

Mach-Tach Parts List

Mach-Tach for PCB Rev 2.6

revision date: 3/18/2015 10:56

Quantity	Reference	Description	Manufacturer	Dist Part Number	Distributor
1	PCB1	Printed Circuit Board Rev 2.6	www.machtach.com	MacTach_PCB	machtach.com
1	U1	MachTach IC	www.machtach.com	MachTach_V2.6	machtach.com
1	ENCODER	ENCODER ROTARY w/ SW	TT	987-1188-ND	DigiKey
5	C3,C4,C6,C7,C8	Cap, Ceramic, 0.1uf		BC1148CT-ND	DigiKey
1	C5	Cap, Electrolytic,22uf Radial 25V		P976-ND	DigiKey
2	DISP1,DISP2	LED 7-SEG Dual Display - RED		516-1207-5-ND	DigiKey
4	Q1-Q4	Transistor, 2N3904		2N3904FS-ND	DigiKey
1	U2	Regulator, 5V LM340-5.0, T220		LM340T-5.0-ND	DigiKey
2	C1,C2	Cap, Ceramic,22pf		399-4162	DigiKey
1	C9	Cap, Ceramic 4700pf		399-4186-ND	DigiKey
1	R5	Var Resistor, 100K		3386F-104LF-ND	DigiKey
1	RN1	DIP Res Pack, 100 ohm for RED DIP Res Pack, 75/82 for GREEN		4116R-1-101LF-ND 4116R-1-750LF-ND	DigiKey
1	D1	LED, Red, 3mm		160-1139-ND	DigiKey
1	R11	Resistor, 1/4 W, 150 ohm		150QBK-ND	DigiKey
1	U3	74HC14 Hex Schmidt Trigger		296-1577-5-ND	DigiKey
1	Y1	Crystal, 8 Mhz		X165-ND	DigiKey
4	R7,R8,R9,R10	Resistor, 1/8 W, 1K		CF18JT1K00CT-ND	DigiKey
3	R1,R2,R3	Resistor, 1/4 W, 10K ohm		10KQBK-ND	DigiKey
1	R4	Resistor, 1/4 W, 1K ohm		1.0KQBK-ND	DigiKey
1	R6	Resistor, 1/4 W, 2M ohm		2.0MQBK-ND	DigiKey
1	ENCODER	Knob, 1/4" shaft		450-1736-ND	DigiKey
1	U1	20 Pin Socket		AE9998-ND	DigiKey
1	J1	Terminal Block		ED10565-ND	DigiKey
4		nylon 0.375" x 0.25" spacers		492-1091-ND	DigiKey
1		red LED plastic lens 1"x 2"		PRD250R-ND	DigiKey
1	J2	power jack 5.5mm x 2.1 mm		CP-051A-ND	DigiKey
1		crystal insulator		XC1750-ND	DigiKey

Sensor Cable Parts

Quantity	Reference	Description	Manufacturer	Dist Part Number	Distributor
1	Opto1	IR Reflective Sensor w/ wires		365-1677-ND	DigiKey
		IR Reflective Sensor		365-1091-ND	DigiKey
24"		3/32" tubing		Q2F332B-100-ND	DigiKey
3'		4 conductor shielded cable non wire sensor is used	lf	644391	Jameco
1		6" x 1/4" reflective strip	Prostripe Pinstripe	R21205 Silver	Pep-Boys

Optional Parts

Quantity	Reference	Description	Manufacturer	Dist Part Number	Distributor
1	Plastic Panel	Custom Panel made from artwork using plastic laminator	from artwork at www.machtach.com		machtach.com
1	Enclosure	Plastic Enclosure - Full size	Serpac	SR031-IB-ND	DigiKey
1	Enclosure	Plastic Enclosure - Full size w tabs	Serpac	SRW031-WIB-ND	DigiKey
1	Enclosure	Metal Encl. for 1/2 size MachTach	Hammond	HM151-ND	DigiKey
1	L1	Choke Common Mode Filter		587-2831-ND	DigiKey
1	Opto1	Slotted Optical Sensor w/ wires		365-1733-ND	DigiKey
1	Opto1	Slotted Optical Sensor		365-1101-ND	DigiKey
1	Gear Sensor	Allegro ATS667 Gear Tooth Sensor		620-1328-1-ND	DigiKey
1	Hall1	Hall Effect Sensor		480-1999-ND	DigiKey
1		Wall Transformer 9V 2.1mm x 5.5mm right angle plug		T1020-P5RP-ND	Digikey

1		Wall Transformer 9V 2.1mm x 5.5mm straight plug		T980-P5P-ND	Digikey
2	Disp1,Disp2	LED 7-SEG Dual Display - GREEN		516-1209-5-ND	DigiKey
1	D1	LED, Green, 3mm		160-1142-ND	DigiKey
1	RN1	DIP Resistor Pack, 82 ohm or 75 ohm FOR GREEN display		4116R-1-820LF-ND 4116R-1-750LF-ND	DigiKey
6	magnets	Neodinium 0.25" x 0.0.625"			Amazon.com
4		Spacers - PCB Mount, 0.375" x 1/4"dia 4-40 threaded		3479K-ND	DigiKey
4		nylon 0.250" x 0.25" spacers		492-1089-ND	DigiKey
4		nylon 0.125" x 0.25" spacers		492-1087-ND	DigiKey
3'		4 conductor shielded cable		644391	Jameco
1	P1	connector, plug	Waldom	WM2902-ND	DigiKey
4	P1	Pins - Connector	Waldom	WM2510CT-ND	DigiKey
1		3/8" x 1.5" Shrink Wrap			
1		1/16" x 4" Shrink Wrap			
1	ENCODER	ENCODER ROTARY w/ SW & Knurled Shaft	TT	987-1187-ND	DigiKey
1	ENCODER	Knob, 1/4" shaft	alternate source	264990	Jameco
1		red LED plastic lens	alternate source	2423 1/16"	Delvies Plastics Inc
1		green LED plastic lens		2092 1/8"	Delvies Plastics Inc
4		4-40 x 1/2" SS panhead screws		H705-ND	Digikey
4		pcb screws #4 x 3/8"		H800-ND	Digikey
1		power plug		CP3-1000-ND	Digikey