TECHNICAL DESCRIPTION

PCB [618] RECEIVER SIGNAL PATH

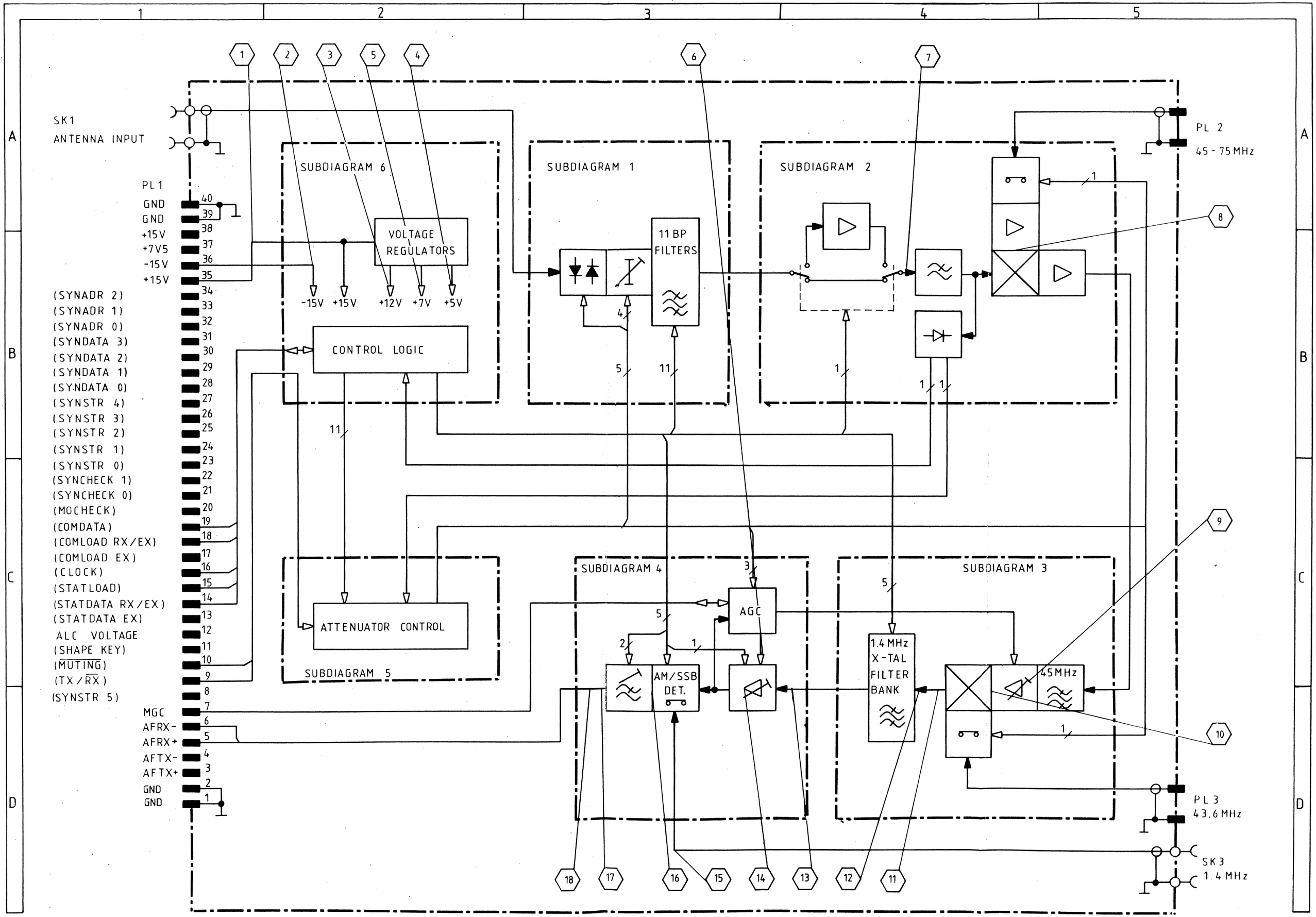
The antenna RF signal is led through coax connector SK1 to the protection circuit, which protects the receiver against excessive RF voltages and static electricity discharges, appearing on the antenna. Through the switchable attenuator the RF signal is led to the preselector consisting of eleven fixed-tuned bandpass filters. The bandpass filters covers the frequency bands 10-405 kHz, 405-527 kHz, 527-1600 kHz, 1.6-4 MHz, 4-5.246 MHz, 5.246-7.27 MHz, 7.27-10.383 MHz, 10.383-14.695 MHz, 14.695-19.571 MHz, 19.571-24.424 MHz, 24.424-30 MHz. A change in receiver frequency will be followed by automatic selection from among the bandpass filters. The automatic selection is controlled from the Transceiver Control Board [624] via the serial data bus. The RF signal goes via the switchable RF amplifier to the high level double balanced Schottky diodes mixer, where it is mixed with the 45-75 MHz synthesizer signal from the Synthesizer Board [611] to generate the first intermediate frequency signal of 45 MHz. Before the signal is applied to the first mixer, the signal level is detected by the broadband detector. The 45 MHz IF signal is amplified in the grounded gate JFET amplifier and then filtered in the 45 MHz double sideband crystal filter, determining the overall AM selectivity. Before being fed to the 2nd mixer, the IF signal is passing through the MOSFET amplifier which has a variable gain controlled by the delayed AGC voltage. The 2nd mixer converts the 45 MHz IF signal to the 1.4 MHz IF signal by mixing with a 43.6 MHz synthesizer signal from the Synthesizer Board [611]. After amplification in the grounded gate JFET amplifier, the 1.4 MHz signal is fed to the Information filter bank. Depending on the version (i.e. crystal filter options) and the selected mode, the 1.4 MHz signal is routed through one of the filters X2, X3, X4, X5 or the wide filter, controlled by the Transceiver Control Board [624] via the serial data bus. The now filtered 1.4 MHz signal is amplified in the 1.4 MHz amplifier strip IC4, Q14 and Q15. The voltage gain of the amplifier strip is controlled partly by the AGC voltage applied to IC4 and partly by the control line "IF-GAIN", which, when in logical high condition, increases the gain of Q14 with approx. 8 dB. From the IF strip the signal is fed to the Signal Detector IC6. The integrated circuit of the Signal Detector contains a balanced mixer and a high gain limiting amplifier. The IF signal is applied to the one input port of the mixer. In the modes H3E and H2A, the IF signal is also fed to the amplified input. This signal is amplified and clipped to constant amplitude and internally connected to the other input port of the mixer where it is mixed with the modulated signal. The difference frequency contains the wanted AF signal. In other modes but H3E and H2A a 1.4 MHz signal, derived from the Synthesizer Board [611], is applied to the amplifier input. The unbalanced AF signal is filtered and converted to a balanced signal before it is fed to the flat cable connector PL1.

