



Michiephone Handset – Bill of Materials

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This is the Bill of Materials for the Speleonics's Michiephone Handset version 2.0. This list is provided for the use of individuals or non-profit organisations such as caving clubs and rescue squads in making their own Michiephones. The Component Names in the tables below refer to the Schematic & Board design published at <http://www.speleonics.com.au/business/>

Electrical Components

Component Name	Description	Package	Supplier	Supplier Part No	Quantity
L1	Ferrite bead		Dick Smith Elect.	R 5425	1
C2	47pF	0805	St. Lucia	SMC86147	1
C7	100pF	0805		SMC861100	1
C3 C4	1.0nF	0805		SMC861.001	2
C1 C5 C6	4.7uF	B		SMTC164.7B	3
R0	0k	1206		SMRC010	1
R1 R2	47k	1206		SMRC0147K	2
R7	20k	1206	Farnell	420-694	1
R6	100k	1206		SMRC01100K	1
R3	560k	1206		SMRC01560K	1
R4 R5	2.2 Meg	1206		SMRC012M2	2
S1	Switch DPDT-mom	SIP6	C & K	8225SHABE	1
S2	Switch SPST	SIP3	C & K	7101MHABE	1
LED1	LED, red	3 mm	Farnell	322-544	1
MIC/LS	STC200930			STC 200930	1
IC1	TLC271CD	SOIC-8	ACD	TLC271CD	1

Mechanical Components

Description	Supplier	Part No.
Box, hand held	Farnell	27134PSL
Graphic / logo - setup + unit cost	Permark Ind.	
Dress nut & Red Cap for DPDT mom	C & K	8025-3
Dress nut, large, 1/4-40 for SPDT	C & K	776001201
Lock washer for SPST, nut for DPDT	C & K	Included with switches
LED lens	C & K, Cliplite	SML190CTP
Mounting Clip LED 3mm for line I/O	C & K, IMO brand	MCT1
Battery clip with leads	Dick Smith	S-6100
Cable 512/005 Ultra-flex, Red, 0.70m	Dick Smith	W-2290
Wire, fine for ferrite bead		
Alligator clip for cable	Dick Smith	P-6400
Cable tie base, natural pk 100	Farnell	268-690
Cable ties, natural, pk 100	Farnell	268-495
Packing for battery, closed cell foam		
Speaker lining, felt		

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Additional Materials

Description	Supplier	Part No.
Fluxclene	Farnell	298-165
Conformal overcoat	Farnell	298-300
Cleaner for conformal (acetone)	Hardware store	
Geotype for serial numbers	Art Places	
Lacquer for serial no sealing	Farnell / hardware	CPL200H
Silastic for strain relief		
Loctite 290	Farnell	146-316

Useful Accessories Available

Description	Supplier	Part No.
Battery, Energizer	Dick Smith or Farnell	
Battery, Lithium Ultralife	Dick Smith or Farnell	
Wire 10/0.1 Yellow, reel 100 metres	Farnell Hartland cables	5833-ZKZD
Flagging tape	Prospectors supplies	
Wire reel winder		