

8. PART LIST AND CIRCUIT DIAGRAMS

8.1. Numbering

An identification number between $\triangle 201$ and $\triangle 293$ is assigned to each module. The designation of a component or terminal includes this number as prefix - example: 213 R3 (resistor R3 on module $\triangle 213$), or 213-4 (terminal No. 4 on module $\triangle 213$).

8.2. Switches

Switches with stops are shown in the extreme anticlockwise position. The BAND-switch is shown in the 500 kHz position.

Switch wafer No. 1. is the wafer nearest to the front panel, and the front side of a wafer is the side facing the front panel.

8.3. Terminals

Locations of terminals appear from the component location drawings. On the circuit diagrams, each terminal is identified by a number, and in most cases by an explanatory text. In addition to this, the number of the module and terminal to which the lead is connected is indicated (example: 213 -4). Where interconnections consists of coaxial cables, only the number of the terminal is given to which the inner conductor of the cable is connected.

8.4. Voltages

Typical DC voltages are indicated on the circuit diagram next to the points to which they refer and are marked with a "V".

Typical logic levels are indicated in a bracket (LOW/HIGH) on the circuit diagrams next to the point to which they refer.

Typical AC voltages are likewise indicated on the circuit diagrams. They are marked with "Vpp" or "mVpp".

For measuring conditions see Chapter 7.

8.5. Test Points

Location of test points are shown on the component location drawings. Typical voltage at each test point is indicated on the circuit diagram.

8.6. Symbol Explanation

8.6.1. Logic circuits:

A small circle at an external input means that the specific input is active LOW, i.e. it produces the desired function, in conjunction with other inputs if its voltage is the lower of the two logic levels in the system, otherwise the specific input is HIGH.

a small circle at a clock input means that the output indicates that the outputs change on the HIGH to LOW clock transition.

A small circle at an output indicates that when the function designated is true, the output is LOW.

Inputs and outputs are labelled with mnemonic letters as described in the table 8.6.1.

8.6.2. Logic Functions:

Logic functions are labelled with mnemonic letters in a bracket. An active LOW function is given a bar over the label.

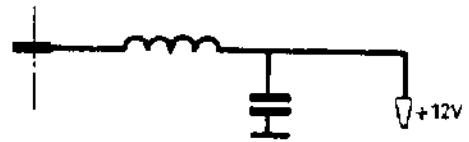
More logic functions may be connected by means of the principles of Boolean Algebra.

8-6-3- Arrows:

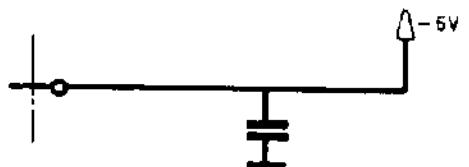
A black arrow on a line indicates in which direction an AC-signal flows.

A white arrow on a line indicates in which direction the information of a DC signal flows. An exception from this rule are the supply lines and their connections, which are always indicated by a supply voltage level or its associated label.

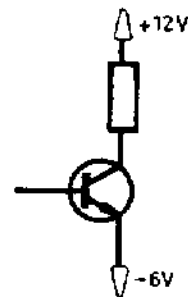
Positive supply line: Example



Negative supply line: Example



Connections to supply line: Example



Label	Short for	Meaning
Ix	Input	Inputs to combinatorial circuits
J, K		Inputs to JK flip flops
Dx	Data	Inputs to D flip flops and latches
S, R	Set, Reset	Inputs to JK and D flip flops, latches, registers, and counters; R resets output to LOW; S sets output to HIGH
Px		Inputs registers and counters
Ax	Addresses	Inputs used for selection of an input, output, data route, or memory location.
E PE	enable Parallel Enable	Control input used to synchronously load information in parallel into a circuit
MR	Master Reset	Input which resets asynchronously all outputs to LOW, overriding all other inputs.
CL	Clear	Input which resets outputs to LOW, but does not override all other inputs
CP CE, CEP, CET	Clock Pulse Count Enable	Control inputs to counters
Ox	Output	Outputs of combinatorial circuits
Qx		Outputs of sequential circuits
TC	Terminal Count	(Output of a counter indicating 1111 for up binary counters, 101 for up decimal counters, or 0000 for down counters).

Table 8.6.1.

Abbreviations

A	= ampere, amperes
C	= capacitor
Car.	= carbon
Cer.	= ceramic
D	= diode
F	= farad
FS	= fuse
H	= henry
IC	= integrated circuit
k	= kilo or 10^3
L	= inductor
LS	= loudspeaker
lin.	= linear
log.	= logarithmic
m	= milli or 10^{-3}
M	= mega or 10^6
ME	= instrument
MF	= metal film
Mi	= mica
MP	= metallized paper
u	= micro or 10^{-6}
n	= nano or 10^{-9}
NPO	= temp. coefficient 0
N150	= temp. coefficient - 150
NTC	= neg. temp coefficient
P	= pico or 10^{-12}
PL	= connector (plug)
Polyes.	= polyester
Polyst.	= polystyrene
PTC	= pos. temp. coefficient
R	= resistor
RL	= relay
S	= switch
SK	= connector (socket)
SL	= lamp
T	= transformer
Tan	= tantalum electrolytic capacitor
TR	= transistor
V	= working voltage DC or volts
Vl...	= valve
Vac.	= working voltage AC
Var.	= variable
Vpp	= peak to peak voltage
Varicap	= variable capacitance diode
ww	= wire wound
W	= watt, watts
W.alum.	= wet aluminium electrolytic
X	= crystal, crystal osc. or crystal filter

PARTS LIST

FOR



215C 1	100 pF	1%	500V	Polyst.	615 210 00
C 2-3	UHF π Filter			Cer.	779 000 02
C 4	470 uF		10V	W.alum.	651 847 00
D 1-2	1S920				830 192 00
215PL1		One Way			751 000 01
215R 1	4.7 kohms	Lin			355 222 31
R 2	10 kohms	Lin			355 222 21
R 3	10 kohms	Log			355 222 41
R 4	100 kohms	5%	1/3W	Car.	501 510 00
215S 1	Band				375 200 86
S 2	Bandwidth				375 202 03
S 3	Mode				375 201 84
S 4					762 000 11
S 5					762 000 10
S 6					345 228 51
215SK1					750 000 11

PARTS LIST

FOR



201C 1-4	0.1 uF	10%	250V	Polyes.	624 510 01
C 5-11	10 nF	-20%+80%	32V	Cer.	602 410 00
C12-13	0.1 uF	10%	250V	Polyes.	624 510 01
C14-16	10 nF	-20%+80%	32V	Cer.	602 410 00
201SK 1-4		32 Way			751 000 21
SK 5-6		64 Way			751 000 23

PARTS LIST

FOR



213C 1	0.68 μ F	10%	100V	Polyes.	623 568 00
C 2	0.47 μ F	10%	250V	Polyes.	624 547 00
C 3	0.1 μ F	10%	250V	Polyes.	624 510 00
C 4	1000 μ F		25V	W.alum.	652 910 00
C 5	2200 μ F		40V	W.alum.	652 922 00
C 6	39 pF	5%	400V	Cer.	605 139 00
C 7	0.1 μ F	10%	250V	Polyes.	624 510 00
C 8	0.68 μ F	10%	100V	Polyes.	623 568 00
C 9-10	0.01 μ F	10%	250V	Polyes.	624 410 00
C11-12	39 pF	5%	400V	Cer.	605 139 00
C13	18 pF	5%	400V	Cer.	605 118 02
C14	27 pF	5%	400V	Cer.	605 127 02
213IC1-2	7812				850 781 20
IC3	7805				850 780 50
213L1-4	25 μ H		RF Choke		740 125 00
L5	100 μ H	10%	RF Choke		740 210 00
L6-8	25 μ H		RF Choke		740 125 00
L9-10	22 μ H	10%	RF Choke		740 122 00
L11			Coil		105 216 21
L12			Coil		105 216 11
L13			Coil		105 216 21
213PL1	12 Way				751 000 27
213R1	2.2 kohms	5%	1/3W	Car.	501 322 00
R2	33 kohms	5%	1/3W	Car.	501 433 00
213SK1-3					750 000 10

