

AUTOTAG SERVICE AND ALIGNMENT PROCEDURES

Both the Base Station and the Tag units are **NOT** field serviceable items and as such all service and alignment will be carried out at the factory. The units will undergo the same procedures as a production unit. See the PRODUCTION TEST PROCEDURES, section R.

PARTS LIST FOR BASE STATION

Used Part Type	Designator	Footprint	Description
=====	=====	=====	=====
2 706MD0009	HS1 HS2	HEATSINK-706MD0009	Heatsink T0-220
1 708AW0001_02	PCB1	PCB_FOR_BOM	PCB AUTOTAG Base-
station MAIN PCB			
1 708MD0001	H2	HOUSING-708MD0001	Housing - AUTOTAG Base
Station Cover			
1 708MD0002	H1	HOUSING-708MD0002	Housing - AUTOTAG Base
Station Base			
2 708MD0003	H3 H4	HOUSING-708MD0003	Housing - AUTOTAG Base
Station Screw Cover			
1 708SA0002	SA1	708SA0002	SUB-ASSEMBLY AUTOTAG
B/S ANTENNA			
1 CAP033108	C67	CE-5/13/21MM/H	Capacitor 1000uF
Radial Electrolytic 35V 20%			
3 CAP093106	C43 C72 C73	CE-2.0/5.0MM	Capacitor Electrolytic
Radial 10uF 35V			
2 CAP982103	C75 C76	CAPLS.6-L18-W5	Capacitor 10nF 250Vac
Y2 15.24mm			
1 CAP985683	C74	CAPLS.6-L19-W8	Capacitor 68nF 250Vac
X2 15.24mm			
1 CTR020301	J1	SMB_V_PLUG	CONNECTOR SMB JACK CO-
AXE PCB VERT			
1 CTR030201	CN1	CTR030201	Connector 3 Way
Plugable Header			
1 CTR031901	CN3	CTR031901	Connector - 3 Way
Plugable Screw Terminal			
1 CTR050201	CN2	CTR050201	Connector 5 Way
Plugable Header			
1 CTR051901	CN4	CTR051901	Connector - 5 Way
Plugable Screw Terminal			
2 CTR060294	CN5 CN7	CTR060294	Connector 6 Way
Plugable Header			
2 CTR061904	CN6 CN8	CTR061904	Connector - 6 Way
Plugable Screw Terminal			
1 CXL206775	X2	XTAL-HC49LP	Crystal Parallel
Resonant 50 PPM CL= 12pF			
2 CXL291200	X1 X4	XTAL-HC49LP	Crystal 12M00Hz Series
Resonant 30 PPM CL= 30 pF			
1 DID041240	D8	LED-3MM-V	Diode LED 3mm RED
diffused Preformed 000CF0004			
1 DID04124A	D6	LED-3MM-V	Diode LED 3mm GREEN
diffused Preformed 000CF0004			

