



HH-70 SCHEMATIC DIAGRAM

BILL OF MATERIAL FOR HH-70

REFERENCE	PART NAME DESCRIPTION	REFERENCE	PART NAME DESCRIPTION	REFERENCE	Part Name & DESCRIPTION
R18	Resistor Chip 18:MCR10EZ180J	C702	Black Box Ass'y	C9, 18, 87	Capacitor Elect 2.2µF 50V SRA:(M) 4x7
R20	Resistor Chip 180:MCR10EZ181J	C701, 703	Capacitor Elect 470µF 16V SMS:(M) 10x12.5	C6, 57	Capacitor Elect 22µF 16V SRA:(M) 5x7
R56	Resistor Chip 18K:MCR10EZ183J	CH1	Ceramic 0.01µF 50VWVZ "F"	C36, 59	Capacitor Elect 33µF 25V SMS:(M) 5x11
R87	Resistor Chip 22:MCR10EZ182J		Transformer Choke EI-14	C38,84	Capacitor Elect 47µF 10V SM:(M) 5x11
R8, 10, 79, 80, 81, 84, 85, 90	Resistor Chip 2.2K:MCR10EZ182J		P.C.B SUB 66.5x27.5x1.6T	C40, 62	Capacitor Elect 47µF 16V SM:(M) 6.3x11
R28, 34, 46	Resistor Chip 22K:MCR10EZ223J	Curl Cord	Cord Curl KSK-23075 4CO 1SH Put BLK	C61, 63	Capacitor Elect 470µF 16V SMS:(M) 10x12.5
R31, 35	Resistor Chip 220K:MCR10EZ224J	J3	Jack Earphone DHJ-3T	C19, 39, 42, 44	Capacitor Elect 4.7µF 35V SRA:(M) 4x7
R72	Resistor Chip 2.2:MCR10EZ22R2J	Ant	Connector CH-239(A) SW-1229	C77	Ceramic Disk 3PF 50V:DD330CJ030C50V
R17, 86	Resistor Chip 2.7K:MCR10EZ272J		Power Cord Ass'y	C81	Tantalum Dip 1µF 25V 1489D105x0025A1
R23, 51	Resistor Chip 27:MCR10EZ273J		Fuse 250V 2A	CT1	Capacitor Trimmer 20PF 6DIA:CVN
R4	Resistor Chip 330:MCR10EZ331J		Wire 1015 AWG 20(10/0.26) RED	Q15, 16	Transistor KTC3194(Y)
R16	Resistor Chip 3.3K:MCR10EZ332J		Wire 1015 AWG 20(10/0.26) BLK	Q14	Transistor KTC1006
R22, 27, 53	Resistor Chip 33K:MCR10EZ333J	Black Box PCB MTG	Fuse Holder	D16	Diode Zener 1N5239B
R24, 38, 41	Resistor Chip 330K:MCR10EZ334J		(+) Tap Tite Screw BH3x6 Zn-Plat	D2, 17	Diode Ge 1N60
R52	Resistor Chip 3.3M:MCR10EZ335J		Cover Up (Black Box) E.G.I T1 Us Coating	D11, 14	Diode 1N4004 (1A 400V)
R57, 82	Resistor Chip 390:MCR10EZ391J		Cover Bo (Black Box) E.G.I T1 Us Coating	X2	Crystal HC-49/U 10.240MHz 32PF:30PPM
R32	Resistor Chip 47:MCR10EZ470J		Holder (ANT MTG) Spce 0.25t	CF2	Filter Ceramic KBF-455R-6A5
R7, 9, 13, 14, 19, 88	Resistor Chip 470:MCR10EZ471J		Holder (MIC MTG)	CF1	Ceramic Filter SK107M4-AC-20
R29, 45, 48, 64, 67	Resistor Chip 4.7K:MCR10EZ472J		Cord Stopper P.P BLK	RFC3	Coil Axial 2.2µH:LAL03TB2R2M
R21, 36, 37, 47	Resistor Chip 47K:MCR10EZ473J	For Use Holder	Bushing Rubber BLK	RFC1, 4	Coil Axial 6.8µH:LAL03TB6R8K