PARTS LIST

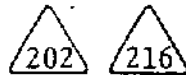
FOR



202/216C 1-3	4.5-26 pF	Var.				683 126 00
C 4	220 pF	1%	500V	Polyst.		615 222 00
C 5	2x518 pF	Var.				686 251 81
C 6	220 pF	1%	500V	Polyst.		615 222 00
C 7	10 nF	-20+80%	32V	Cer.		602 410 00
C 8	0.68 uF	10%	100V	Polyes.		623 568 00
C 9	0.1 uF	10%	250V	Polyes.		624 510 00
C10	1 uF	10%	250V	Polyes.		624 610 00
C11	0.1 uF	10%	250V	Polyes.		624 510 00
C12	0.1 uF	10%	100V	Polyes.		623 510 00
C13-19	0.1 uF	10%	250V	Polyes.		624 510 00
C20	910 pF	1%	500V	Polyst.		615 291 00
C21	422 pF	1%	125V	Polyst.		613 242 20
C22	130 pF	5%	400V	Cer.		605 213 00
C23	100 pF	5%	400V	Cer.		605 210 00
C24	91 pF	5%	400V	Cer.		605 191 00
C25	0.1 uF	10%	100V	Polyes.		623 510 00
C26	4.7 pF	+0.25 pF	400V	Cer.		605 047 01
C27	3.9 pF	+0.25 pF	400V	Cer.		605 039 00
C28	5.6 pF	+0.25 pF	400V	Cer.		605 056 00
C29	0.1 uF	10%	100V	Polyes.		623 510 00
C30	910 pF	1%	500V	Polyst.		615 291 00
C31	0.1 uF	10%	100V	Polyes.		623 510 00
C32	422 pF	1%	125V	Polyst.		613 242 00
C33	180 pF	5%	400V	Cer.		605 218 01
C34	180 pF	5%	400V	Cer.		605 218 00
C35	3.9 pF	+0.25 pF	400V	Cer.		605 039 00
C36	3.3 pF	+0.25 pF	400V	Cer.		605 033 00
C37	6.8 pF	+0.25 pF	400V	Cer.		605 068 00
C38	68 pF	5%	400V	Cer.		605 168 00
C39	51 pF	5%	400V	Cer.		605 151 00
C40	39 pF	5%	400V	Cer.		605 139 00
C41	3.3 pF	+0.25 pF	400V	Cer.		605 033 00
C42	1.5 pF	+0.25 pF	400V	Cer.		605 015 00
C43-44	1.8 pF	+0.25 pF	400V	Cer.		605 018 00
C45	15 pF	5%	400V	Cer.		605 115 00
C46	100 pF	5%	400V	Cer.		605 210 00
C47	3 3 nF	1%	125V	Polyst.		613 333 00
C48	0.1 uF	10%	250V	Polyes.		624 510 00
C49-51	4.5-26 pF	Var.				683 126 00
C52	130 pF	5%	400V	Cer		605 213 00
C53	100 pF	5%	400V	Cer.		605 210 00

PARTS LIST

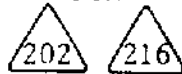
FOR



202/216C54	91 pF	5%	400V	Cer.	605 191 00
C55	1.8 pF	+0.25 pF	400V	Cer.	605 018 00
C56	47 nF	10%	250V	Polyes.	624 447 00
C57	1.8 pF	+0.25 pF	400V	Cer.	605 018 00
C58	22 nF	10%	250V	Polyes.	624 422 00
C59	4.7 pF	+0.25 pF	400V	Cer.	605 047 01
C60	180 pF	5%	400V	Cer.	605 218 00
C61	4.7 pF	+0.25 pF	400V	Cer.	605 047 01
C62	3.9 pF	+0.25 pF	400V	Cer.	605 039 00
C63	5.6 pF	+0.25	400V	Cer.	605 056 00
C64	68 pF	5%	400V	Cer.	605 168 00
C65	51 pF	5%	400V	Cer.	605 151 00
C66	39 pF	5%	400V	Cer.	605 139 00
C67	3.3 pF	+0.25 pF	400V	Cer.	605 033 00
C68	3.9 pF	+0.25 pF	400V	Cer.	605 039 00
C69	3.3 pF	+0.25 pF	400V	Cer.	605 033 00
C70	6.8 pF	+0.25 pF	400V	Cer.	605 068 00
C71	2.7 pF	+0.25 pF	400V	Cer.	605 027 00
C72-73	1.8 pF	+0.25 pF	400V	Cer.	605 018 00
C74	27 pF	5%	400V	Cer.	605 127 00
C75	15 pF	5%	400V	Cer.	605 115 00
C76-78	4.5-26 pF	Var.			683 126 00
C79	180 pF	5%	400V	Cer.	605 218 00
C80	130 pF	5%	400V	cer.	605 213 00
C81	100 pF	5%	400V	Cer.	605 210 00
C82	91 pF	5%	400V	Cer.	605 191 00
C83	68 pF	5%	400V	Cer.	605 168 00
C84	47 pF	5%	400V	Cer.	605 147 00
C85	33 pF	5%	400V	Cer.	605 133 00
C86	3.3 nF	1%	125V	Polyst.	613 333 00
C87	1 uF	10%	100V	Polyes.	623 610 00
C88	0.1 uF	10%	250V	Polyes.	624 510 00
C89-98	0.1 uF	10%	100V	Polyes.	623 510 00
C99	10 nF	-20+80%	32V	Cer.	602 410 00
C100	0.1 uF	10%	100V	Polyes.	623 510 00
C101-102	15 pF	5%	400V	Cer.	605 115 00
C103	1 uF	10%	100V	Polyes.	623 610 00
C104-105	0.1 uF	10%	100V	Polyes.	623 510 00
C106-108	10 nF	-20+80%	32V	Cer.	602 410 00
C109	22 pF	+0.25 pF	400V	Cer.	605 122 02
C110	0.1 uF	10%	100V	Polyes.	623 510 00
C111-112	10 nF	-20+80%	32V	Cer.	602 410 00

PARTS LIST

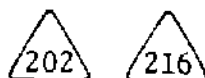
FOR



202/216C113	0.1 uF	10%	250V	Polyes.	624 510 00
C114	0.1 uF	10%	100V	Polyes.	623 510 00
C115	10 nF	-20/+80%	32V	Cer.	602 410 00
C116-118	0.1 uF	10%	100V	Polyes.	623 510 00
C119	0.1 uF	10%	250V	Polyes.	624 510 00
C120	10 nF	10%	250V	Polyes.	624 410 00
C121	18 pF	5%	400V	Cer.	605 118 00
202/216D 1- 4	388A				830 038 80
D 5-42	1S920				830 192 00
202/216L 1- 2	1 mH	10%	RF Choke		740 310 01
L 3- 4	100 uH	10%	RF Choke		740 210 00
L 6			Coil		105 018 32
L 7			Coil		105 018 42
L 8			Coil		105 018 52
L 9	680 uH	10%	RF-Choke		740 268 00
L10			Coil		105 018 62
L11-12			Coil		105 018 72
L13			Coil		105 018 22
L14-15	22 uH	10%	RF Choke		740 122 00
L16-17	0.68 uH	10%	RF Choke		740 006 80
L18	22 uH	10%	RF Choke		740 122 00
L19	1 mH	10%	RF Choke		740 310 01
202/216R1	100 kohm	5%	1/3W	Car.	501 510 00
R2	100 ohms	5%	1/3W	Car.	501 210 00
R 3- 9	1 kohm	5%	1/3W	Car.	501 310 00
R10	220 kohms	5%	1/3W	Car.	501 522 00
R11	6.8 kohms	5%	1/3W	Car.	501 368 00
R12-14	1 kohm	5%	1/3W	Car.	501 310 00
R15-16	10 kohms	5%	1/3W	Car.	501 410 00
R17-18	18 kohms	5%	1/3W	Car.	501 418 00
R19-20	330 ohms	5%	1/3W	Car.	501 233 00
R21-22	33 kohms	5%	1/3W	Car.	501 433 00
R23	8.2 kohms	5%	1/3W	Car.	501 382 00
R24	39 ohms	5%	1/3W	Car.	501 139 00
R25	100 ohms	Var.			582 210 00
R26	39 ohms	5%	1/3W	Car.	501 139 00
R27-28	56 ohms	5%	1/3W	Car.	501 156 00
202/216S 1					375 200 45
S 2- 3					375 200 56
S 4					375 200 76
S 5					375 200 65

PARTS LIST

FOR



202/216SL1- 8	A9A-C		821 000 05
202/216T 1		Transformer	105 017 71
T 2		Transformer	105 017 81
T 3		Transformer	105 017 91
T 4		Transformer	105 017 62
T 5		Transformer	105 018 01
T 6- 7		Transformer	105 018 11
T 8		Transformer	105 216 61
T 9		Transformer	105 216 41
T10		Transformer	105 216 53
T11		Transformer	105 218 02
T12		Transformer	105 218 12
T13		Transformer	105 218 22
T14		Transformer	105 216 91
T15		Transformer	105 217 01
T16		Transformer	105 217 11
T17		Transformer	105 217 21
T18		Transformer	105 217 31
T19		Transformer	105 217 41
T20		Transformer	105 217 51
T21		Transformer	105 217 61
T22-23		Transformer	105 217 72
T24		Transformer	105 217 91
T25		Transformer	105 215 12
T26		Transformer	105 217 91
202/216TR1- 4	J310		840 031 01
202X 1	Crystal filter	38 MHz -2.7/+2.7 MHz	285 201 41
216X 1	Crystal filter	38 MHz -4/+4 MHz	385 201 31

PARTS LIST

FOR



221C 1-2	27 pF	10%	25V	Cer.	605 127 03
C 3	47 pF	10%	25V	Cer.	605 147 01
C 4	56 pF	10%	25V	Cer.	605 156 03
C 5	47 pF	10%	25V	Cer.	605 147 01