2	FER022221	F1 F2	EMI-FILT	EMI FILTER Murata
DSS306-351Y5S221M100				
1	INC28317A	U8	T0-220/H1	IC LM317AT Adjustable
Positive Voltage Regulator				
1	INC287805	U6	T0-220/H1	IC 5V Fixed Voltage
Regulator T0-220				
1	MIE09TB05	BZ1	BUZZER	BUZZER 5V INTERNAL
DRIVE OD=12mm				
1	MIE290001	BT1	BTY-CR2032/1HME	CR2032/1HME 3V Lithium
Battery				
44	Not Used	BM1 BT2 BTH1 C11 C6	TEST-HOLE	
C8 FD1 FD2 FD3 FD4				
JP1 JP2 P1 P2 P3 P4				
POT3 R47 R48 R76 TP1				
TP10 TP11 TP12 TP13				
TP14 TP15 TP16 TP17				
TP18 TP19 TP2 TP20				
TP21 TP22 TP4 TP5				
TP6 TP7 TP8 TP9 U13				
U16 X3				
1	POT041102	POT2	VR3A	RESISTOR PRESET 1K0
SINGLE TURN 1/4W				
1	POT041103	POT1	VR3A	RESISTOR PRESET 10K
SINGLE TURN 1/4W				
2	RES261103	RN1 RN2	RES-SIP-9P	Resistor Network 9 PIN
1 COMMON & 8 RESISTORS				
1	RLY404323	K1	RLY4243AZ	Relay 8 Amp 5V Coil
SPDT - V23061				
1	SC0033103	C51	C0805-W	Capacitor 10nF Ceramic
10%				
28	SC0033104	C16 C19 C20 C21 C22	C0805-W	Capacitor 100nF
Ceramic X7R 10%				
C23 C24 C25 C27 C28				
C30 C32 C34 C35 C52				
C56 C57 C59 C60 C61				
C62 C63 C64 C77 C82				
C83 C84 C92				
6	SC0036220	C49 C50 C86 C87 C90	C0805-W	Capacitor 22pF Ceramic
10%				
C91				
3	SC10132P2	C13 C33 C4	C0805-W	Capacitor 2p2F Ceramic
NPO +/- 0.25pF				
4	SC1023100	C10 C2 C41 C7	C0805-W	Capacitor 10pF Ceramic
NPO 5%				
5	SC1023101	C18 C31 C39 C65 C89	C0805-W	Capacitor 100pF
Ceramic NPO 5%				
1	SC1023150	C70	C0805-W	Capacitor 15pF Ceramic
NPO 5%				
2	SC1023151	C40 C93	C0805-W	Capacitor 150pF
Ceramic NPO 5%				
8	SC1023221	C1 C12 C29 C3 C45	C0805-W	Capacitor 220pF
Ceramic NPO 5%				
C54 C55 C58				
3	SC1023330	C37 C38 C42	C0805-W	Capacitor 33pF 50V
Ceramic NPO 5%				
2	SC1023471	C46 C80	C0805-W	Capacitor 470pF
Ceramic NPO 5%				

9	SC1033102 Ceramic 10%	C14 C17 C26 C44 C48	C0805-W	Capacitor 1n0F NPO
2	SC2232105 Tantalum 10%	C66 C68 C79 C85 C53 C78	C-TANTA-R	Capacitor 1u0F 16V
3	SC4140106 Ceramic Y5V 20%	C69 C81 C88	C1206-W	Capacitor 10uF 10V
5	SCT151007 6pF SMD	C15 C36 C47 C5 C9	SCT4	CAPACITOR TRIMMER 2 -
1	SCT500200 Trimmer 5 to 20pF	C71 SMD	SCT500200	Capacitor Ceramic
3	SD0014004 1N4004	D11 D24 D27	DMELF-W	Diode General Purpose
1	SD0200001 SOT23	D16	SOT-23-W	DIODE PIN HSMP3810
2	SD0200002 SOT23	D1 D12	SOT-23-W	DIODE SIGNAL BAT18
1	SD0485819 ??V - SM5819	D13	DMELF-W	Diode Schottky 1 Amp
1	SD0510001 35 4pF to 11pF	D14	3518	DIODE VARACTOR SM1104-
1	SD0690001 V SMD	D15	SMDF	Diode Bridge 1 Amp ???
2	SD1690002 600W - SMBJ15CA	D2 D3	SMB-BI-W	TRANZORB Bipolar 15V
1	SD1690003 600W - SMBJ33CA	D22	SMB-BI-W	TRANZORB Bipolar 33V
7	SD169J50A	D10 D17 D19 D20 D21 D4 D9	SMB-W	TRANZORB 600W SMBJ5.0A
4	SD170AS16 SOT23	D18 D23 D25 D26	SOT-23-W	DIODE SIGNAL BAS16
1	SI0028001 Voltage Reg LP2951	U7	S0-8-W	IC Adjustable POS LDO
2	SI0213001 74HC151	U14 U15	S0-16-W	IC 8-Input Multiplexer
2	SI0351001 BIT uCONTROLLER	U19 U4	S0IC28W-W	IC PIC16C63A-20I/S0 8
1	SI0500232 MAX202E	U1	S0IC16W-W	IC RS232 Transceiver
2	SI0500485 Transceiver	U17 U2	S0-8-W	IC RS485 Half Duplex
1	SI1028785 Regulator TA78L05F	U10	SOT-89-W	IC 5V Positive Voltage
1	SI1792001 KESRX01	U9	QSOP24	IC ASK RF RECEIVER
3	SI2069001 SMD	U11 U3 U5	11-4C1	IC Optocoupler TLP 181
2	SI2187001 24LC64-I/SM or SN	U12 U18	S08/S08W-W	IC I2C EEPROM 8Kx8
4	SL0002331 330nH SMD	L13 L14 L15 L16	L0805-W	Inductor Air core
2	SL0002680 SMD	L11 L5	L1010-W	Inductor 68nH Air core
6	SL0020180 18nH SMD	L1 L2 L6 L7 L8 L9	L0805-W	Inductor Air core
2	SL0020270 27nH SMD	L3 L4	L1010-W	Inductor Air core