From the IF strip the signal is also fed to the AGC Detector consisting of two transistors in the integrated array IC20. The signal, which is now rectified to a DC voltage, is applied to the AGC Timing Circuit. The AGC voltage from the AGC Timing Circuit controls the overall gain of the receiver. The AGC voltage is also fed to the Transceiver Control Board [624], where it is used in

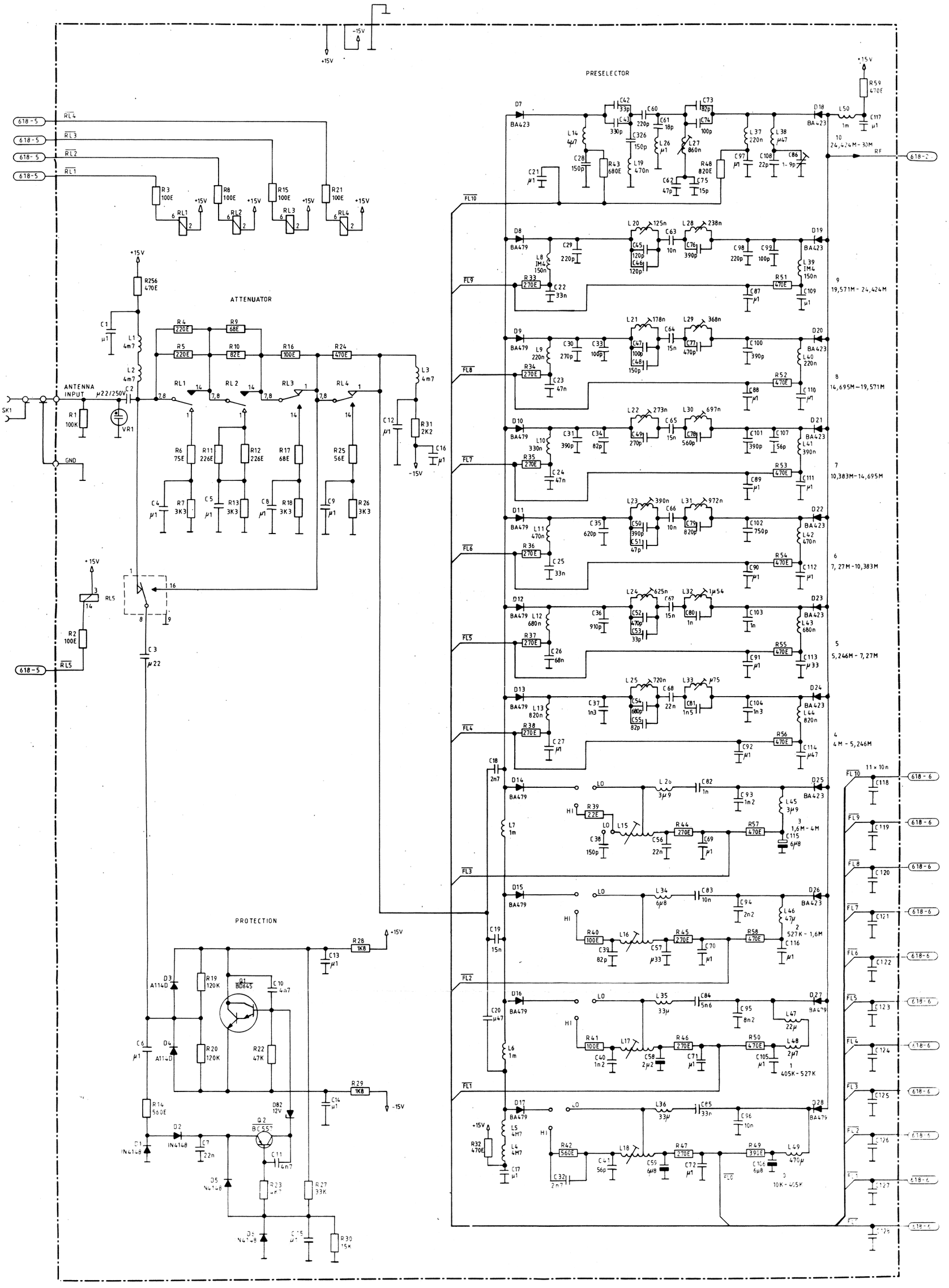
self test routines and, by means of a voltage to frequency converter, fed to the Control Unit controlling the signal strength meter on the front panel. When manual gain control (MGC) is selected the Transceiver Control Board 624 generates a DC voltage which is fed to the receiver signal path instead of the AGC voltage. Subdiagram 5 shows the control circuits for the board and Subdiagram 6 shows the interface circuits to the serial data busses.