22	1				
	L 2				
	L 3				375 239 61

PARTS LIST

FOR



203C 1	0.1 uF	10%	250V	Polyes.	624 510 00
C 2	47 nF	10%	250V	Polyes.	624 447 00
C 3	0.1 uF	10%	250V	Polyes.	624 510 00
C 4	560 pF	1%	500V	Polyst.	615 256 00
C 5	510 pF	1%	500V	Polyst.	615 251 00
C 6- 7	2.2 nF	1%	250V	Polyst.	614 322 00
C 8	22 uF		16V	Polyst.	615 722 00
C 9-10	47 nF	-20/+80%	16V	Cer.	601 447 00
C11	56 pF	5%	400V	Cer.	605 156 02
C12	22 pF	±0.25 pF	400V	Cer.	605 122 02
C13	1 pF				
C14	56 pF	5%	400V	Cer.	605 156 02
C15-16	47 nF	-20/+80%	16V	Cer.	601 447 00
C17	0.1 uF	10%	250V	Polyes.	624 510 00
C18	47 nF	-20/+80%	16V	Cer.	601 547 00
C19	0.1 uF	10%	250V	Polyes.	624 510 00
C20	4.7 pF	±0.25 pF	400V	Cer.	605 047 01
C21	10 nF	-20/+80%	32V	Cer.	602 410 00
C22	0.1 uF	10%	250V	Polyes.	624 510 00
C23	110 pF	1%	500V	Polyst.	615 211 00
C24	10 nF	-20/+80%	32V	Cer.	602 410 00
C25-26	0.1 uF	10%	250V	Polyes.	624 510 00
C27-29	10 nF	-20/+80%	32V	Cer.	602 410 00
C30	0.1 uF	10%	250V	Polyes.	624 510 00
C31	390 pF	1%	500V	Polyst.	615 239 00
C32	0.1 uF	10%	250V	Polyes.	624 510 00
C33	10 nF	-20/+80%	32V	Cer.	602 410 00
C34	0.1 uF	10%	250V	Polyes.	624 510 00
C35-36	10 nF	-20/+80%	30V	Cer.	602 410 00
C37	22 pF	10%	400V	Cer.	605 122 02
203D 1- 4	BB109 G				833 010 90
D 5	BA379				833 037 90
203IC1	1496CN				850 149 60
203L 1- 3	100 uH	10%	RF Choke		740 210 00

PARTS LIST

FOR



203R 1	18 kohms	5%	1/3W	Car.	501 418 00
R 2	3.3 kohms	5%	1/3W	Car.	501 333 00
R 3	1.2 kohms	5%	1/3W	Car.	501 312 00
R 4	1.8 kohms	5%	1/3W	Car.	501 318 00
R 5	22 kohms	5%	1/3W	Car.	501 422 00
R 6	12 kohms	5%	1/3W	Car.	501 412 00
R 7	150 kohms	5%	1/3W	Car.	501 515 00
R 8	47 kohms	Var.			582 447 00
R 9	56 ohms	5%	1/3W	Car.	501 156 00
R10	100 ohms	5%	1/3W	Car.	501 210 00
R11	470 kohms	5%	1/3W	Car.	501 515 00
R12	470 kohms	5%	1/3W	Car.	501 547 00
R13	1.2 kohms	5%	1/3W	Car.	501 312 00
R14	470 kohms	5%	1/3W	Car.	501 547 00
R15	560 ohms	5%	1/3W	Car.	501 256 00
R16	27 kohms	5%	1/3W	Car.	501 427 00
R17	22 kohms	5%	1/3W	Car.	501 422 00
R18	12 kohms	5%	1/3W	Car.	501 412 00
R19	82 kohms	5%	1/3W	Car.	501 482 00
R20	1.5 kohms	5%	1/3W	Car.	501 315 00
R21	2.7 kohms	5%	1/3W	Car.	501 327 00
R22	Not used				
R23	680 ohms	5%	1/3W	Car.	501 268 00
R24	10 kohms	5%	1/3W	Car.	501 410 00
R25	1.5 kohms	5%	1/3W	Car.	501 315 00
R26	2.2 kohms	5%	1/3W	Car.	501 322 00
R27	10 kohms	5%	1/3W	Car.	501 410 00
R28	27 kohms	5%	1/3W	Car.	501 427 00
R29	33 ohms	5%	1/3W	Car.	501 133 00
R30	330 ohms	5%	1/3W	Car.	501 233 00
R31	100 ohms	5%	1/3W	Car.	501 210 00
R32	47 ohms	5%	1/3W	Car.	501 147 00
R33	1 kohms	5%	1/3W	Car.	501 310 00
R34	10 kohms	5%	1/3W	Car.	501 410 00
R35	470 ohms	5%	1/3W	Car.	501 247 00
R36	1 kohm	Var.			582 310 00
R37	680 ohms	5%	1/3W	Car.	501 268 00
R38	470 ohms	5%	1/3W	Car.	501 247 00
R39	56 ohms	5%	1/3W	Car.	501 156 00
R40	10 kohms	5%	1/3W	Car.	501 410 00

PARTS LIST

FOR



203T 1		Transformer	105 215 21
T 2		Transformer	105 215 31
T 3		Transformer	105 215 41
T 4		Transformer	105 216 71
T 5		Transformer	105 106 62
203TR1- 3	BC547B		840 054 70
TR4	BSX20		840 002 00
TR5	TIS88A		843 008 80
TR6	BC547B		840 054 70
TR7	TIS88A		843 008 80
203X 1		2.999 750 MHz	385 202 23

PARTS LIST

FOR



217C 1	10 nF	10%	250V	Polyes.	624 410 00
C 2	0.1 uF	10%	250V	Polyes.	624 510 00
C 3	1 nF	1%	500V	Polyst.	615 310 01
C 4- 8	0.1 uF	10%	250V	Polyes.	624 510 00
C 9	6.8 nF	1%	125V	Polyst.	613 368 00
C10	0.1 uF	10%	250V	Polyes.	624 510 00
C11	1 nF	1%	500V	Polyst.	615 310 01
C12	10 nF	10%	250V	Polyes.	624 410 00
217D 1-10	1S920				830 192 00
217L 1- 2			Coil		105 215 81
217R 1	6.8 kohms	5%	1/3W	Car.	501 368 00
R 2- 6	100 ohms	5%	1/3W	Car.	501 210 00
R 7-11	6.8 kohms	5%	1/3W	Car.	501 368 00
R12-16	3.3 kohms	5%	1/3W	Car.	501 333 00
R17-21	10 kohms	5%	1/3W	Car.	501 410 00
R22	3.3 kohms	5%	1/3W	Car.	501 333 00
R23	100 ohms	5%	1/3W	Car.	501 210 00
217X 1	Filter LSB	1.4 MHz			385 112 02
X 2	Filter Telex				385 201 71
X 3	Filter Narrow				385 201 01
X 4	Filter Verrynarrow				385 200 91

PARTS LIST

FOR



205C 1	4.7 nF	-20/+80%	32V	Cer.	602 347 00
C 2	22 uF		16V	Tan	651 722 00
C 3	0.1 uF	10%	250V	Polyes.	624 510 00
C 4	2.2 pF	±0.25 pF	400V	Cer.	605 022 00
C 5	0.1 uF	10%	250V	Polyes.	624 510 00
C 6	4.7 nF	-20/+80%	32V	Cer.	602 347 00
C 7	0.1 uF	10%	250V	Polyes.	624 510 00
C 8	100 uF		25V	W.alum.	652 810 00
C 9-12	0.1 uF	10%	250V	Polyes.	624 510 00
C13	1 nF	1%	500V	Polyst.	615 310 00
C14	0.1 uF	10%	250V	Polyes.	624 510 00
C15	4.7 nF	-20/+80%	32V	Cer.	602 347 00
C16	0.1 uF	10%	250V	Polyes.	624 510 00
C17	10 pF	5%	400V	Cer.	605 110 00
C18	1.2 nF	1%	500V	Polyst.	615 312 00
C19-20	22 nF	10%	250V	Polyes.	624 510 00
C21	120 pF	5%	400V	Cer.	605 212 00
C22	470 pF	1%	500V	Polyst.	615 247 00
C23	4.7 nF	-20/+80%	32V	Cer.	602 347 00
C24-28	0.1 uF	10%	250V	Polyes.	624 510 00
C29	3.9 nF	1%	250V	Polyst.	614 339 00
C30	4.7 nF	-20/+80%	32V	Cer.	602 347 00
C31-32	0.1 uF	10%	250V	Polyes.	624 510 00
C33	0.47 uF	10%	250V	Polyes.	624 547 00
C34-35	0.1 uF	10%	250V	Polyes.	624 510 00
C36	10 nF	-20/+80%	32V	Cer.	602 410 00
205D 1- 9	1S920				830 192 00
D10	AAZ17				830 001 70
D11-12	1S920				830 192 00
205IC1	TBA120				850 012 00
205L 1			Coil		105 106 92
L 2			Coil		105 107 22
L 3- 4	100 uH	10%	RF-Choke		740 210 00
205R 1	10 kohms	5%	1/3W	Car.	501 410 00
R 2	100 ohms	5%	1/3W	Car.	501 210 00
R 3	10 kohms	5%	1/3W	Car.	501 410 00
R 4	680 ohms	5%	1/3W	Car.	501 268 00
R 5	1 kohm	5%	1/3W	Car.	501 310 00
R 6	10 kohms	5%	1/3W	Car.	501 410 00

