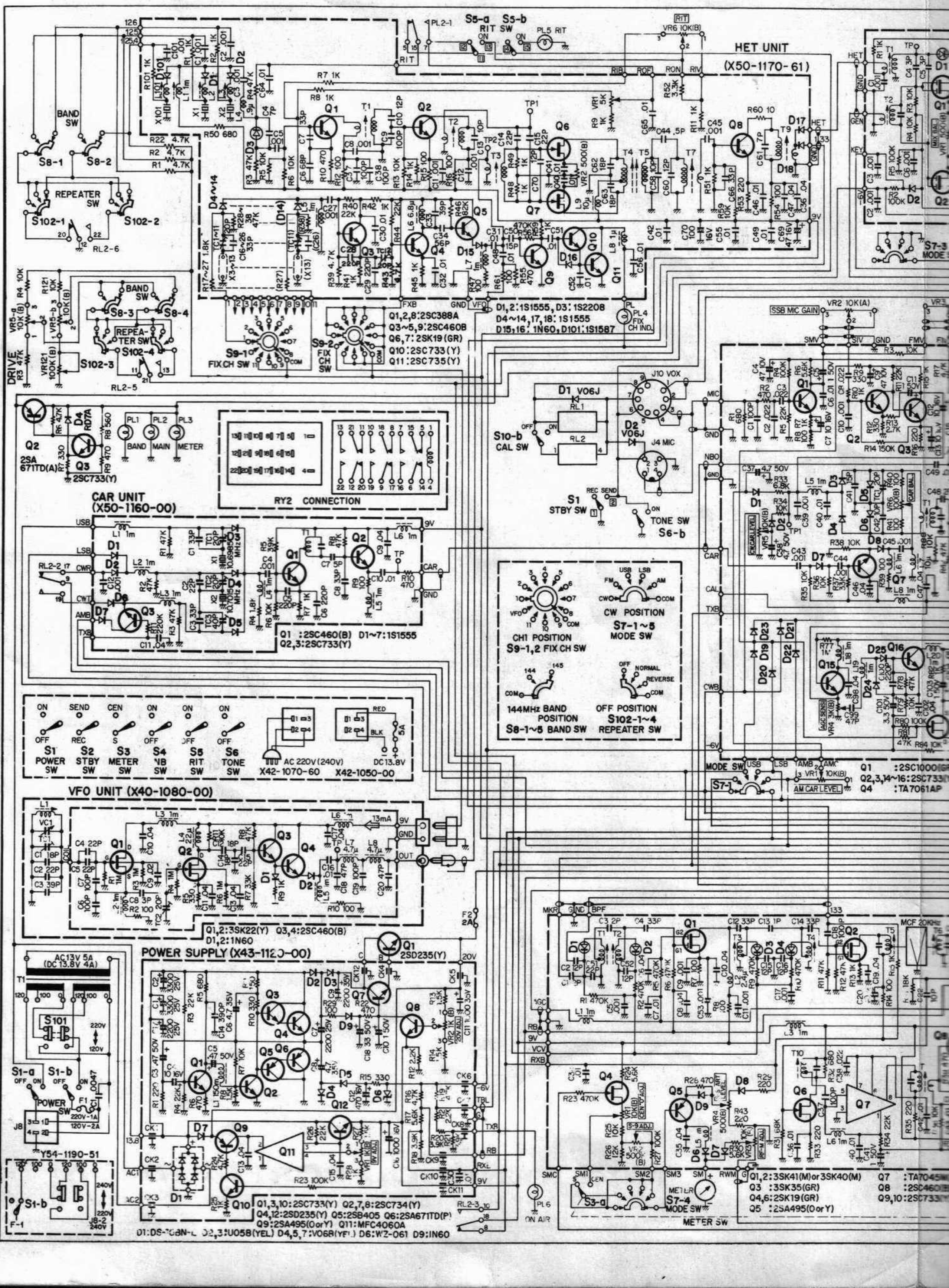
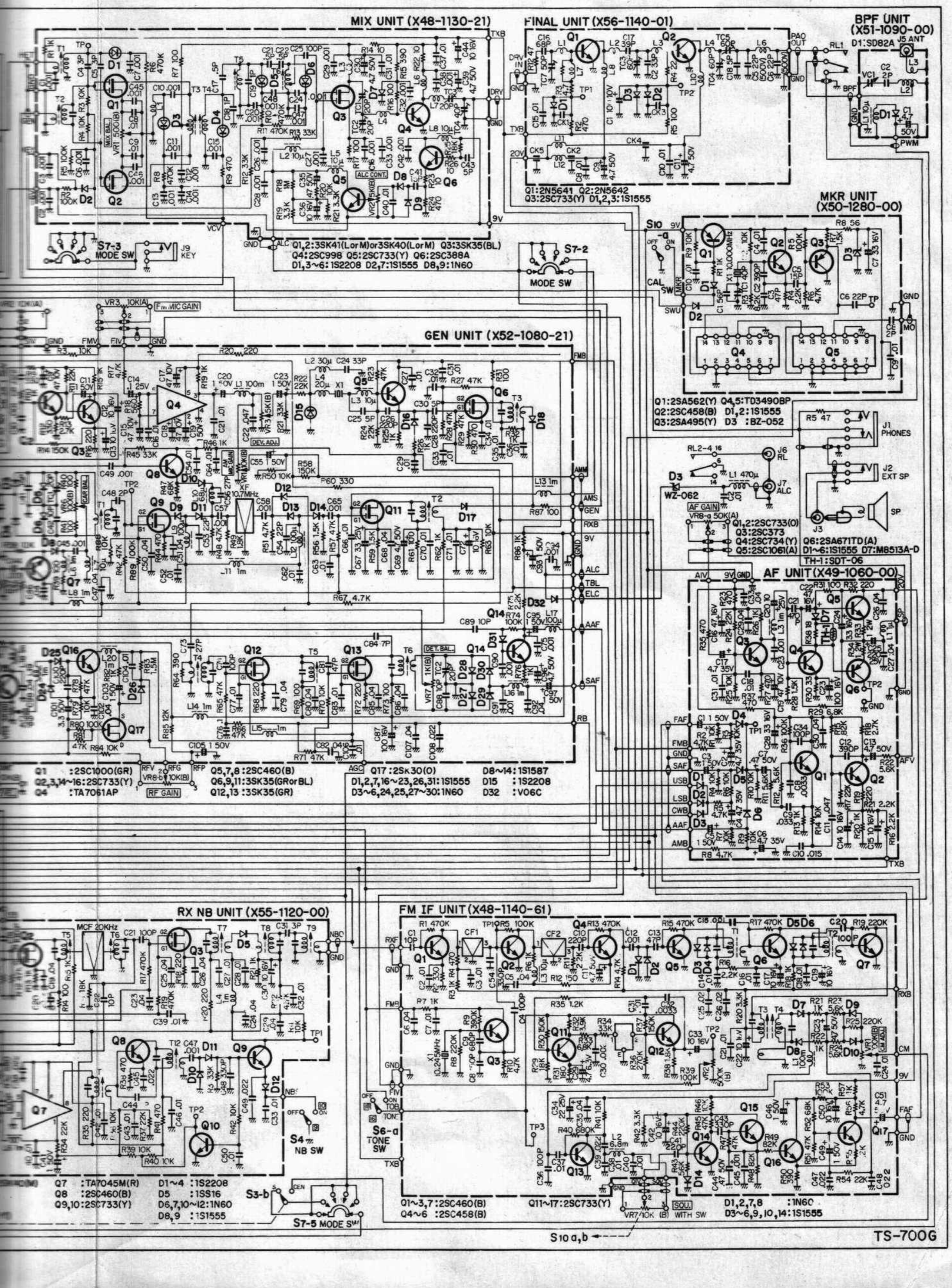

B2LJJ
ON AIR
RIT
TS-700G
REPEATER
NORMAL
OFF
REV.