993 561 8X COMP

PCB 618 VERSION A7
RECEIVER SIGNAL PATH
VIEWED FROM COMPONENT SIDE

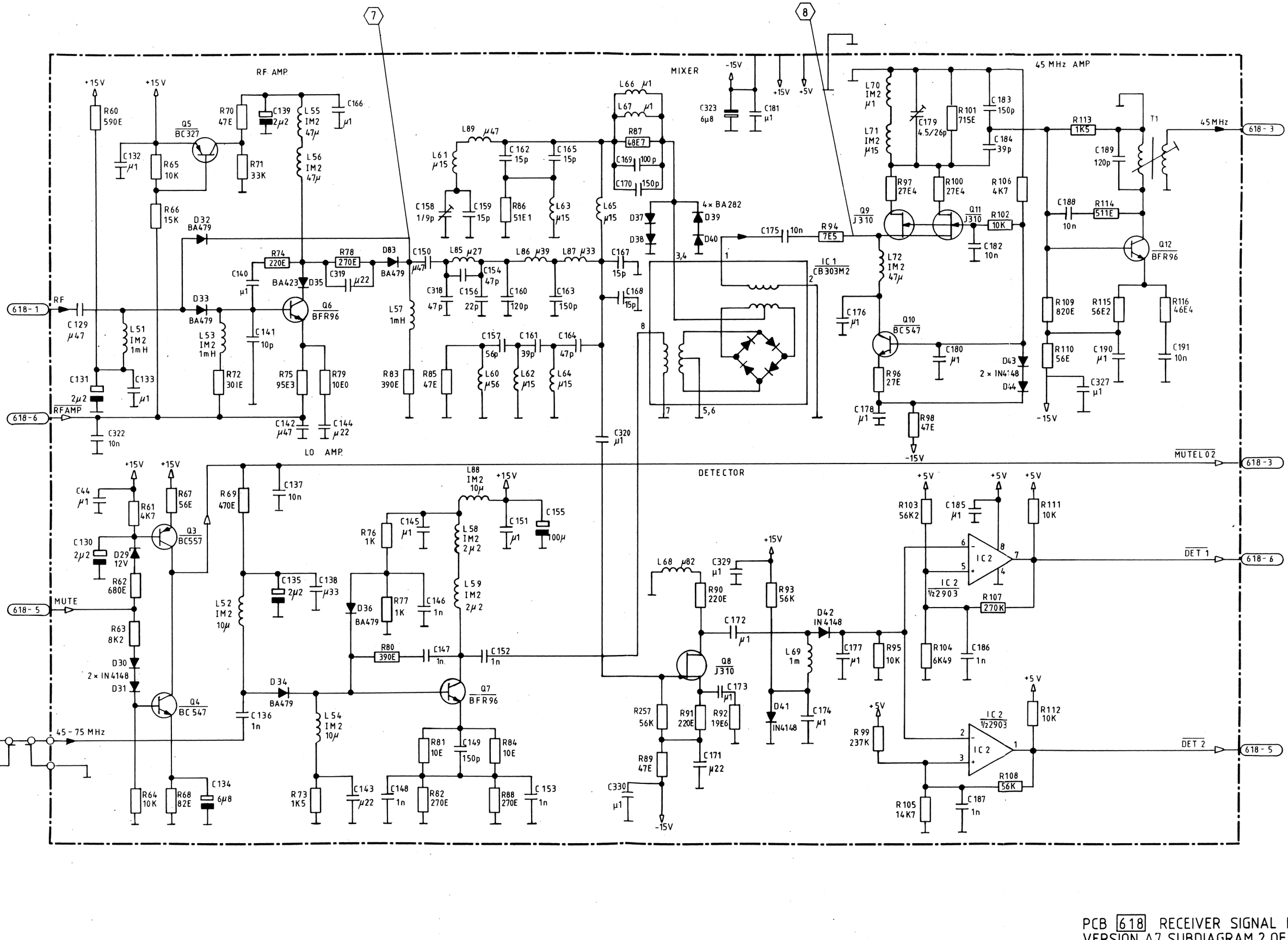


PCB 618 RECEIVER SIGNAL PATH, MAIN DIAGRAM. VERSION A7



PCB 618 RECEIVER SIGNAL PATH
VERSION A7 SUBDIAGRAM 1 OF 6

993 561 8X SUB 1



993 561 8X SUB 2

PCB 618 RECEIVER SIGNAL PATH
VERSION A7 SUBDIAGRAM 2 OF 6

PCB 618 RECEIVER SIGNAL PATH
VERSION A7 SUBDIAGRAM 3 OF 6

1.4 MHz IF AMP

ATTENUATOR

AF OUTPUT

SIGNAL-DET

AGC DET.