PARTS LIST

FOR



205R 7	27 ohms	5%	1/3W	Car.	501 127 00
R 8	100 ohms	5%	1/3W	Car.	501 210 00
R 9	1 kohm	5%	1/3W	Car.	501 310 00
R10	10 kohms	5%	1/3W	Car.	501 410 00
R11-12	1 kohm	5%	1/3W	Car.	501 310 00
R13	1.2 kohms	5%	1/3W	Car.	501 312 00
R14	150 kohms	5%	1/3W	Car.	501 515 00
R15	10 kohms	5%	1/3W	Car.	501 410 00
R16	470 ohms	5%	1/3W	Car.	501 247 00
R17-18	330 ohms	5%	1/3W	Car.	501 233 00
R19	1 kohm	5%	1/3W	Car.	501 310 00
R20	4.7 kohms	5%	1/3W	Car.	501 347 00
R21-22	100 kohms	5%	1/3W	Car.	501 510 00
R23	680 ohms	5%	1/3W	Car.	501 268 00
R24	33 ohms	5%	1/3W	Car.	501 133 00
R25	3.3 kohms	5%	1/3W	Car.	501 333 00
R26	1 kohm	5%	1/3W	Car.	501 310 00
R27	68 kohms	5%	1/3W	Car.	501 468 00
R28	27 kohms	5%	1/3W	Car.	501 427 00
R29	330 ohms	5%	1/3W	Car.	501 233 00
R30	6.8 kohms	5%	1/3W	Car.	501 368 00
R31	4.7 kohms	5%	1/3W	Car.	501 347 00
R32	1.2 kohms	5%	1/3W	Car.	501 312 00
R33	1 kohm	5%	1/3W	Car.	501 310 00
R34	3.3 kohms	5%	1/3W	Car.	501 333 00
R35	100 ohms	5%	1/3W	Car.	501 210 00
R36	1.2 kohms	5%	1/2W	Car.	502 312 00
ST 1			Transformer		105 107 02
205TR1- 2	BF240				840 024 00
TR3	BC547B				840 054 70
TR4	BF240				840 024 00
TR5	BC547B				840 054 70

PARTS LIST

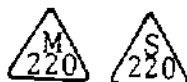
FOR



220C 1	0.47uF	10%	100V	Polyes.	623 547 00
C 2	0.1 uF	10%	250V	Polyes.	624 510 00
C 3	0.1 uF	10%	100V	Polyes.	623 510 00
C 4	47 nF	-20+80%	16V	Cer.	601 447 00
C 5	22 uF		16V	Tan.	651 722 00
C 6-7	10 nF	-20+80%	32V	Cer.	602 410 00
C 8	0.1 uF	-20+80%	16V	Cer.	601 510 00
C 9	0.1 uF	10%	250V	Polyes.	624 510 00
C10	10 nF	10%	250V	Polyes.	624 410 00
C11	0.47 uF	10%	100V	Polyes.	623 547 00
C12	10 nF	10%	250V	Polyes	624 410 00
C13	10 nF	-20+80%	32V	Cer.	602 410 00
C14	470 uF		16V	W.alum.	651 847 00
C15	47 nF	-20+80%	16V	Cer.	601 447 00
C16	22 uF		16V	Tan.	651 722 00
C17	100 uF		25V	W.alum.	652 810 00
C18	110 pF	1%	500V	Polyst.	615 211 00
C19	22 uF		16V	Tan.	651 722 00
C20	220 pF	1%	500V	Polyst.	615 222 00
C21	10 nF	-20+80%	32V	Cer.	602 410 00
C22	0.1 uF	10%	100V	Polyes.	623 510 00
C23	47 pF	5%	400V	Cer.	605 147 00
C24	10 nF	10%	250V	Polyes.	624 410 00
C25	110 pF	1%	500V	Polyst.	615 211 00
C26	1.2 nF	1%	500V	Polyst.	615 312 00
C27	100 uF		25V	W.alum.	652 810 00
C28	4.7 nF	-20+80%	32V	Cer.	602 347 00
C29	47 nF	-20+80%	16V	Cer	601 447 00
C30	0.1 uF	10%	100V	Polyes.	623 510 00
C31	47 nF	-20+80%	16V	Cer.	601 447 00
C32	0.1 uF	-20+80%	16V	Cer.	601 510 00
C33	5.6 nF	1%	63V	Polyst.	612 356 00
C34	0.22 uF	10%	250V	Polyes.	624 522 00
C35	22 uF		16V	Tan.	651 722 00
C36	1.2 nF	1%	500V	Polyst.	615 312 00
C37	2.2 nF	1%	250V	Polyst.	614 322 00
C38	330 pF	1%	500V	Polyst.	615 233 00
C39	0.1 uF	-20+80%	16V	Cer.	601 510 00
C40	47 nF	-20+80%	16V	Cer.	601 447 00
C41	10 nF	10%	250V	Polyes.	624 410 00
C42	0.1 uF	10%	100V	Polyes.	623 510 00

PARTS LIST

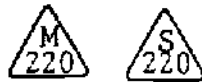
FOR



220C43	100 μ F		25V	W.alum.	652 810 00
C44	0.1 μ F	10%	250V	Polyes.	624 510 00
C45	470 μ F		16V	W.alum.	651 847 00
C46	47 nF	-20+80%	16V	Cer.	601 447 00
C47-49	0.1 μ F	-20+80%	16V	Cer.	601 510 00
C50	0.1 μ F	10%	250V	Polyes.	624 510 00
C51	47 pF	5%	400V	Cer.	605 147 00
C52	0.22 μ F	10%	250V	Polyes.	624 522 01
C53	3.3 pF	+0.25pF	400V	Cer.	605 033 00
C54	2.7 pF	\pm 0.25pF	400V	Cer.	605 027 00
C55	47 pF	5%	400V	Cer.	605 147 00
C56	0.1 μ F	10%	250V	Polyes.	624 510 00
C57	3.3 nF	1%	125V	Polyst.	613 333 00
C58-59	0.22 μ F	10%	250V	Polyes.	624 522 01
C60-61	0.22 μ F	10%	100V	Polyes.	623 522 00
C62-63	0.1 μ F	10%	100V	Polyes.	623 510 00
220D 1	BB109				833 010 90
D 2-6	IS920				830 192 00
220IC1	1496				
IC2	TBA810S				850 149 60
IC3	7493				850 081 00
					850 749 31
220L 1-5	100 μ H		RF-Choke		740 210 00
L 6-7			Coil		105 215 91
L 8-15	100 μ H		RF-Choke		740 210 00
220PL1	32 Way				701 000 20
220R 1	820 ohms	5%	1/3W	Car.	501 282 00
R 2	4.7 kohms	5%	1/3W	Car.	501 347 00
R 4	47 kohms			Var.	582 447 01
R 5	180 kohms	5%	1/3W	Car.	501 518 00
R 6	1 kohms	5%	1/3W	Car.	501 310 00
R 7	100 kohms	5%	1/3W	Car.	501 510 00
R 8	33 kohms	5%	1/3W	Car.	501 433 00
R 9	1.8 kohms	5%	1/3W	Car.	501 318 00
R10	100 kohms	5%	1/3W	Car.	501 510 00
R11	4.7 kohms	5%	1/3W	Car.	501 347 00
R12	3.9 kohms	5%	1/3W	Car.	501 339 00
R13	15 kohms	5%	1/3W	Car.	501 415 00
R14	1.8 kohms	5%	1/3W	Car.	501 318 00
R15	150 ohms	5%	1/3W	Car.	501 215 00
R16	4.7 kohms	5%	1/3W	Car.	501 347 00

PARTS LIST

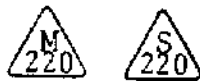
FOR



220R17	1.2 kohms	5%	1/3W	Car.	501 312 00
R18	22 kohms	5%	1/3W	Car.	501 422 00
R19	1 kohms	5%	1/3W	Car.	501 310 00
R20	220 ohms	5%	1/3W	Car.	501 222 00
R21	3.3 kohms	5%	1/3W	Car.	501 333 00
R22	470 ohms	5%	1/3W	Car.	501 247 00
R23	270 ohms	5%	1/3W	Car.	501 227 00
R24-25	680 ohms	5%	1/3W	Car.	501 268 00
R26	12 kohms	5%	1/3W	Car.	501 412 00
R27	18 kohms	5%	1/3W	Car.	501 418 00
R28	10 kohms	5%	1/3W	Car.	501 410 00
R29	27 kohms	5%	1/3W	Car.	501 427 00
R30	8.2 kohms	5%	1/3W	Car.	501 382 00
R31	1 kohms	5%	1/3W	Car.	501 310 00
R32	2.7 kohms	5%	1/3W	Car.	501 327 00
R33	2.2 kohms	5%	1/3W	Car.	501 322 00
R34	680 ohms	5%	1/3W	Car.	501 268 00
R35	56 ohms	5%	1/3W	Car.	501 156 00
R36	680 ohms	5%	1/3W	Car.	501 268 00
R37	10 kohms	5%	1/3W	Car.	501 410 00
R38	33 ohms	5%	1/2W	Car.	502 133 00
R39	8.2 kohms	5%	1/3W	Car.	501 382 00
R40	15 kohms	5%	1/3W	Car.	501 415 00
R41	820 ohms	5%	1/3W	Car.	501 282 00
R42	270 ohms	5%	1/3W	Car.	501 227 00
R43	100 kohms	5%	1/3W	Car.	501 510 00
R44-45	10 kohms	5%	1/3W	Car.	501 410 00
R46	12 kohms	5%	1/3W	Car.	501 412 00
R47	470 ohms	5%	1/3W	Car.	501 247 00
R48	820 ohms	5%	1/3W	Car.	501 282 00
R49	220 ohms	5%	1/3W	Car.	501 222 00
R50	10 kohms	5%	1/3W	Car.	501 410 00
R51	22 ohms	5%	1/3W	Car.	501 122 00
R52	47 ohms	5%	1/3W	Car.	501 147 00
R53	5.6 kohms	5%	1/3W	Car.	501 356 00
R54	39 kohms	5%	1/3W	Car.	501 439 00
R55	330 ohms	5%	1/3W	Car.	501 233 00
R56	120 ohms	5%	1/3W	Car.	501 212 00
R57-58	470 ohms	5%	1/3W	Car.	501 247 00
R59	390 ohms	5%	1/3W	Car.	501 239 00