DRIVE
FINAL
145
144
146
RIT
SQUELCH
AF GAIN
RF GAIN
CAL ON
LSB
USB
KENWOOD
2m ALL MODE TRANSCEIVER
POWER
SEND
CEN
NB
RIT
TONE
OFF
REC
S
OFF
MIC
PHONES
MODE
FM
CW
USB
LSB
AM
BAND
FIX. CH
VFO

TS-700G SCHEMTIC

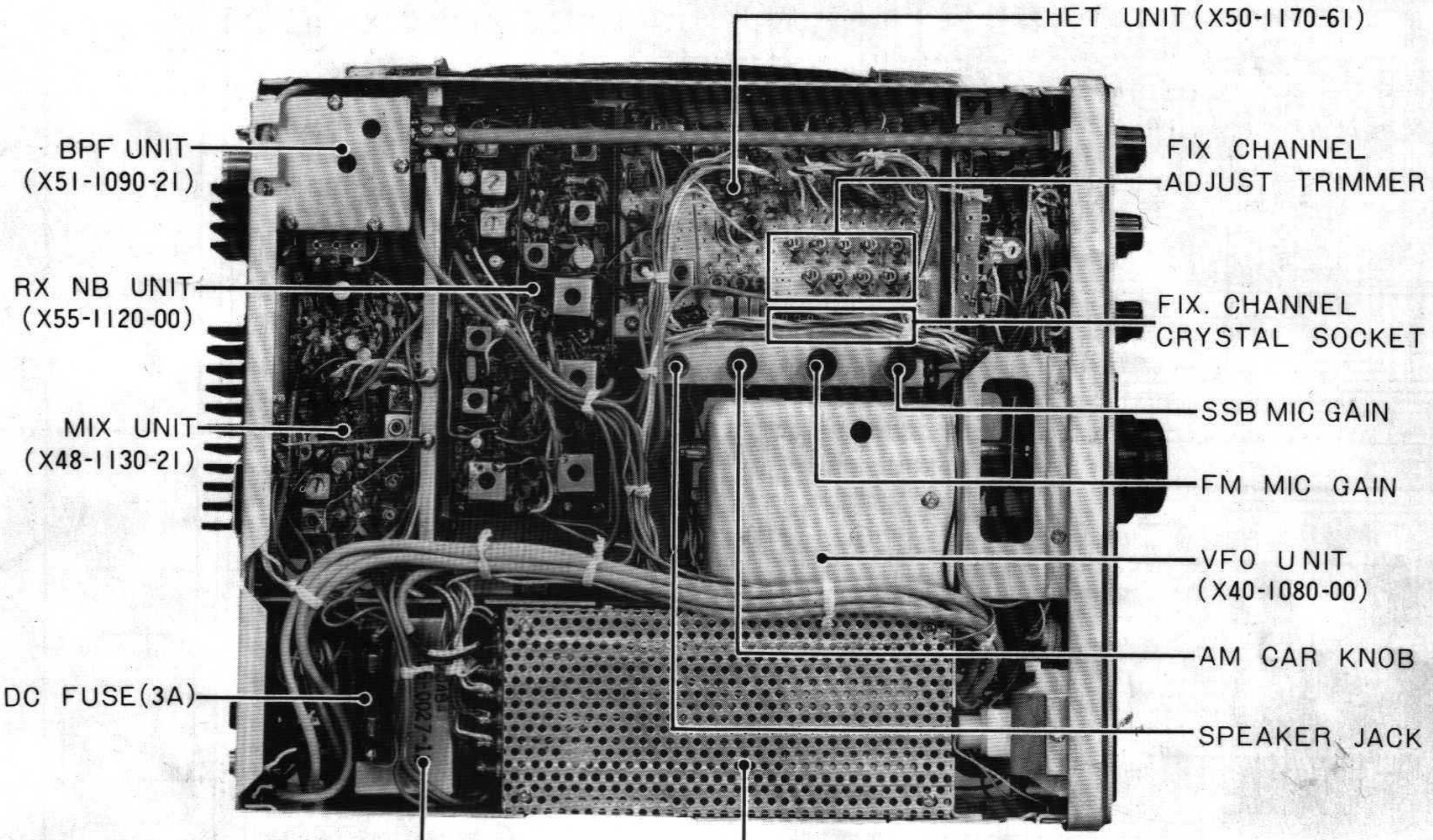


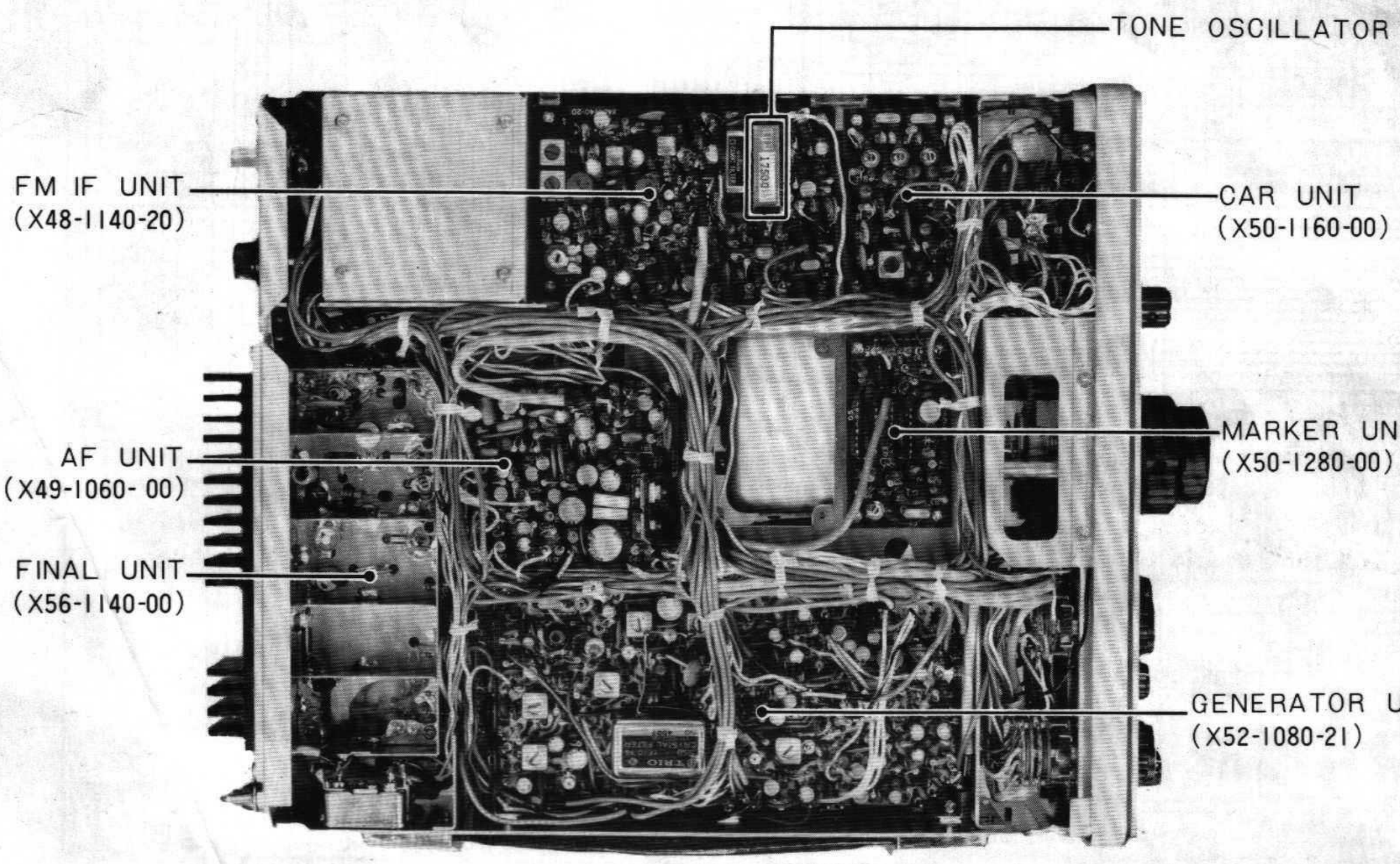
IEMTIC DIAGRAM



GEN UNIT (X52-1080-21)
MIC AMP
Q1 2SC1000
VR6
AF AMP
Q2 2SC733
Q3 2SC733
FM MIC
AF AMP
Q4 TA7061 AP
FM FILTER
DEV NARROW
10.700MHz X1
OSC
Q5 2SC460
BUFF AMP
Q6 3SK35
AM MIC
AM
B.M
D3 D6 IN60
BUFFER
Q9 3SK35
BUFFER
Q7 2SC460
BUFFER
Q8 2SC460
XF 10.7MHz