AGC TIMING

GND

1,4 MHz

GND

618 - 6 AMDET

618 - 3 1,4 MHz IF

618 - 6 IF GAIN

618 - 5 MUTE

618 - 5 FAST

618 - 5 H3E/MGCI

618 - 5 MGCRSTI

AUBW1 618 - 6

AUBW2 618 - 6

AF RX PL1-6

AF RX PL1-5

AGC DELAYED 618 - 3

MGC PL1-7

+15V +7V +12V -15V

IC4 MC1350

IC6 TBA120T

IC7 ½ 1458N

IC5 ½ 1458N

IC32 ⅕ ULN2083

Q16 BC547 Q17 BF 240 Q18 BF 240 Q19 BC547 Q20 BC557 Q21 BC557

D60 IN4148 D61 IN4148 D62 IN4148 D63 IS920 D64 IS920 D65 IN4148 D66 IN4148 D67 IN4148 D68 IN4148 D69 IN4148 D70,71,72 3×IN4148 D73 IN 4148 D74 IN4148 D75,76 2×IN4148 D77 IN4148 D78 BZX79B5V6

T2

L80 IM2 4µ7 L81 IM2 220µ L82 22µH IM2 L83 75µ L79 IM2 220µ

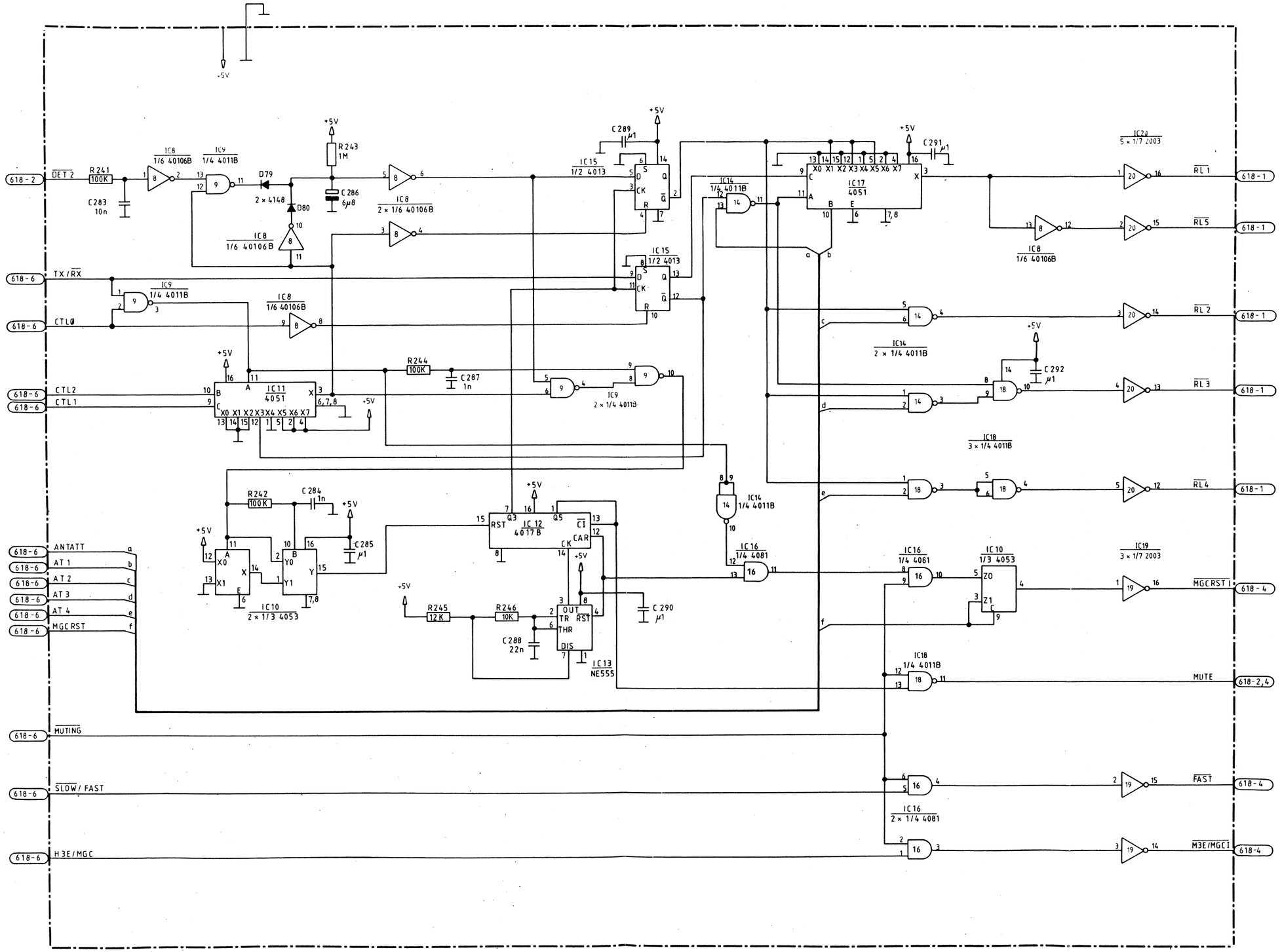
R163 270E R164 33K R165 8K2 R166 10K R167 10K R168 10K R169 2K2 R170 4K7 R171 100E R172 2K2 R173 2K7 R174 10E R175 1K8 R176 1K87 R177 33E2 R178 27E R179 100E R180 220E R181 562E R182 560E R183 825E R184 4K7 R185 3K9 R186 100E R187 3K48 R188 1K8 R189 10K0 R190 10K R191 5K62 R192 1K87 R193 82K5 R194 56E R195 4K7 R196 82K5 R197 27E R198 220E R199 1K R200 27E R201 100E R202 12K R203 3K3 R204 100K R205 5K6 R206 56E R207 47K R208 1K8 R209 1M5 R210 10K R211 47E R212 2E8 R213 1K R214 390E R215 470K R216 100E R217 1K R218 100K R219 1K R220 56E R221 1K R222 33K R223 100K R224 100K R225 68K R226 4K7 R227 680E R228 100K R229 10K R230 22E R231 5K6 R232 10M R233 47K R234 33K R235 82K R236 470K R237 270E R238 270E R239 220E R240 33K