PARTS LIST

FOR



220R60	220 ohms	5%	1/3W	Car.	501 222 00
R61	100 ohms	5%	1/3W	Car.	501 210 00
R62	2.7 kohms	5%	1/3W	Car.	501 327 00
R63	10 kohms	5%	1/3W	Car.	501 410 00
R64	680 ohms	5%	1/3W	Car.	501 268 00
R65	2.7 kohms	5%	1/3W	Car.	501 327 00
R66	680 ohms	5%	1/3W	Car.	501 268 00
R67	1 ohms	5%	2W	WW	523 010 00
R68	820 ohms	5%	1/3W	Car.	501 282 00
R69-70	3.3 kohms	5%	1/3W	Car.	501 333 00
R71	6.8 kohms	5%	1/3W	Car.	501 368 00
R72	1 kohms	5%	1/3W	Car.	501 310 00
R73-74	560 ohms	5%	1/3W	Car.	501 256 00
R75	4.7 kohms	5%	1/3W	Car.	501 347 00
R76	6.8 kohms	5%	1/3W	Car.	501 368 00
R77	56 ohms	5%	1/3W	Car.	501 156 00
R78	27 ohms	5%	1/3W	Car.	501 127 00
220T 1			Transformer		105 216 01
T 2			Transformer		105 218 31
T 3			Transformer		105 215 51
T 4			Transformer		105 215 61
T 5			Transformer		105 215 71
220TR 1	BC547B				840 054 70
TR 2	BF240				840 024 00
TR 3	BC557B				840 055 70
TR 4	BC547B				840 054 70
TR 5-6	BF240				840 024 00
TR 7	BSX20				840 002 00
TR 8	BC547B				840 054 70
TR 9-10	BSX20				840 002 00
220X 1	12.5965MHz				385 201 52
X 2	12.5950MHz				385 201 62
X 3	TCXO 11,2 MHz	Spec.B281			811 000 03

PARTS LIST

FOR



207C 1- 3	0.1 uF	10%	250V	Polyes.	624 510 00
C 4	4.7 nF		32V	Cer.	602 347 00
C 5	47 nF	-20/+80%	12V	Cer.	601 447 00
C 6- 9	47 nF	-20/+80%	16V	Cer.	601 447 00
C10	4.7 nF		32V	Cer.	602 347 00
C11-12	47 nF	-20/+80%	16V	Cer.	601 447 00
C13	47 nF	-20/+80%	12V	Cer.	601 447 00
C14-15	270 pF	1%	500V	Polyst.	615 227 00
C16-17	220 pF	1%	500V	Polyst.	615 222 00
C18-19	0.1 uF	10%	250V	Polyes.	624 510 00
C20	47 nF	-20/+80%	16V	Cer.	601 447 00
C21	820 pF	1%	500V	Polyst.	615 282 00
207IC1	74S74				850 747 41
IC2	74LS74				850 747 40
IC3	74H30				850 743 02
IC4	74LS20				850 742 01
IC5	93S10				850 931 00
IC6	74S32				850 743 21
IC7	74LS160				857 416 00
IC8	74LS93				850 749 32
IC9	74LS00				850 740 02
IC10	74LS02				850 740 21
IC11	93S10				850 931 00
IC12	74LS90				850 749 01
IC13	74LS160				857 416 00
IC14	93S10				850 931 00
IC15	74LS160				850 931 00
IC16	74LS 90				850 749 01
IC17	74163				857 416 30
IC18	74LS30				850 743 01
IC19-20	74LS00				850 740 02
IC21-22	7426				850 742 60
IC23	74LS02				
207L 1- 2	100 uH	10%	RF-Choke		740 210 00
207PL 1	64 Way				751 000 22
207R 1	68 ohms	5%	1/3W	Car.	501 168 00
R 2	3.3 kohms	5%	1/3W	Car.	501 333 00
R 3	1.5 kohms	5%	1/3W	Car.	501 315 00
R 4	10 kohms	5%	1/3W	Car.	501 410 00
R 5	4.7 kohms	5%	1/3W	Car.	501 347 00

PARTS LIST

FOR



207R 6	330 ohms	5%	1/3W	Car.	501 233 00
R 7	1 kohm	5%	1/3W	Car.	501 310 00
R 8	220 ohms	5%	1/3W	Car.	501 222 00
R 9	82 ohms	5%	1/3W	Car.	501 182 00
R10	220 ohms	5%	1/3W	Car.	501 222 00
R11	82 ohms	5%	1/3W	Car.	501 182 00
R12	180 ohms	5%	1/3W	Car.	501 218 00
R13	47 ohms	5%	1/3W	Car.	501 147 00
R14	390 ohms	5%	1/3W	Car.	501 239 00
R15	3.3 kohms	5%	1/3W	Car.	501 333 00
R16	820 ohms	5%	1/3W	Car.	501 282 00
R17	100 ohms	5%	1/3W	Car.	501 210 00
R18	1 kohm	5%	1/3W	Car.	501 310 00
R19	330 ohms	5%	1/3W	Car.	501 233 00
R20	3.3 kohms	5%	1/3W	Car.	501 333 00
R21	390 ohms	5%	1/3W	Car.	501 239 00
R22-24	1 kohm	5%	1/3W	Car.	501 310 00
R25-26	1.5 kohms	5%	1/3W	Car.	501 315 00
R27	1 kohm	5%	1/3W	Car.	501 310 00
R28	4.7 kohms	5%	1/3W	Car.	501 347 00
R29	1 kohm	5%	1/3W	Car.	501 310 00
R30	10 kohms	5%	1/3W	Car.	501 410 00
R31-32	4.7 kohms	5%	1/3W	Car.	501 347 00
R33-37	1 kohm	5%	1/3W	Car.	501 310 00
R38	1.8 kohm	5%	1/3W	Car.	501 318 00
R39	1 kohm	5%	1/3W	Car.	501 310 00
R40	1.8 kohm	5%	1/3W	Car.	501 318 00
207TR1	BSX20				840 002 00
TR2- 3	BC547B				840 054 70
TR4	BSX20				840 002 00
TR5- 6	BC547B				840 054 70

PARTS LIST

FOR



208C 1	4.7 nF	-20/+80%	32V	Cer.	602 347 00
C 2	0.22 uF	10%	100V	Polyes.	623 522 00
C 3- 5	47 nF	-20/+80%	16V	Cer.	601 447 00
C 6	4.7 nF	-20/+80%	32V	Cer.	602 347 00
C 7	0.1 uF	10%	250V	Polyes.	624 510 00
C 8	47 nF	-20/+80%	16V	Cer.	601 447 00
C 9	0.1 uF	10%	250V	Polyes.	624 510 00
C10-11	47 nF	-20/+80%	16V	Cer.	601 447 00
C12	0.1 uF	10%	250V	Polyes.	624 510 00
C13	180 pF	1%	500V	Polyst.	615 218 00
C14-15	47 nF	-20/+80%	16V	Cer.	601 447 00
C16	0.1 uF	10%	250V	Polyes.	624 510 00
C17	0.47 uF	10%	100V	Polyes.	623 547 00
C18	130 pF	1%	500V	Polyst.	615 213 00
C19	5.6 pF	±0.25 pF	400V	Cer.	605 056 00
C20	220 pF	1%	500V	Polyst.	615 222 00
C21	33 pF	5%	400V	Cer.	605 133 00
C22	180 pF	1%	500V	Polyst.	615 218 00
C23	39 pF	5%	400V	Cer.	605 139 00
C24	180 pF	1%	500V	Polyst.	615 218 00
C25	22 pF	5%	400V	Cer.	605 122 00
C26	120 pF	1%	500V	Polyst.	615 212 00
C27-28	0.1 uF	10%	250V	Polyes.	624 510 00
C29	68 pF	5%	400V	Cer.	605 168 00
C30	220 pF	1%	500V	Polyst.	615 222 00
C31	0.68 uF	10%	100V	Polyes.	623 568 00
C32	68 pF	5%	400V	Cer.	605 168 00
C33	0.1 uF	10%	250V	Polyes.	624 510 00
C34	3.3 nF	1%	125V	Polyes.	613 333 00
C35	1.8 nF	1%	250V	Polyst.	614 318 00
208IC1	7805				850 780 50
IC2	74LS13				850 741 30
IC3	74LS73				850 747 30
IC4	1496				850 149 60
IC5	74LS13				850 741 30
IC6	74490				857 449 00
IC7-10	74LS93				850 749 32
IC11	74LS20				850 742 01
IC12	74LS00				850 740 02

