electronix Express	1770GOMDD8012A	\$1.80	1	\$1.80	
Competition Style Arcade Joystick	ABlackHorse.com	RA-Joystick-JS10	\$8.95	1	\$8.95	
25' - 24 AWG/4 Pair Category 5e Network Cable	Jameco	645722	\$3.74	1	\$3.74	Purchased in 100' Roll
25' - 16/3 Extension Cord	Home Depot	277525	\$4.24	1	\$4.24	Purchased as 100' Cord
25' - 16/2 Awg 250 Feet In Wall Speaker Wire	Amazon.com	-	\$4.60	1	\$4.60	Purchased in 250' Rolls
8' - 16/2 Awg 250 Feet In Wall Speaker Wire	Amazon.com	-	\$1.50	1	\$1.50	Purchased in 250' Rolls
5" L x 4" W x 3" H Aluminum Enclosure	Jameco	11886	\$8.95	1	\$8.95	
1/4" Stud Size Ring Terminal	MSC	02651065	\$0.20	2	\$0.40	Purchased in quantities of 25
Automotive Fuse Holders 20A - Fuse Type: AF	MSC	03078805	\$1.46	1	\$1.46	Also available at auto supply stores
Automotive - ATC Blade Type Fuses 10 Amp	MSC	74680513	\$0.66	3	\$1.98	Purchased in quantities of 5
<b>Printed Circuit Board:</b>						
PIC16F88	microchipdirect.com	PIC16F88-I/P	\$2.60	1	\$2.60	Purchased in quantities of 1 - 25
18 Pin Socket 0.30" Width	Jameco	112231	\$0.16	1	\$0.16	Purchased in quantities of 10-90
+5V 1A Voltage Regulator T-220 Package	Jameco	51262	\$0.29	2	\$0.58	Purchased in quantities of 1-9
Connector Terminal Blocks 2 Position 16A	Jameco	2094485	\$0.39	4	\$1.56	Purchased in quantities of 1-9
Connector Terminal Blocks 4 Position 16A	Jameco	2124429	\$0.65	1	\$0.65	Purchased in quantities of 1-9
0.33 uF Capacitor	Jameco	138237	\$0.15	2	\$0.30	Purchased in quantities of 10-90
0.1 uF Capacitor	Jameco	25523	\$0.08	2	\$0.16	Purchased in quantities of 10-90
4.7K 1/2W Resistor	Jameco	661677	\$0.05	1	\$0.05	Purchased in quantities of 100-900
10K 1/4W Resistors	Jameco	691104	\$0.04	4	\$0.16	Purchased in quantities of 100-900
1K 1/4W Resistors	Jameco	690865	\$0.04	4	\$0.16	Purchased in quantities of 100-900
1K 1/2W Resistors	Jameco	661503	\$0.05	5	\$0.25	Purchased in quantities of 100-900
Red LED	Jameco	333973	\$0.12	1	\$0.12	Purchased in quantities of 10-90
Green LED	Jameco	334086	\$0.10	4	\$0.40	Purchased in quantities of 10-90
PN2907A PNP Transistor TO-92 Package	Jameco	178520	\$0.05	4	\$0.20	Purchased in quantities of 10-90
1N5817 Schottky Diode	Jameco	177949	\$0.14	4	\$0.56	Purchased in quantities of 10-90
Relay SPDT 8 Amps DC, 5V Coil	Jameco	187151	\$1.35	4	\$5.40	Purchased in quantities of 10-49
MG Chemicals 9x6 in Printed Circuit Board 1/16" Thick Single Sided Presensitized (Makes 3 Boards) (Chemicals and Kits Extra)	Allied Electronics	70125850	\$4.15	1	\$4.15	Purchased in quantities of 1+
<b>Motors/Propellor:</b>						
Mayfair Bilge Pump 500 GPH	Aftermarket Marine	IMBP01	\$19.95	3	\$59.85	
Traxxas #1583 Right Hand 4.0 mm Propellor	Tower Hobbies	1583	\$3.19	2	\$6.38	
Traxxas #1584 Left Hand 4.0 mm Propellor	Tower Hobbies	1584	\$3.19	1	\$3.19	
<b>Body, Pressure Canister, &amp; Hardware:</b>						
413-005 1/2" Side Outlet 90s (PVC Corners)	FlexPVC.com	413005	\$1.19	8	\$9.52	
1/2" PVC Schedule 40 Pipe	Home Depot	193682	\$1.78	2	\$3.56	
1/2" PVC Slip Slip Couplings	Home Depot	571683	\$0.17	4	\$0.68	Purchased in quantities of 10
1/2" PVC Slip Slip Tee	Home Depot	366923	\$0.23	8	\$1.80	Purchased in quantities of 10
1/2" PVC Slip Slip Elbow	Home Depot	571697	\$0.17	6	\$1.02	Purchased in quantities of 10
4 in. UV-Resistant Cable Ties (1,000-Pack)	Home Depot	747442	\$0.017	40	\$0.68	Purchased in quantities of 1000
8 in. UV-Resistant Cable Ties (1,000-Pack)	Home Depot	748726	\$0.02	25	\$0.50	Purchased in quantities of 1000