C232 22µ C233 µ1 C234 10n C235 220p C236 100p C238 µ1 C239 µ1 C240 10n C241 1n C242 10n C243 µ1 C244 µ1 C245 µ1 C246 µ1 C247 10n C248 10n C249 µ1 C250 10p C251 µ1 C252 1n C253 470p C254 µ1 C255 2n2 C256 1n2 C257 220p C258 µ1 C259 10n C260 1µ C261 µ1 C262 µ1 C263 10µ C264 22µ C266 µ1 C267 µ1 C268 10n C269 µ1 C270 22n C271 1n C272 µ22 C273 10µ C274 10µ C275 330p C276 820p C277 22n C278 µ1 C279 910p C280 6µ8 C281 6µ8 C282 10n C315 µ1 C321 10n C324 µ1 C328 10n

R75 1K8

PCB 618 RECEIVER SIGNAL PATH
VERSION A7 SUBDIAGRAM 4 OF 6

993 561 8X SUB 4



PCB 618 RECEIVER SIGNAL PATH
VERSION A7 SUBDIAGRAM 5 OF 6

-15V +15V +12V +7V +5V

PL1-36 PL1-35

C293 6µ8 C300 0µ1 C294 6µ8 C301 µ1 C302 6µ8 C303 µ47 L84 470µH

IC23 MA7812 12V REG C305 µ1 +12V

IC24 MA7805 5V REG C306 µ1 +5V

R249 1K8 D81 6V8 C304 µ1 +7V

SERIAL TO PARALLEL IN

PARALLEL TO SERIAL OUT

PL1-16 CLOCK
PL1-18 COM LOAD
PL1-19 COM DATA

C295 470p C296 470p

IC25 4094B C311 µ1 IC27 4094B IC26 4094B C312 µ1 IC28 4094B C313 µ1

NOTE: ON 2003 PIN 8 IS GND AND PIN 9 IS V_{CC}

R255 56K R252 56K R253 56K R254 56K

IC30 ¼ 2003 IC24 6 × ¼ 2003 IC29 ¼ 2003 IC30 4 × ¼ 2003 IC19 ¼ 2003 IC19 7 × ¼ 2003

ANTATT 618-5
AT4 618-5
AT3 618-5
AT2 618-5
AT1 618-5
CTL2 618-5
CTL1 618-5
CTL0 618-5
$\overline{FL2}$ 616-2
$\overline{FL4}$ 618-1
$\overline{FL1}$ 618-1
$\overline{FL7}$ 618-1
$\overline{FL10}$ 618-1
$\overline{FL6}$ 618-1
$\overline{FL8}$ 618-1
$\overline{FL3}$ 618-1
SLOW/FAST 618-5
RF AMP 618-1
$\overline{FL9}$ 618-1
$\overline{FL5}$ 618-1
MGC/RST 618-5
H3E/MGC 618-5
$\overline{FL0}$ 618-1
$\overline{DET1}$ 618-2
AMDET 618-4
$\overline{X2}$ 618-3
$\overline{X3}$ 618-3
$\overline{X4}$ 618-3
$\overline{AUBW1}$ 618-4
$\overline{AUBW2}$ 618-4
IF GAIN 618-4
$\overline{X5}$ 618-3
$\overline{RC\ WIDE}$ 618-3
TX/RX 618-5
$\overline{RX\ MUTE}$ 618-5
STAT DATA PL1-14

AUBW

PL1-15 STAT LOAD C297 470p

IC21 74C165 IC22 74C165

R250 47K VERSION JUMPERS

R251 56K C325 µ1

SSB TELEX X3 X2

C307-C310 4 × µ1

Q22 BC547 Q23 BC557 R247 1K8 R248 270E C298 470pF

PL1-9 TX / $\overline{RX}$
PL1-10 $\overline{RX\ MUTE}$

C299 470p

PCB 618 RECEIVER SIGNAL PATH
VERSION A7 SUBDIAGRAM 6 OF 6

TEST POINTS FOR PCB 618 RECEIVER SIGNAL PATH.

(1) + 15V DC

(2) - 15V DC

(3) + 12V DC

(4) + 5V DC

(5) + 6.8V DC

(6) SELF TEST # 22 7V
—— " —— 23-24 2.9V
—— " —— 25-30 9.8V

(7) (8) (9) (10) (11) ONLY FOR USE WITH SIGNAL GENERATOR

(12) SELF TEST # 25 $50mV_{pp}$
—— " —— 26-30 $40mV_{pp}$

(13) SELF TEST # 25-30 $30mV_{pp}$

(14) SELF TEST # 25-30 $450mV_{pp}$ SINEWAVE 1.4 MHz

(15) SELF TEST # 22-30 $650mV_{pp}$ —— " —— 1.4 MHz

(16) (17) SELF TEST # 25 $1.7V_{pp}$ - 1 kHz

NOTE: KEEP GROUNDCORD ON PROBE AS SHORT AS POSSIBLE..