PARTS LIST

FOR



208IC13	74121				857 412 10
IC14	74LS13				850 741 30
IC15	74LS00				850 740 02
IC16	74LS03				850 740 31
IC17	7416				850 741 60
208L 1	100 μ H	10%	RF-Choke		740 210 00
L 2			Coil		105 218 92
L 3			Coil		105 219 11
L 4			Coil		105 219 01
L 5			Coil		105 218 81
L 6	100 μ H	10%	RF-Choke		740 210 00
208PL1	32 Way				751 000 20
208R 1	4.7 kohms	5%	1/3W	Car.	501 347 00
R 2	680 ohms	5%	1/3W	Car.	501 268 00
R 3	1 kohm	5%	1/3W	Car.	501 310 00
R 4	15 kohms	5%	1/3W	Car.	501 415 00
R 5- 6	4.7 kohms	5%	1/3W	Car.	501 347 00
R 7	1.2 kohms	5%	1/3W	Car.	501 312 00
R 8	1.8 kohms	5%	1/3W	Car.	501 318 00
R 9	18 kohms	5%	1/3W	Car.	501 418 00
R10	12 kohms	5%	1/3W	Car.	501 412 00
R11-14	1 kohm	5%	1/3W	Car.	501 310 00
R15	680 ohms	5%	1/3W	Car.	501 268 00
R16	180 ohms	5%	1/3W	Car.	501 218 00
R17	560 ohms	5%	1/3W	Car.	501 256 00
R18	270 ohms	5%	1/3W	Car.	501 227 00
R19-20	470 ohms	5%	1/3W	Car.	501 247 00
R21-24	1 kohm	5%	1/3W	Car.	501 310 00
R25	15 kohms	5%	1/3W	Car.	501 415 00
R26	12 kohms	5%	1/3W	Car.	501 412 00
R27	470 ohms	5%	1/3W	Car.	501 247 00
R28	560 ohms	5%	1/3W	Car.	501 256 00
R29	10 kohms	5%	1/3W	Car.	501 410 00
R30	27 kohms	5%	1/3W	Car.	501 427 00
R31	100 kohms	5%	1/3W	Car.	501 510 00
R32	1 kohm	5%	1/3W	Car.	501 310 00
R33	390 ohms	5%	1/3W	Car.	501 239 00
R34	1.2 kohms	5%	1/3W	Car.	501 312 00

PARTS LIST

FOR



208R35	10 kohms	5%	1/3W	Car.	501 410 00
R36	47 kohms	5%	1/3W	Car.	501 447 00
R37	560 ohms	5%	1/3W	Car.	501 256 00
R38	150 ohms	5%	1/3W	Car.	501 215 00
R39	15 kohms	5%	1/3W	Car.	501 415 00
R40	4.7 kohms	5%	1/3W	Car.	501 347 00
R41-44	1 kohm	5%	1/3W	Car.	501 310 00
R45	4.7 kohms	5%	1/3W	Car.	501 347 00
R46-47	1 kohm	5%	1/3W	Car.	501 310 00
R48	1.8 kohms	5%	1/3W	Car.	501 318 00
R49	1 kohm	5%	1/3W	Car.	501 310 00
R50	5.6 kohm	5%	1/3W	Car.	501 356 00
208T 1			Transformer		105 219 21
208TR1	BSX20				840 002 00
TR2- 5	BC547B				840 054 70

PARTS LIST

FOR



209C 1	0.1 uF	10%	250V	Polyes.	624 510 00
C 2	68 nF	10%	100V	Polyes.	623 468 00
C 3	0.1 uF	10%	250V	Polyes.	624 510 00
C 4	22 nF	10%	250V	Polyes.	624 422 00
C 5	0.1 uF	10%	250V	Polyes.	624 510 00
C 6	22 nF	10%	250V	Polyes.	624 422 00
C 7	2.2 nF	1%	250V	Polyst.	614 322 00
C 8	3.3 nF	1%	125V	Polyst.	613 333 00
C 9	33 pF	5%	400V	Cer.	605 133 00
C10	47 nF	10%	250V	Polyes.	624 447 00
C11	33 pF	5%	400V	Cer.	605 133 00
C12	470 uF		16V	W.alum.	651 847 00
C13	1000 uF		16V	W.alum.	651 910 00
C14-16	100 uF		16V	W.alum.	651 810 00
C17-19	0.1 uF	10%	250V	Polyes.	624 510 00
C20-21	33 pF	5%	400V	Cer.	605 133 00
C22	0.22 uF	10%	250V	Polyes.	624 522 01
C23	0.47 uF	10%	100V	Polyes.	623 547 00
C24	22 nF	10%	250V	Polyes.	624 422 00
C25	10 nF	10%	250V	Polyes.	624 410 00
C26	47 nF	10%	250V	Polyes.	624 447 00
C27-29	10 nF	10%	250V	Polyes.	624 410 00
C30	47 nF	10%	250V	Polyes.	624 447 00
C31	100 pF	1%	500V	Polyst.	615 210 00
C32	12 pF	5%	400V	Cer.	605 112 00
C33	0.1 uF	10%	250V	Polyes.	624 510 00
C34	10 nF	10%	250V	Polyes.	624 410 00
C35	4.7 nF	-20/+80%	32V	Cer.	602 347 00
C36	470 pF	1%	500V	Polyst.	615 247 00
C37-38	0.1 uF	10%	250V	Polyes.	624 510 00
C39	470 uF		16V	W.alum.	651 847 00
C40-41	4.7 nF	-20/+80%	32V	Cer.	602 347 00
C42	0.1 uF	10%	250V	Polyes.	624 510 00
C43	1 uF	10%	100V	Polyes.	623 610 00
C44	47 nF	10%	250V	Polyes.	624 447 00
C45	47 nF	-20/+80%	16V	Cer.	601 447 00
C46	47 nF	10%	250V	Polyes.	624 447 00
C47	4.7 nF	-20/+80%	32V	Cer.	602 347 00
C48	47 nF	-20/+80%	16V	Cer.	601 447 00
C49-50	0.1 uF	10%	250V	Polyes.	624 510 00
C51	1 uF	10%	100V	Polyes.	623 610 00
C52	47 nF	-20/+80%	16V	Car.	601 447 00
C53	47 nF	-20/+80%	16V	Car.	601 447 00

PARTS LIST

FOR



209R40	1 kohm	5%	1/3W	Car.	501 310 00
R41	180 ohms	5%	1/3W	Car.	501 218 00
R42	22 kohms	5%	1/3W	Car.	501 422 00
R43	15 kohms	5%	1/3W	Car.	501 415 00
R44	3.3 kohms	5%	1/3W	Car.	501 333 00
R45	2.7 kohms	5%	1/3W	Car.	501 327 00
R46	4.7 kohms	5%	1/3W	Car.	501 347 00
R47	100 ohms	5%	1/3W	Car.	501 210 00
R48	1 kohm	5%	1/3W	Car.	501 310 00
R49	180 ohms	5%	1/3W	Car.	501 218 00
R50	39 ohms	5%	1/3W	Car.	501 139 00
R51	100 ohms	5%	1/3W	Car.	501 210 00
R52	120 ohms	5%	1/3W	Car.	501 212 00
R53	100 ohms	5%	1/3W	Car.	501 210 00
R54	100 kohms	5%	1/3W	Car.	501 510 00
R55	120 ohms	5%	1/3W	Car.	501 212 00
R56	4.7 kohms	5%	1/3W	Car.	501 347 00
R57	3.3 kohms	5%	1/3W	Car.	501 333 00
R58	10 kohms	5%	1/3W	Car.	501 410 00
R59	82 ohms	5%	1/3W	Car.	501 182 00
R60	56 ohms	5%	1/3W	Car.	501 156 00
R61	220 ohms	5%	1/3W	Car.	501 222 00
R62	10 kohms	5%	1/3W	Car.	501 410 00
R63	100 kohms	5%	1/3W	Car.	501 510 00
R64	120 ohms	5%	1/3W	Car.	501 212 00
R65	22 ohms	5%	1/3W	Car.	501 122 00
R66	22 kohms	5%	1/3W	Car.	501 422 00
209T 1			Transformer		105 218 51
T 2			Transformer		105 218 41
209TR1- 4	BF240				840 024 00
TR5	BSX20				840 002 00
TR6	BC547B				840 054 70
TR7	BSX20				840 002 00
TR8	BC547B				840 054 70