R5, 12	Resistor Chip 470K:MCR10EZ474J		Label Caution 2A 40x2Bx0.02t	RFC2	Coil Axial 0.39µH:LAL02TB3R9K
R70	Resistor Chip 56:MCR10EZ560J	Holder MTG	Cover Ass'y	RFC7	Coil Spring 3.4DIAx0.55DIAx8.5tR
R60	Resistor Chip 5.6K:MCR10EZ562J	Upper & Bottom MTG	(+) Tapping Screw(FH) 2.6x12-2S BLK	RFC5	Coil Spring 3.4x0.55x9.5tR
R77	Resistor Chip 68:MCR10EZ680J		(-) Tapping Screw(BH) 3x10-2S BLK	L2	Coil IFT 455KHz-A
R1, 58	Resistor Chip 680:MCR10EZ681J		Frame ABS 94HB A215M	L3	Coil IFT 455KHz-B
R39, 40	Resistor Chip 68K:MCR10EZ683J		Cover Upper ABS 94HB A215M	L1	Coil 27MHz RX ANT
R6	Resistor Chip 8.2K:MCR10EZ822J		Cover Bottom ABS 94HB A215M	L4	Coil Vco
R122	Resistor Chip 82K:MCR10EZ823J		Holder PC Dark Gray	L5, 16	Coil RF Pre Amp A TX27MHz
C13, 30, 34, 49, 86, 88, 122	Ceramic Chip 0.001µF:CM21CG102K50AT		Lens-Acryl Clear	SW1	SW Tact SW1104-2
C22, 33, 35, 51	Ceramic Chip 0.1µF:CM21Y5V104Z25AT		Knob VOL. SQ ABS 94HB A215M	RFC6	9.5T Sprng.Coil Assy
C16, 80	Ceramic Chip 0.01µF:CM21x7R103K50AT		Holder(MIC) 69.8xø11.4x7t Rubb. BLK		Coil Spring 3.4x0.55x9.5tR
C56, 88	Ceramic Chip 0.0022µF:CM21x7R222K50AT		Cushion ø11x8t Sponge	M3	VCO Module Ass'y
C5, 11, 17, 37, 50, 53, 55, 74, 79, 83	Ceramic Chip 0.022µF:CM21x7R223K50AT	Upper SPK MTG	PTT Button Silicone Rubber HS55'	R800, 609	Resistor Chip 0:MCR10EZ0R0J
C43	Ceramic Chip 0.22µF:CM21Y5V224Z25AT		Key Pad Silicone Rubber HS60'	R805, 607	Resistor Chip 10K:MCR10EZ103J
C32	Ceramic Chip 0.033µF:CM21x7R333K50AT	Bottom Air MTG	Felt ø37x0.3t Felt BLK	R808	Resistor Chip 120K:MCR10EZ124J
C8, 10, 12, 14, 15, 21, 23, 29, 70, 73, 121	Ceramic Chip 0.047µF:CM21x7R473K50AT		Felt 8x45x0.5t Felt Stick	R804	Resistor Chip 22K:MCR10EZ223J
C60, 75	Ceramic Chip 0.068µF:CM21x7R683K50AT		Esd Protector Cup 0.05t Sticker	R805	Resistor Chip 27K:MCR10EZ272J
C41	Ceramic Chip 1PF:CM21CG010C50AT		Felt Felt 55x35x0.3t	R801	Resistor Chip 47:MCR10EZ470J
C28	Ceramic Chip 120PF:CM21CG121J50AT		Label Name Polyester 49.5x14.5	R802	Resistor Chip 820:MCR10EZ821J
C64, 68, 69	Ceramic Chip 220PF:CM21CG221J50AT		LCD PCB Ass'y	C601, 610, 611	Ceramic Chip 0.01µF:CM21x7R103K50AT
C67	Ceramic Chip 270PF:CM21CG271J50AT		Resistor Chip 1K:MCR10EZ102J	C608	Ceramic Chip 120PF:CM21CG121J50AT
C58, 71	Ceramic Chip 330PF:CM21CG331J50AT		Resistor Chip 2.2K:MCR10EZ222J	C602	Ceramic Chip 18PF:CM21CG180J50AT