14 in. UV-Resistant Cable Ties (1,000-Pack)	Home Depot	295875	\$0.13	25	\$3.25	Purchased in quantities of 1000
1/4-20 18-8 Stainless Steel All-Thread, 3' Long	MSC	06052104	\$4.48	1	\$4.48	
1/4-20 x 3" Stainless Steel Machine Screws	MSC	67572768	\$0.8442	4	\$3.38	Purchased in quantities of 100
1/4-20 Stainless Steel Nuts	MSC	87925608	\$0.07	12	\$0.84	Purchased in quantities of 100
1/4-20 Stainless Steel Washers	MSC	06796197	\$0.0339	12	\$0.41	Purchased in quantities of 100
1/4-20 Stainless Steel Wing Nuts	MSC	67581447	\$0.82	4	\$3.28	Purchased in quantities of 100
1/4" x 1 1/2" Fender Stainless Steel Washers	McMaster Carr	90313A109	\$0.36	20	\$7.20	Purchased in quantities of 25
Industrial Thermo Polymers "Water Noodle"	Pinch-A-Penny	15820350	\$1.99	0.5	\$1.00	
#8-32 x 3/4" Stainless Steel Machine Screw	MSC	67571604	\$0.101	4	\$0.40	Purchased in quantities of 100
#8-32 Stainless Steel Washer	MSC	87925335	\$0.021	4	\$0.08	Purchased in quantities of 100
#8-32 Stainless Steel Nut	MSC	87925541	\$0.057	4	\$0.23	Purchased in quantities of 100
1/4" ID - 1/2" OD Rubber Grommet	MSC	82828535	\$0.10	1	\$0.10	Purchased in quantities of 100
5/8" x 0.014" x 2" Long Brass Tubing	Local Hardware Store	-	\$1.00	1	\$1.00	
3/16" Cable Clamp	Jameco	173729	\$0.06	2	\$0.12	Purchased in quantities of 100
3" OD x 2 3/4" ID x 7 1/8" Plexiglas Cylinder	McMaster Carr	8486K361	\$5.53	1	\$5.53	3' Piece Makes 4 Canisters
4" x 4" x 1/2" Plexiglas	McMaster Carr	8560K274	\$8.22	1	\$8.22	6" x 6" Piece Makes 1 Piece
4" x 4" x 1/4" Aluminum	McMaster Carr	8975K425	\$2.94	1	\$2.94	4" x 12" Bar Makes 3 Pieces
2" x 8" Aluminum Bar	Home Depot	482809	\$2.55	1	\$2.55	3' Bar Makes 4 Pieces
6" x 6" Rubber Gasket	Home Depot	124734	\$2.29	1	\$2.29	Purchased in Packs of 2
Lapp S1234 Connector, Liquid-Tight, Non-Metallic, NPT-3/4 Inch, Gray	Allied Electronics	70123233	\$2.39	1	\$2.39	Purchased in quantities of 1-9
Teflon Tape	Home Depot	-	-	-	-	
1/2" x 20' Caulk Backer Rod	Home Depot	462440	\$3.48	1	\$3.48	
1/2" Braided Expandable Sleeving	Ebay	-	\$8.25	1	\$8.25	
#6-32 x 3/4" Stainless Steel Machine Screw	MSC	37007341	\$0.1755	5	\$0.88	Purchased in quantities of 100
#6-32 Stainless Steel Washer	MSC	87925533	\$0.0486	5	\$0.24	Purchased in quantities of 100
#6-32 Stainless Steel Nut	MSC	87925327	\$0.0209	5	\$0.10	Purchased in quantities of 100
#6 x 1/4" Nylon Spacers	McMaster Carr	94639A301	\$0.0763	5	<del>\$0.38</del>	Purchased in quantities of 100
<b>Total:</b>					<b>\$205.29</b>	Costs exclude shipping & sales tax

Source List:

Vendor Name	Website	Telephone #
ABlackHorse.com	<a href="http://ABlackHorse.com">ABlackHorse.com</a>	800-805-9729
Aftermarket Marine	<a href="http://amarket.com">amarket.com</a>	800-349-2628
Allied Electronics	<a href="http://alliedelec.com">alliedelec.com</a>	866-433-5722
Amazon.com	<a href="http://amazon.com">amazon.com</a>	-
Electronics Express	<a href="http://elexp.com">elexp.com</a>	800-972-2225
FlexPVC.com	<a href="http://flexpvc.com">flexpvc.com</a>	352-620-8080
Home Depot	<a href="http://homedepot.com">homedepot.com</a>	-
Jameco	<a href="http://jameco.com">jameco.com</a>	800-831-4242
McMaster Carr	<a href="http://mcmaster.com">mcmaster.com</a>	630-600-3600
MicrochipDirect	<a href="http://microchipdirect.com">microchipdirect.com</a>	888-624-7435
MSC Industrial Supply Co,	<a href="http://mscdirect.com">mscdirect.com</a>	800-645-7270
Pinch-A-Penny	<a href="http://pinchapenny.com">pinchapenny.com</a>	-
Tower Hobbies	<a href="http://towerhobbies.com">towerhobbies.com</a>	800-637-6050