PARTS LIST FOR RECEIVER SIGNAL PATH BOARD 618 VERSION A7

Printed Circuit Board Complete 618		107 561 81
IC1	CB303M2 Balanced mixer	850 030 30
IC2	LM2903	850 290 30
IC3	HPF505 Balanced mixer	850 000 11
IC4	MC1350	850 135 00
IC5,7	MC1458N	850 145 80
IC6	TBA 120 T	850 012 01
IC8	CD40106B	850 010 60
IC9,14,18	4011B	850 401 10
IC10	CD4053B	850 405 30
IC11,17	CD4051B	850 405 10
IC12	4017B	850 401 70
IC13	NE555	850 055 50
IC15	4013B	850 401 30
IC16	4081B	850 408 10
IC19,20,29,30,31	2003A	850 200 30
IC21,22	74C165	850 416 50
IC23	MA7812	850 781 20
IC24	MA7805	850 780 50
IC25,26,27,28	4094B	850 409 40
IC32	ULN2083A	850 208 30
Q1	BC327	840 032 70
Q2,17,18,20,22	BC557B	840 055 70
Q3,9,11,16,18,19	BC547B	840 054 70
Q4,5,10	BFR96	840 009 60
Q6,13	J310	840 031 03
Q7	J310 2 pcs. matched	840 031 02
Q12	BF981	843 098 10
Q14,15	BF240	840 024 00
Q21	BD645	842 064 50
D1,2,5,6,30,31, 41-44,46,60-62, 65-77,79,80	1N4148	830 414 80
D3,4	388A 114A	830 011 40
D7,18-26,35	BA423	830 042 30
D8-17,27-28,32-34, 36,51,52,54,83	BA479	833 047 90
D29	BZX79C12	832 791 21
D37-40	BA282	830 028 20
D45,47,48,50,53, 55-59,63,64	1S920	830 192 00
D49	BZX79B5V1	832 795 11
D78	BZX79B5V6	832 795 60

PARTS LIST FOR RECEIVER SIGNAL PATH BOARD 618 VERSION A7

D81	BZX79C6V8				832 796 80
VR1	NEON LAMP				722 000 00
X1	45 HHz	Filter 2.7 kHz			383 571 01
X2	LSB Filter	1.4 MHz 1 kohm			385 112 03
RL1-4	Relay	12V	DIL		780 000 25
RL5	Relay	12V	DR-12V		780 000 38
R1,204,218,223, 224,228,241,242, 244	100 kohm	5%	1/8W	Car.	500 510 00
R2,3,8,15,21,40, 41,117,120,124-125,133,138,144, 148,152,154,157, 160,171,179,186, 201,216	100 ohm	5%	1/8W	Car.	500 210 00
R4,5	220 ohm	5%	1.5W	MO	544 222 00
R6	75 ohm	5%	5W	MO	547 175 00
R7,13,18,26, 118,121,203	3.3 kohm	5%	1/8W	Car.	500 333 00
R9	68 ohm	5%	1/4W	Car.	501 168 00
R10	82 ohm	5%	1/4W	Car.	501 182 00
R11,12	226 ohm	1%	1/4W	MF	511 222 60
R14,42,182	560 ohm	5%	1/8W	Car.	500 256 00
R16	100 ohm	1%	1/4W	MF	511 210 00
R17	68 ohm	5%	1.5W	MO	544 168 00
R19,20	120 kohm	5%	1/8W	Car.	500 512 00
R22,207,233	47 kohm	5%	1/8W	Car.	500 447 00
R23,61,106,170, 184,226	4.7 kohm	5%	1/8W	Car.	500 347 00
R24,32,50-59	470 ohm	5%	1/4W	Car.	501 247 00
R25	56 ohm	5%	1.5W	MO	544 156 00
R27,71,164,222, 234,240	33 kohm	5%	1/8W	Car.	500 433 00
R28,29,127,175, 188,208,247,249	1.8 kohm	5%	1/8W	Car.	500 318 00
R30,66	15 kohm	5%	1/8W	Car.	500 415 00
R31	2.2 kohm	5%	1/4W	Car.	501 322 00