PARTS LIST

FOR



210C 1	330 pF	1%	500V	Polyst.	615 233 00
C 2	110 pF	1%	500V	Polyst.	615 211 00
C 3	22 pF	5%	400V	Cer.	605 122 00
C 4-6	0.1 uF	10%	100V	Polyes.	623 510 00
C 7	100 uF		25V	W. alum.	652 810 00
C 8	1000 uF		16V	W. alum.	651 910 00
C 9	33 pF	5%	400V	Cer.	605 133 00
C10-11	0.47 uF	10%	100V	Polyes.	623 547 00
C12	3.9 nF	1%	125V	Polyst.	613 339 00
C13-15	10 nF	10%	250V	Polyes.	624 410 00
C16-18	3.3 pF	±0.25 pF	400V	Cer.	605 033 00
C19	47 pF	5%	400V	Cer.	605 147 00
C20-22	0.1 uF	10%	100V	Polyes.	623 510 00
C23	100 uF		25V	W.alum.	651 910 00
C24	(4.5-26)pF	Var.			683 126 00
C25	100 uF		25V	W.alum	651 910 00
C26	(4.5-26)pF	Var.			683 126 00
C27	100 uF		25V	W.alum.	651 910 00
C28	(4.5-26)pF	Var.			683 126 00
C29-31	100 pF	1%	500V	Polyst.	615 210 00
C32-35	0.1 uF	10%	100V	Polyes.	623 510 00
C36-38	3.3 pF	±0.25 pF	400V	Cer.	605 033 00
C39	10 nF	10%	250V	Polyes.	624 410 00
C40	1 uF	10%	100V	Polyes.	623 610 00
C41	10 nF	10%	250V	Polyes.	624 410 00
C42	82 pF	5%	400V	Cer.	605 182 00
C43	0.1 uF	10%	100V	Polyes.	623 510 00
C44-45	10 nF	10%	250V	Polyes.	624 410 00
C46	0.1 uF	10%	100V	Polyes.	623 510 00
C47	10 nF	10%	250V	Polyes.	624 410 00
C48	51 pF	5%	400V	Cer.	605 151 00
C49	10 nF	10%	250V	Polyes.	624 410 00
C50	22 nF	10%	250V	Polyes.	624 422 00
C51	47 nF	-20/+80%	16V	Cer.	601 447 00
210D 1-4	BB109G				833 010 90
D 5	1S920				830 192 00
D 6-7	BB109G				833 010 90
D 8	1S920				830 192 00

PARTS LIST

FOR



210D 9-10	BB109G				833 010 90
D11	1S920				830 192 00
D12-21	BB109G				833 010 90
D22-24	BA182				830 018 20
210IC1- 2	301A				850 030 10
IC3	74S132				857 413 20
210L 1- 2	220 uH	10%	RF-choke		740 222 00
L 3	22 uH	10%	RF-choke		740 122 00
L 4	10 uH	10%	RF-choke		740 110 00
L 5	2.2 uH	10%	RF-choke		740 022 00
L 6			Coil		105 219 42
L 7-8			Coil		105 219 51
L 9-11	100 uH	10%	RF-choke		740 210 00
L 12-13	10 uH	10%	RF-choke		740 110 00
210PL1					751 000 20
210R 1- 2	33 kohms	5%	1/3W	Car.	501 433 00
R 3	4.7 kohms	5%	1/3W	Car.	501 347 00
R 4	56 kohms	5%	1/3W	Car.	501 456 00
R 5	1 kohm	Var.			582 310 00
R 6	330 ohms	5%	1/3W	Car.	501 233 00
R 7	4.7 kohms	5%	1/3W	Car.	501 347 00
R 8	12 kohms	5%	1/3W	Car.	501 412 00
R 9-10	10 kohms	5%	1/3W	Car.	501 410 00
R11	6.8 kohms	5%	1/3W	Car.	501 368 00
R12-14	100 ohms	5%	1/3W	Car.	501 210 00
R15-16	1 kohm	5%	1/3W	Car.	501 310 00
R17-18	10 kohms	5%	1/3W	Car.	501 410 00
R19-20	2.2 kohms	5%	1/3W	Car.	501 322 00
R21-23	180 kohms	5%	1/3W	Car.	501 518 00
R24-26	820 kohms	5%	1/3W	Car.	501 582 00
R27	180 ohms	5%	1/3W	Car.	501 218 00
R28	270 ohms	5%	1/3W	Car.	501 227 00
R29-30	180 ohms	5%	1/3W	Car.	501 218 00
R31	470 ohms	5%	1/3W	Car.	501 247 00
R32	180 ohms	5%	1/3W	Car.	501 218 00

PARTS LIST

FOR



210R33	330 ohms	5%	1/3W	Car.	501 233 00
R34	10 kohms	5%	1/3W	Car.	501 410 00
R35	1 kohm	5%	1/3W	Car.	501 310 00
R36	1.2 kohms	5%	1/3W	Car.	501 312 00
R37	1 kohm	5%	1/3W	Car.	501 310 00
R38	12 ohms	5%	1/3W	Car.	501 112 00
R39	150 ohms	5%	1/3W	Car.	501 215 00
R40	56 kohms	5%	1/3W	Car.	501 456 00
R41	120 ohms	5%	1/3W	Car.	501 212 00
R42	120 ohms	5%	1/3W	Car.	501 212 00
R43	220 ohms	5%	1/3W	Car.	501 222 00
R44	1.2 kohms	5%	1/3W	Car.	501 312 00
R45	1.5 kohms	5%	1/3W	Car.	501 315 00
R46	6.8 kohms	5%	1/3W	Car.	501 368 00
R47	2.2 kohms	5%	1/3W	Car.	501 322 00
R48	10 ohms	5%	1/3W	Car.	501 110 00
R49	68 ohms	5%	1/3W	Car.	501 168 00
R50	330 ohms	5%	1/3W	Car.	501 233 00
R51	56 ohms	5%	1/3W	Car.	501 156 00
R52	100 ohms	5%	1/3W	Car.	501 210 00
R53	1.5 kohms	5%	1/3W	Car.	501 315 00
210TR1- 3	BFX 89				840 008 90
TR4	BC547B				840 054 70
TR5- 6	BC577				840 055 70
TR7- 9	E310				840 031 00
TR10	BC547B				840 054 70
TR11	BSX20				840 002 00
TR12	BF240				840 024 00
TR13	BFW17A				840 001 70
TR14	BSX20				840 002 00

PARTS LIST

FOR



211C 1	0.47 uF	10%	100V	Polyes.	623 547 00
C 2	1000 uF		10V	W.alum.	651 910 00
C 3	22 uF		16V	Tan	651 722 00
C 4- 7	47 nF	-20/+80%	16V	Cer.	601 447 00
C 8	0.1 uF	10%	100V	Polyes.	623 510 00
C 9	10 nF	10%	250V	Polyes.	624 410 00
C10	2.2 nF	1%	250V	Polyst.	614 322 00
C11	4.7 nF	-20/+80%	32V	Cer.	602 347 00
C12	100 uF		16V	W. alum.	651 810 00
D 1- 2	1S920				830 192 00
211IC1	SN74148				857 414 81
IC2	uA7805				850 780 50
IC3	SN74LS93				850 749 32
IC4	NE555				850 055 50
IC5	SN74145				857 414 51
IC6- 7	SDA20				879 000 00
IC8	MAN82				824 008 20
IC9	74LS13				850 741 30
IC10	74LS74				850 747 40
IC11-13	MAN82				824 008 20
IC14	2003A				850 200 30
IC15	7448				850 744 80
IC16-17	MAN82				824 008 20
211L1	4.7 uH	10%	RF Choke		740 047 00
LME1		1 mA	300 ohms		873 000 10
211R 1	2.7 kohms	5%	1/3W	Car.	501 327 00
R 2	1.8 kohms	5%	1/3W	Car.	501 318 00
R 3	2.2 ohms	5%	2W	WW	523 022 00
R 4	2.7 kohms	5%	1/3W	Car.	501 327 00
R 5- 6	1 kohm	5%	1/3W	Car.	501 310 00
R 7-10	4.7 kohms	5%	1/3W	Car.	501 347 00
R11	10 kohms	5%	1/3W	Car.	501 410 00
R12-14	4.7 kohms	5%	1/3W	Car.	501 347 00
R15	10 kohms	5%	1/3W	Car.	501 410 00
R16-19	4.7 kohms	5%	1/3W	Car.	501 347 00
R20	10 kohms	5%	1/3W	Car.	501 410 00
R21	1 kohm	5%	1/3W	Car.	501 310 00
R22	47 kohms	Var.		Log.	355 222 13
R23	2.2 kohms	5%	1/3W	Car.	501 322 00
R24-25	82 ohms	5%	1/3W	Car.	501 182 00

PARTS LIST

FOR



212C 1	4.7 nF	-20/+80%	32V	Cer.	602 347 00
C 2	10 nF	-20/+80%	32V	Cer.	602 410 00
C 3	4.7 nF	1%	125V	Polyst.	613 347 00
C 4	22 uF		16V	Tan.	651 722 00
C 5	1.8 nF	1%	250V	Polyst.	614 318 00
C 6-14	47 nF	-20/+80%	16V	Cer.	601 447 00
C15	100 pF	1%	500V	Polyst.	615 210 00
C16-35	1 nF	-20/+80%	25V	Cer.	602 310 00
C36	4.7 nF	-20/+80%	32V	Cer.	602 347 00
C37	470 uF		6.3V	W.alum.	650 847 00
C38	15 nF	1%	63V	Polyst.	612 415 00
C39	390 PF	1%	500V	Polyst.	615 239 00
12D 1- 3	AAZ17				830 001 70
D 4- 5	1S920				830 192 00
121C1	74LS08				850 740 80
IC2	7404				850 740 40
IC3	74LS05				850 740 51
IC4	74LS123				857 412 30
IC5	74LS09				850 740 90
IC6 - 7	74LS00				850 740 02
IC8 - 9	74LS32				850 743 20
IC10-15	74LS168				857 416 80
IC16	74LS32				850 743 20
IC17	74LS08				850 740 80
IC18	74LS32				850 743 20
IC19-20	74LS08				850 740 80
IC21	74LS32				850 743 20
IC22	74LS08				850 740 80
IC23	74LS32				850 743 20
IC24	74LS08				850 740 80
IC25-28	74LS151				857 415 10
IC29	74LS74				850 747 40
IC30	7409A				850 740 91
IC31	74LS05				850 740 51
12PL1	64 Way				751 000 22