C78	Ceramic Chip 39PF:CM21CG390J50AT		Resistor Chip 220K:MCR10EZ224J	C603	Ceramic Chip 22PF:CM21CG220J50AT
C54	Ceramic Chip 0.0047µF:CM21x7R472K50AT		Resistor Chip 330:MCR10EZ331J	C607	Ceramic Chip 220PF:CM21CG221J50AT
C7, 66	Ceramic Chip 47PF:CM21CG470J50AT		Resistor Chip 47K:MCR10EZ473J	C609	Ceramic Chip 27PF:CM21CG270J50AT
C26	Ceramic Chip 470PF:CM21CG471J50AT		Resistor Chip 470K:MCR10EZ474J	C606	Ceramic Chip 33PF:CM21CG330J50AT
C31	Ceramic Chip 560PF:CM21CG561J50AT		Resistor Chip 5.1K:MCR10EZ512J	C605	Ceramic Chip 47PF:CM21CG470J50AT
C27	Ceramic Chip 6PF:CM21CG60D50AT		Capacitor Elect 47µF 10V SM:(M) 5x11	Q602	Transistor KTC38755Y
C24, 85	Ceramic Chip 7PF:CM21CG70D50AT		Ceramic Chip 0.001µF:CM21CG102K50AT	Q601, 603	Diode Varicap LV2209
C25	Ceramic Chip 8PF:CM21CG80D50AT		Ceramic Chip 0.01µF:CM21x7R103K50AT	D601	P.C.B VCO MODULE 30.7x1.6T XPC 94HB 1/1
Q5, 9	Transistor KTA1504ST1(G)		Ceramic Chip 15PF:CM21CG150J50AT	M1	RF AMP H/H Module
Q1, 6, 12, 18, 19, 81	Transistor KTC38755T1(G)		Ceramic Chip 22PF:CM21CG220J50AT	R100, 102, 102	Resistor Chip 0:MCR10EZ0R0J
Q8, 11	BRT KRC102S		Tantalum Dip 0.47µF 35V:489D474x0035A1	R107	Resistor Chip 100:MCR10EZ101J
Q9	BRT KRC111S		Tantalum Dip 10µF 16V:489D106x0016C1	R106, 108	Resistor Chip 10K:MCR10EZ103J
Q2, 3, 4, 7	Transistor KTC3880ST1(Y)		Capacitor Trimmer 20PF:ECR-LA020A12	R104	Resistor Chip 18K:MCR10EZ180J
Q10	Transistor KTA1683		Transistor KTA1504ST1(G)	R103	Resistor Chip 330:MCR10EZ331J
Q17	Transistor KRA101S		I.C. LC7234-8496	R105	Resistor Chip 33K:MCR10EZ333J
IC2	I.C. KIA324F		Diode Zener UZ-5.6BM:5.6V 0.5W	R109, 110	Resistor Chip 470:MCR10EZ471J
IC1	I.C. LM386D		Diode Zener 1N5234B	C112	Ceramic Chip 0.01µF:CM21x7R103K50AT
D9	Diode Si KDS226		Diode KDS196S	C103, 105, 106, 107, 111, 113	Ceramic Chip 0.022µF:CM21x7R223K50AT
D4, 5, 7	Diode Si KDS184S		LED Back Light KLS-002MS	C109	Ceramic Chip 150PF:CM21CG151J50AT
D1, 3, 6, 12	Diode KDS196S		LCD LE-0202AP	C108	Ceramic Chip 220PF:CM21CG221J50AT
	P.C.B Main		Crystal HC-49/U 4.5MHz 30PPM 16PF	C102	Ceramic Chip 33PF:CM21CG330J50AT
	Packing Ass'y		P.C.B A'ssy 58.2x115x1.2t FR4 1/1	C104	Ceramic Chip 47PF:CM21CG470J50AT
Mic Bracket MTG	(+) Tapping Screw(BH) 3x10-2S Ni-Plat		P.C.B Main(Top) 99x58.2x1.2t FR4	C114	Ceramic Chip 680PF:CM21CG681K50AT
Black Box MTG	(+) Tapping Screw(TH) 4x12-1S Ni-Plat		P.C.B Sub 21.5x13.5x1.2t FR4 1/1	Q102, 103	Transistor KTC3880ST1(Y)