PARTS LIST FOR RECEIVER SIGNAL PATH BOARD 618 VERSION A7

R33-38,44-47, 78	270 ohm	5%	1/4W	Car.	501 227 00
R39,230	22 ohm	5%	1/8W	Car.	500 122 00
R43,62	680 ohm	5%	1/4W	Car.	501 268 00
R48	820 ohm	5%	1/4W	Car.	501 282 00
R49,83	390 ohm	5%	1/4W	Car.	501 239 00
R60	590 ohm	1%	1/4W	MF	511 259 00
R64,65,95,102, 111,112,134, 166-168,210,229, 246	10 kohm	5%	1/8W	Car.	500 410 00
R119,173	2.7 kohm	5%	1/8W	Car.	500 327 00
R63,139,158,165	8.2 kohm	5%	1/8W	Car.	500 382 00
R67,194,206,220	56 ohm	5%	1/8W	Car.	500 156 00
R68	82 ohm	5%	1/8W	Car.	500 182 00
R69,143,215,236	470 kohm	5%	1/8W	Car.	500 547 00
R70	47 ohm	5%	1/4W	Car.	501 147 00
R72	301 ohm	1%	1/4W	MF	511 230 10
R73,113,140,142	1.5 kohm	5%	1/8W	Car.	500 315 00
R74,90,91,180, 198,239	220 ohm	5%	1/8W	Car.	500 222 00
R75	90.3 ohm	1%	1/8W	MF	511 195 30
R76,77,123,147, 199,213,217,219, 221	1 kohm	5%	1/8W	Car.	500 310 00
R79,174	10 ohm	1%	1/4W	MF	511 110 00
R80,214	390 ohm	5%	1/8W	Car.	500 239 00
R81,84	10 ohm	5%	1/8W	Car.	500 110 01
R82,88	270 ohm	5%	1/2W	Car.	502 227 00
R85,89,98, 128,145,211	47 ohm	5%	1/8W	Car.	500 147 00
R86	51.1 ohm	1%	1/4W	MF	511 151 10
R87	48.7 ohm	1%	1/4W	MF	511 148 70
R92	19.6 ohm	1%	1/4W	MF	511 119 60
R93,108,132, 254,257	56 kohm	5%	1/8W	Car.	500 456 00
R94	7.5 ohm	1%	1/4W	MF	511 075 00

PARTS LIST FOR RECEIVER SIGNAL PATH BOARD 618 VERSION A7

R96,155,178,197, 200	27 ohm	5%	1/8W	Car.	500 127 00
R97,100	27.4 ohm	1%	1/4W	MF	511 127 40
R99	237 kohm	1%	1/4W	MF	511 523 70
R101	715 ohm	1%	1/4W	MF	511 271 50
R103	56.2 kohm	1%	1/4W	MF	511 456 20
R104	6.49 kohm	1%	1/4W	MF	511 364 90
R105	14.7 kohm	1%	1/4W	MF	511 414 70
R107	270 kohm	5%	1/8W	Car.	500 527 00
R109,149,150	820 ohm	5%	1/8W	Car.	500 282 00
R110	56 ohm	5%	1/4W	Car.	501 156 00
R114	511 ohm	1%	1/4W	MF	511 251 10
R115	56.2 ohm	1%	1/4W	MF	511 156 20
R116	46.4 ohm	1%	1/4W	MF	511 146 40
R122,129,136,141, 146,151,159,161, 162,205,231,258	5.6 kohm	5%	1/8W	Car.	500 356 00
R126,227	680 ohm	5%	1/8W	Car.	500 268 00
R130,137,156	120 ohm	5%	1/8W	Car.	500 212 00
R131,235	82 kohm	5%	1/8W	Car.	500 482 00
R135	18 kohm	5%	1/8W	Car.	500 418 00
R163,237,238,248	270 ohm	5%	1/8W	Car.	500 227 00
R169,172,259	2.2 kohm	5%	1/8W	Car.	500 322 00
R176,192	1.87 kohm	1%	1/4W	MF	511 318 70
R177	33.2 ohm	1%	1/4W	MF	511 133 20
R181	562 ohm	1%	1/4W	MF	511 256 20
R183	825 ohm	1%	1/4W	MF	511 282 50
R185	3.9 kohm	5%	1/8W	Car.	500 339 00
R187	3.48 kohm	1%	1/4W	MF	511 334 80
R191	5.62 kohm	1%	1/4W	MF	511 356 20
R193,196	82.5 kohm	1%	1/4W	MF	511 482 50
R195	4.7 kohm			Pot.	582 347 00
R202,245	12 kohm	5%	1/8W	Car.	500 412 00
R209	1.5 Mohm	5%	1/4W	Car.	501 615 00
R189,190	10 kohm	1%	1/4W	MF	511 410 00
R225	68 kohm	5%	1/8W	Car.	500 468 00
R232	10 Mohm	5%	1/4W	Car.	501 710 00
R243	1 Mohm	5%	1/8W	Car.	500 610 00
R250	9x47 kohm			Sil.	530 000 07
R251-253,255	7x56 kohm			Sil.	530 000 13

PARTS LIST FOR RECEIVER SIGNAL PATH BOARD 618 VERSION A7

C1,4-6,8,9, 12-17,21,27,44, 69-72,87-92,97, 105,109-112,116, 117,132,133,140, 145,151,166,172-174,176-178,180, 185,190,192,194, 201-203,205,211, 215,218-221,224, 226,227,231,233, 238,239,243-247, 249,251,254,258, 261,262,266,267, 269,278,285,289-292,300,301,304-315,320,324,325, 327,329,330	0.1 uF	10%	63V	Polyes.	622 510 00
C2,3	0.22 uF	10%	250V	Polyes.	624 522 01
C7,56,68,181, 270,277,288	22 nF	10%	63V	Polyes.	622 422 00
C10,11	4.7 nF		63V	Cer.	602 347 02
C18	2.7 nF	10%		Cer.	602 327 00
C19,64,65,67	15 nF	20%	63V	Polyes.	622 415 01
C20,114,129, 142,150,303	0.47 uF	10%	63V	Polyes.	622 547 01
C22,25,63,85	33 nF	20%	63V	Polyes.	622 433 00
C23,24	47 nF	10%	63V	Polyes.	622 447 00
C26	68 nF	20%	63V	Polyes.	622 468 00
C28,38,149,163, 170,183,200, 225,326	150 pF	2%	63V	N150	602 215 00
C29,98,235,257	220 pF	1%	500V	Polyst.	615 222 00
C30,60	270 pF	1%	500V	Polyst.	615 227 00
C31,50,76,100, 101	390 pF	1%	500V	Polyst.	615 239 00
C32	2.7 nF	1%	125V	Polyst.	613 327 00
C33,47,48,74,99, 169,236	100 pF	2%	63V	N150	602 210 00
C34,39,55,73	82 pF	2%	63V	N150	602 182 00