1	S02043392	Y2	QCC-8	SAW Resonator 433.92
MHz 1-port SMD				
1	SR0001183	R63	R0805-W	Resistor 18K 1/8W 1%
Thick Film Chip				
6	SR0001272	R28 R45 R53 R54 R59	R0805-W	Resistor 2K7 1/8W 1%
Thick Film Chip				
		R60		
1	SR0001332	R64	R0805-W	Resistor 3K3 1/8W 1%
Thick Film Chip				
10	SR0001471	R11 R15 R21 R22 R3	R0805-W	Resistor 470R 1/8W 1%
Thick Film Chip				
		R57 R58 R62 R7 R9		
3	SR0003000	R49 R50 R51	R0805-W	Resistor 0R 1/8W Thick
Film Chip				
3	SR0003101	R29 R32 R40	R0805-W	Resistor 100R 1/8W
Thick Film Chip				
2	SR0003102	R12 R23	R0805-W	Resistor 1K0 1/8W
Thick Film Chip	5%			
23	SR0003103	R1 R16 R17 R18 R24	R0805-W	Resistor 10K 1/8W
Thick Film Chip				
		R25 R26 R27 R30 R35		
		R38 R4 R46 R6 R65		
		R66 R67 R68 R71 R72		
		R73 R77 R8		
1	SR0003123	R34	R0805-W	Resistor 12K 1/8W
Thick Film Chip				
12	SR0003472	R13 R19 R2 R20 R41	R0805-W	Resistor 4K7 1/8W
Thick Film Chip				
		R44 R5 R52 R55 R56		
		R74 R75		
2	SR0003473	R33 R36	R0805-W	Resistor 47K 1/8W
Thick Film Chip				
2	SR0213100	R14 R43	R1206-W	Resistor 10R 1/4W
Thick Film Chip				
1	SR0213183	R37	C1206-W	Resistor 18K 1/4W
Thick Film Chip				
1	SR0213470	R10	R1206-W	Resistor 47R 1/4W
Thick Film Chip				
2	SR0213680	R31 R42	R1206-W	Resistor 68R 1/4W
Thick Film Chip				
3	ST00BC807	Q4 Q5 Q8	SOT23-BEC-W	Transistor BC807-40
PNP				
14	ST00BC817	Q10 Q11 Q12 Q13 Q14	SOT23-BEC-W	Transistor BC817-40
NPN				
		Q15 Q16 Q17 Q18 Q19		
		Q3 Q6 Q7 Q9		
2	ST10BFR92	Q1 Q2	SOT23-BEC-W	Transistor BFR92A NPN
2	SWS038000	SW1 SW2	SWS038000	Switch 8 Way DIP PCB
Mount				
1	TFM032331	T2	TFMR-1.5VA-1	Transformer 220V/12V
1.5VA				
2	TFM300104	L10 L12	axial0.4	Inductor 22uH AXIAL
3	VAR275350	M1 M2 M3	MOV-10MM-275V	Varistor Metal Oxide
275V 10mm SIOV-S10K275				
6	ZZA100300	N1 N2 N3 N4 N5 N6	NUT-M3-HEX	Nut M3 Hex DIN934
2	ZZA209310	S1 S2	SCREW-M3-C/H	Screw M3X10 CHEESE
HEAD				

4	ZZA500300	W1 W2 W3 W4	WASHER-M3	Washer M3 Star
6	ZZK990001	SP1 SP2 SP3 SP4 SP5	GLASSBEAD	Spacer - Glass Bead
		SP6		