MIC Bracket MTG	Washer (Spring) M3 Ni-Plat	VR501	VR 10KA:121PS2-1	D101	Diode Si KDS226
Black Box MTG	Washer (Spring) M4 Ni-Plat	VOL, SQ MTG	VR 10KB:121PN-01		P.C.B Module 39.25x16.88x1.6t XPC 94HB 1/1
Set. Black Box	Bracket SUS 0.8t		(+) Machine Screw(RH) 1.7x6 Zn-Plat		6.5T Sprng. Coil Ass'y
	Wire Clamp (Cord) Nylon		Shield Plate SPTE 0.3t		Core 1108-KA-058 M9DTH3.7x6
	Box Tray SW1S 215(W)x193(D)x60(H)		Shaft (VOL.SQ) BSBM & 66.0		L.P.F Module MIC ASSY
	Box Inner Manila 215.0(W)x194.0(D)x60(H)		Main Body Ass'y		Ceramic Chip 220PF:CM21CG221J50AT
	Box Out DW1 395(W)x310(D)x220(H)		Transistor KTC2075		Ceramic Chip 470PF:CM21CG471J50AT
Screw/Washer/Bracket/Packing	Polybag P.P 100x100x0.05t	IC2	I.C. KIA7217AP		Ceramic Chip 560PF:CM21CG561J50AT
Set. Black Box	Manual Instruction	T1	Transformer EI-19 CHOKE		Coil Spring 3.4DIAx0.55DIAx6.5tR
	Card Registration		Header Pin Connector GDH2-16DBC (1.2)		Coil Spring 3.4DIAx0.55DIAx7.5tR
	CB Rule	MICA	Connector TDH2-16SC		P.C.B SUB 21.5x13.5x1.2t FR4 1/1
	Schematic Diagram	LCD PCB MTG	MICA (For T.R. 2SC2078)		Coil Spring 3.4DIAx0.55DIAx6.5tR
	Upper Cover Ass'y	Audio:2 TR:1	(+) Machine Screw (PH) 2.6x4 Zn-Plat		Coil Spring 3.4x0.55x4.5tR
	Upper Cover Ass'y	Audio:2 TR1	(+) Machine Screw(FH) 2.6x8 Zn-Plat		Core 1108-KA-058 M9DTH3.7x6
	Ceramic Chip 0.01µF:CM21X7R103K50AT	Audio:2 TR1	Nut SS41 M2.6-1S Zn-Plat		Main PCB SMD Ass'y
	Speaker 44-88-06 8Ohm 0.3W		Washer Spring ø2.6 Zn-Plat		Resistor Chip 10M:MCR10EZ106J
	MIC Condenser WM034CY		Body Main EGI 0.8t Us Coating		Resistor Chip 1.2K:MCR10EZ122J
	Connector Waffer 8283-0212-00-000:2PIN		Heat Sink (Audio) ALP3 2t		Resistor Chip 1.5K:MCR10EZ152J
	Busing (FOR T.R. 2SC2078)		Heat Sink Cup 0.3t		Resistor Chip 15K:MCR10EZ153J
	2P Housing Ass'y 2P 100MM		Main PCB Manual Ass'y		Resistor Chip 150K:MCR10EZ154J
	Wire Cover Ass'y		Resistor Semifixed 1KB:RH0651C100102		
	Wire 1007 AWG 24 (1/0.51) BLK		Resistor Semifixed 10KB:RH0651C100103		
	Wire 1007 AWG 24 (1/0.51) RED		Resistor Semifixed 2.2KB:RH0651C100222		
	Wire Vinyl 080D (7/0.12) ORG		Resistor Semifixed 22KB:RH0651C100223		
	Wire Vinyl 080D (7/0.12) YEL		Thermistor 500 Ohm ±15%:KC5C150L		
			Capacitor Elect 100µF 16V SM(MI):6.3x11		
			Capacitor Elect 100µF 16V SM(MI):8x11.5		
			Capacitor Elect 10µF 16V SRA(MI):4x7		