PARTS LIST FOR RECEIVER SIGNAL PATH BOARD 618 VERSION A7

C35	620 pF	1%	250V	Polyst.	614 262 00
C36,279	910 pF	1%	500V	Polyst.	615 291 00
C37,104	1.3 nF	1%	160V	Polyst.	613 313 00
C40,93,256	1.2 nF	1%	500V	Polyst.	615 312 00
C41,107,157,198	56 pF	2%	63V	N150	602 156 00
C42,53	33 pF	2%	63V	N150	602 133 01
C43,275	330 pF	1%	500V	Polyst.	615 233 00
C45,46,160,189, 222,223,228	120 pF	2%	63V	N150	602 212 00
C49,52,77,229, 253	470 pF	1%	630V	Polyst.	615 247 00
C51,62,154,164, 318	47 pF	2%	63V	N150	602 147 00
C57,113,138	0.33 uF	20%	63V	Polyes.	622 533 01
C58,130,131,135, 139,210	2.2 uF		25V	Sol. al.	652 622 03
C59,106,115,134, 280,281,286	6.8 uF	20%	25V	Tan.	652 668 00
C61	18 pF	2%	63V	N150	602 118 00
C66,83,96, 118-128,137,175, 182,188,191,195, 204,206-209,212, 213,214,217,230,234, 237,240,242,248, 259,268,282,284, 321,322,328	10 nF	10%	63V	Polyes.	622 410 01
C75,159,162,165, 167,168,196	15 pF	2%	63V	N150	602 115 00
C78	560 pF	1%	500V	Polyst.	615 256 00
C79,276	820 pF	1%	500V	Polyst.	615 282 00
C80,82,103	1 nF	1%	500V	Polyst.	615 310 01
C81	1.5 nF	1%	500V	Polyst.	615 315 00
C84	5.6 nF	1%	125V	Polyst.	613 356 00
C94,255	2.2 nF	1%	125V	Polyst.	613 322 00
C95	8.2 nF	1%	125V	Polyst.	613 382 00
C102	750 pF	1%	500V	Polyst.	615 275 00
C108,156	22 pF	2%	63V	N150	602 122 00

PARTS LIST FOR RECEIVER SIGNAL PATH BOARD 618 VERSION A7

C136,146,147, 148,152,153,186, 187,216,241,252, 271,283,287	1 nF	10%	63V	Cer.	602 310 02
C141,250	10 pF	2%	63V	N150	602 110 00
C143,144,171, 272,319	0.22 uF	10%	63V	Polyes.	622 522 01
C155	100 uF		25V	Sol. al.	652 810 00
C158,314	2-9 pF		100V	Var.	683 009 00
C161,184	39 pF	2%	63V	N150	602 139 01
C179	4.5-26 pF			Var.	683 126 00
C193,232,264	22 uF		16V	Tan.	651 722 01
C199	27 pF	2%	63V	N150	602 127 00
C260	1 uF		35V	Tan.	652 610 01
C263,273,274	10 uF		63V	Sol. al.	652 710 02
C293,294,302,323	6.8 uF		25V	Sol. al.	652 668 01
C295-299	470 pF	10%	63V	Cer.	602 247 00
L1-5	4.7 mH	5%	RF Choke		740 347 00
L6,7,50,51,53, 57,69	1000 uH	10%	RF Choke	IM2	740 310 04
L8,39	0.15 uH	20%	RF Choke	IM4	740 001 51
L9,37,40	0.22 uH	10%	RF Choke	IM2	740 002 21
L10,87	0.33 uH	10%	RF Choke	IM2	740 003 30
L11,19,38	0.47 uH	10%	RF Choke	IM2	740 004 70
L12,43	0.68 uH	10%	RF Choke	IR2	740 006 81
L13,44,68	0.82 uH	10%	RF Choke	IM2	740 008 20
L14,74,80	4.7 uH	10%	RF Choke	IM2	740 047 02
L26,66,67,70	0.1 uH	10%	RF Choke	IM2	740 001 00
L34	6.8 uH	10%	RF Choke	IM2	740 068 01
L35,36	33 uH		RF Choke		740 133 01
L41,86	0.39 uH	10%	RF Choke	IM2	740 003 90
L45	3.9 uH	10%	RF Choke	IM2	740 039 00
L46,55,56,72	47 uH	10%	RF Choke	IM2	740 147 03
L47,77,78,82	22 uH	10%	RF Choke	IM2	740 122 02
L48	2.7 uH	10%	RF Choke	IM2	740 027 00
L49	470 uH	10%	RF Choke	IM2	740 247 02
L52,54,75,76,88	10 uH	10%	RF Choke	IM2	740 110 04
L58,59	2.2 uH	10%	RF Choke	IM2	740 022 02
L60	0.56 uH	10%	RF Choke	IM2	740 005 60
L61-65,71	0.15 uH	10%	RF Choke	IM2	740 001 50
L73	0.33 uH	10%	RF Choke	IM4	740 003 31
L79,81	220 uH	10%	RF Choke	IM2	740 222 02
L84	470 uH	5%	RF Choke		740 247 01
L85	0.27 uH	5%	RF Choke	IM2	740 002 71