Q11 3SK35
AMB
AF UNIT (X49-1060-00)
9V
USB
LSB
CWB
AMP
Q2 2SC733
(B.P.)
AMP
Q1 2SC733
(B.P.)
DRIVER
Q4 2SC734
PRE AMP
Q3 2SC373
Q5 2SC1061
POWER AMP
Q6 2SA671
SSB DET
D27 D30 IN60
IF-AMP
Q13 3SK35
IF-AMP
Q12 3SK35
AM DET
Q14 2SQ733
BUFFER
Q15 2SC733
AGC AMP
Q16 2SC733
AGC RECT
SWITCHING
Q17 2SK30
VR4
RF GAIN
6V
AGC
MKR UNIT (X50-1280-00)
10MHz
OSC
Q2 2SC458
BUFFER
Q3 2SA495
DIVIDER 1/10
Q4 TD3490
DIVIDER 1/10
Q5 TD3490
Q1 2SA562 (Y)
SWITCHING
B.P.F UNIT (X51-1090-00)
MIX UNIT (X48-1130-21)
KEY
HET MIX (B.M)
Q1
Q2
VARICAP TUNING
VHF AMP
Q3 3SK35
PRE-DRIVER
Q4 2SC998
ALC BUFF
Q5 2SC733
Q6 2SC388A
ALC AMP
ALC
FINAL UNIT (X56-1140-01)
DRIVER
Q1 2N5641
FINAL AMP
Q2 2N5642
RX NB UNIT (X55-1120-00)
BLANKING GATE
SIG AMP
Q3 3SK35
MCF
20kHz
AGC
HET MIX
Q2 3SK41
RF-TUNE
RF AMP
Q1 3SK41 or 40
AGC AMP
Q9 2SC733
S METER AMP
Q5 2SA495
BUFFER
Q4 2SK19
AGC (NB)
NOISE AMP
SWITCHING
Q10 2SC733
NOISE AMP
Q8 2SC460
NOISE AMP
Q7 TA7045
BUFFER
Q6 2SK19
M
VFO UNIT (X40-1080-00)
BUFFER
Q3 2SC460
BUFFER
Q2 3SK22
L-C OSC
Q1 3SK22
BUFFER
Q4 2SC460
HET UNIT (X50-1170-61)
BUFFER 133MHz
Q8 2SC388A
Q6
2SK19
Q7
PRE MIX (B.M.)