PARTS LIST

FOR



212R 1	100 ohms	5%	1/3W	Car.	501 210 00
R 2	470 ohms	5%	1/3W	Car.	501 247 00
R 3- 7	1 kohm	5%	1/3W	Car.	501 310 00
R 8	1.8 kohms	5%	1/3W	Car.	501 318 00
R 9	4.7 kohms	5%	1/3W	Car.	501 347 00
R10	10 kohms	5%	1/3W	Car.	501 410 00
R11	27 kohms	5%	1/3W	Car.	501 427 00
R12-13	10 kohms	5%	1/3W	Car.	501 410 00
R14	2.7 kohms	5%	1/3W	Car.	501 327 00
R15	3.3 kohms	5%	1/3W	Car.	501 333 00
R16	1.5 kohms	5%	1/3W	Car.	501 315 00
R17	18 kohms	5%	1/3W	Car.	501 418 00
R18	10 kohms	5%	1/3W	Car.	501 410 00

PARTS LIST

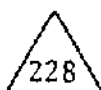
FOR



214C 1- 2	47 nF	-20/+80%	16V	Cer.	601 447 00
214IC1	74S196				857 419 60
214L 1	220 uH	10%	RF Choke		740 222 00
214R 1	1 kohm	5%	1/3W	Car.	501 310 00
R 2	1.5 kohms	5%	1/3W	Car.	501 315 00

PARTS LIST

FOR



228C 1- 3	47 nF	-20/+80%	16V	Cer.	601 447 00
228D 1	1S920				830 192 00
228L 1	100 uH	10%	RF Choke		740 210 00
228R 1	100 kohms	5%	1/3W	Car.	501 510 00
R 2	220 ohms	5%	1/2W	Car.	502 222 00
R 3	5.6 kohms	5%	1/3W	Car.	501 356 00
R 4	2.7 kohms	5%	1/3W	Car.	501 327 00
R 5	1.2 kohms	5%	1/3W	Car.	501 312 00
R 6	820 ohms	5%	1/3W	Car.	501 282 00
R 7	1 kohm	5%	1/3W	Car.	501 310 00
R 8	10 kohms	5%	1/3W	Car.	501 410 00
R 9	1 kohm	5%	1/3W	Car.	501 310 00
228TR 1- 4	BC547B				840 054 70

PARTS LIST

FOR



293	C1-3	47 nF	-20/+80%	16V	Cer	601 447 00
	C4-5	270 pF	1%	500V	Polyst.	615 227 00
	C6-7	0.1 uF	10%	100V	Polyes	623 510 00
	C8	2.2 uF	10%	16V	Tan.	652 622 00
293	IC1	74LS90				850 749 01
	IC2	74LS163				857 416 31
	IC3	74LS00				850 740 02
293	L1-3	100uH	10%	RF-Choke		740 210 00
293	R1	1 kohm	5%	1/3W	Car.	501 310 00
	R2	10 kohms	5%	1/3W	Car.	501 410 00
	R3	1.5 kohms	5%	1/3W	Car.	501 315 00
	R4	12 kohms	5%	1/3W	Car.	501 412 00
	R5	680 ohms	5%	1/3W	Car.	501 268 00
	R6	1 kohm	5%	1/3W	Car.	501 310 00
	R7	150 ohms	5%	1/3W	Car.	501 215 00
	R8	1 kohm	5%	1/3W	Car.	501 310 00
	R9	5.6 kohms	5%	1/3W	Car.	501 356 00
	R10	390 ohms	5%	1/3W	Car.	501 239 00
	R11	1 kohm	5%	1/3W	Car.	501 310 00
	R12-13	3.9 kohms	5%	1/3W	Car.	501 339 00
	R 14-15	1 kohm	5%	1/3W	Car.	501 310 00
	R16	12 kohms	5%	1/3W	Car.	501 412 00
	R17-19	1 kohm	5%	1/3W	Car.	501 310 00
293	TR1	BF240				840 024 00
	TR2-4	BSX20				840 002 00

PARTS LIST

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287C1-2	47 nF	10%	630V	Polyes.	626 447 00
C3-4	0.1 uF	10%	250V	Polyes.	624 510 00
C5	0.47 uF	10%	630V	Polyes.	626 547 00
C6	1 uF	10%	100V	Polyes.	623 610 01
C7-14	0.1 uF	10%	250V	Polyes.	624 510 00
C15	0.47 uF	10%	630V	Polyes.	626 547 00
C16	1 uF	10%	100V	Polyes.	623 610 00
C17	4700 uF		25V	W.alum.	652 947 01
C18	2200 uF		40V	W.alum.	652 922 00
C19	470 uF		40V	W.alum.	652 847 00
C20-21	1 uF	10%	100V	Polyes.	623 610 00
C22-24	47 nF	10%	250V	Polyes.	624 447 00
C25	1 uF	10%	100V	Polyes.	623 610 00
C26	100 uF		25V	W.alum.	652 810 00
C27	100 uF		25V	W.alum.	652 810 00
287D1-8	1N5401				831 540 10
D9-15	1S920				830 192 00
D16	BZX79 B6V8	Zener			832 796 81
D17-18	BZX79 B7V5	Zener			832 797 50
287L1-4	25uH	RF Choke			740 125 00
287R1	220 kohms	5%	1W	Car.	504 522 00
R2	1.5 kohms	5%	1W	Car.	504 315 00
R3	220 ohms	5%	5W	WW	527 222 00
R4	10 kohms	5%	1/3W	Car.	501 410 00
R5	12 ohms	5%	3/4W	Car.	503 112 00
R6	12 kohms	5%	1/3W	Car.	501 412 00
R7	100 ohms	5%	1/2W	Car.	502 210 00
R8	4.7 kohms	5%	1/3W	Car.	501 347 00
R9-10	1 kohm	5%	1/3W	Car.	501 310 00
R11	220 kohms	5%	1/3W	Car.	501 522 00
R12	27 ohms	5%	1/3W	Car.	501 127 00
R13	1 kohm	5%	1/3W	Car.	501 310 00
R14	4.7 kohms	5%	1/3W	Car.	501 347 00
R15	10 kohms	5%	1/3W	Car.	501 410 00
R16	10 kohms	5%	1/3W	Car.	501 410 00
R17	4.7 kohms	5%	1/3W	Car.	501 347 00
R18	1.2 kohm	5%	1/3W	Car.	501 312 00
R19	100 ohms	5%	1/2W	Car.	502 210 00
R20	10 kohms	5%	1/3W	Car.	501 410 00
R21	220 ohms	5%	5W	WW	527 220 00

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37R22	10 kohms	5%	1/3W	Car.	501 410 00
R23	120 ohms	5%	1/2W	Car.	502 212 00
R24	4.7 kohms	5%	1/3W	Car.	501 347 00
R25	68 ohms	5%	1/3W	Car.	501 168 00
R26	15 ohms	5%	1/2W	Car.	502 115 00
R27	68 ohms	5%	1/2W	Car.	502 168 00
R28	1 ohm	5%	5W	WW	527 010 01
R29	150 ohms	5%	1/2W	Car.	502 215 00
R30	82 ohms	5%	3W	WW	526 182 00
R31	68 ohms	5%	1/3W	Car.	501 168 00
R32	10 kohms	5%	1/3W	Car.	501 410 00
R33	100 ohms	5%	1/3W	Car.	501 210 00
R34	3.3 kohms	5%	1/2W	Car.	502 333 00
87RJ.1	1 change over, 24 V Coil				780 000 21
RL2	1 change over, 24 V Coil				780 000 19
87TR1	BC337-25				846 033 70
TR2-3	BC557B				840 055 70
TR4	2N6027	PUT			844 602 70
TR5	BC337-25				846 033 70
TR6	BC547B				840 054 70
TR7	BC337-25				846 033 70
TR8	BC135-10				842 013 50

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Version S1 and S2

288	C1	1u	10%	250V	Polyes	624 610 00
	C2-3	47nF	10%	250V	Polyes	624 447 00
288	D1	BZY93C33R				832 933 00
	D2	MV5353	Zener			823 000 01
	D3	1S920				830 192 00
288	FS1	2.5A	Fast	6.3 x 32mm		720 325 00
	FS2	0.315A/220V	Slow	6.3 x 32mm		720 231 51
	FS2	0.63A/110V	Slow	6.3 x 32mm		720 263 00
	FS3	1A	Fast	6.3 x 32mm		720 310 00
288	R1	56 ohms		3W		526 156 00
	R2	82 ohms	5%	1/3 W		501 182 00
288	S1		Safety			764 000 02
288	SK1		24Way	Version S-1 only		751 000 53
	SK2		3 Way			751 000 56
288	SK3		2 Way			751 000 44
	SK4		12Way			751 000 29
288	T1		Mains			384 209 11
	T2		Converter			384 209 03
	T3		Line			385 242 11
288	TR1-2	2N6254				842 625 40
	TR3	2N3055				842 305 50
	TR4	BD23410				842 023 40
	TR5	2N3055				842 305 50
288	TS1		4 Way			770 000 16
	TS2		12 Way	Version S-2 only		770 000 04