BUFFER
Q2 2SC388A
OSC
Q1 2SC388A
125.1
X1
126.1
X2
125.5
HET OSC
X101
1 ~ 11
RIT OSC
BUFFER
Q5 2SC460
BUFFER
Q4 2SC460
Q3 2SC460
FIXED-CH
LAMP CONT
Q11 2SC735
Q10 2SC733
Q9 2SC460
P.L
SWITCHING
BUFFER
CAR UNIT (X50-1160-00)
X1
X2
OSC
Q1 2SC460
BUFFER
Q2 2SC460
Q3 2SC735
TXB
SWITCHING AMB
POWER-SUPPLY (X43-1120-00)
REG
20V
6V V06B
TBL 3V(Rx) /0.43V (Tx)
TXB 0 " /9V "
RB 0.75V " /3V "
REG 9V 9V " /9V "
RXB 9V " /0 "
13.8 ACI AC2
DC13.8V
AC12V
AC100 · 120 · 220V
FM IF UNIT (X48-1140-61)
FM DET
VR1
AF AMP
Q17 2SC733
Q7 2SC460
Q6 2SC458
Q5 2SC458
Q4 2SC458
455kHz
CF 2
2ND MIX
Q2 2SC460
10.7MHz
CF-1
Q3-6 LIMITTER AMP
BUFFER
Q1 2SC460
Q16 2SC733
Q15 2SC733
Q14 2SC733
Q13 2SC733
SWITCHING
DET
NOISE AMP
SQU
NOISE AMP
X1
OSC
Q3 2SC460
10.245MHz
VR2
Q12 2SC733
Q11 2SC733
Q11 Q12 TONE OSC
TOB
Transmit Signal Line
Receive Signal Line
Others
TS700G

TOP & BOTTOM VIEW OF THE TS-700G





TS-700G SPECIFICATIONS

SPECIFICATIONS

TRANSMIT/RECEIVE FREQUENCY RANGE	144 ~ 146 MHz
MODE	SSB, FM, CW, AM
RF OUTPUT	10 watts for SSB, CW and FM 3 watts for AM
ANTENNA IMPEDANCE	50Ω (unbalanced)
CARRIER SUPPRESSION	Better than 40 dB
SIDE-BAND SUPPRESSION	Better than 40 dB
SPURIOUS RADIATION	Less than −60 dB
MAX. FREQUENCY DEVIATION (FM)	±5 kHz
REPEATER FREQUENCY SHIFT WIDTH	600 kHz
RPT TONE FREQUENCY	1750 Hz
MODULATION	Balanced modulation for SSB Variable reactance frequency shift for FM Low power modulation for AM
MICROPHONE	Dynamic microphone, 500Ω
AUDIO FREQUENCY RESPONSE	400 ~ 2600 Hz, within −9 dB
POWER CONSUMPTION	Transmit mode: 95W (AC 120/220V), 4A (DC 13.8V), max. Receive mode (no signal): 45W (AC 120/220V), 0.8A (DC 13.8V)
POWER REQUIREMENTS	AC 120/220V, 50/60 Hz DC 12V ~ 16V (13.8V as reference)
DIMENSIONS	278 (W) × 124 (H) × 320 (D) mm
WEIGHT	11 kg
RECEIVING SYSTEM	SSB, CW, AM: Single-superheterodyne FM: Double-superheterodyne
INTERMEDIATE FREQUENCY	SSB, CW, AM: 10.7 MHz FM: 1st IF ... 10.7 MHz 2nd IF ... 455 kHz
RECEIVING SENSITIVITY	SSB, CW: S/N = 10 dB or better at 0.25μV FM: S/N = 30 dB or better at 1μV 20 dB noise quieting = Less than 0.4μV AM: S/N = 10 dB or better at 1μV
IMAGE RATIO	Better than 60 dB
IF REJECTION	Better than 60 dB
PASS-BAND WIDTH	SSB, CW, AM: More than 2.4 kHz at −6 dB FM: More than 12 kHz at −6 dB
RECEIVER SELECTIVITY	SSB, CW, AM: Less than 4.8 kHz at −60 dB FM: Less than 24 kHz at −60 dB
SQUELCH SENSITIVITY	0.25μV
AUDIO OUTPUT	More than 2W at 8Ω load (10% distortion)
RECEIVER LOAD IMPEDANCE	8Ω
FREQUENCY STABILITY	Within ±2 kHz during one hour after one minute of warm-up, and within 150 Hz during any 30 minute period thereafter.