Black Shadow SSB

Colt 485

SINGLE SIDEBAND 40 CHANNEL CITIZENS BAND 2-WAY RADIO

INSTRUCTION MANUAL

ANOTHER QUALITY PRODUCT OF
COLT COMMUNICATIONS, INC.
SKOKIE, ILL. 60077

INTRODUCTION

Thank you for your confidence in selecting Colt two-way radio equipment. We know you'll find your transceiver as exciting as it is practical. Many years of valuable experience designing electronic products are behind our two-way communications systems. Only the highest quality components are incorporated into Colt radios to assure reliability and maximum performance.

Installing and operating the Colt 485 is not complicated, but the flexibility provided by its numerous operating features may not be fully appreciated until a little time is spent becoming familiar with its controls and connections.

It will be to your advantage to save all the packing materials-carton, fillers, cushioning, etc., they will prove valuable in preventing damage should you ever have occasion to transport or ship the Colt 485.

To qualify for the Colt Warranty, please fill out the Warranty Registration Card and mail it promptly. Your Warranty protection will not go into effect unless you return the registration card, which is packed with the carton.

INSTRUCTION MANUAL

FOR

COLT 485

SINGLE SIDEBAND 40 CHANNEL CITIZENS BAND 2-WAY RADIO

COLT 485

SPECIFICATIONS

GENERAL

Channels:	40 — AM/Single Sideband
Frequency Range:	26.965 to 27.405 MHz
Frequency Control:	Phaselock Synthesizer
Frequency Tolerance:	±0.005%
Frequency Stability:	±0.003%
Operating Temperature Range:	—30°C to +50°C
Microphone:	Plug-in type dynamic
Input Voltage:	13.8V DC (Positive or negative ground)
Current Drain:	Receive — 1.5A at maximum audio output, 0.5A at standby (no signal).
Size:	10"L. x 7-1/2"W. x 2-1/2"H.
Weight:	6 lbs.
Antenna Connector:	Standard American [SO-239] type
Semiconductors:	44 Transistors, 47 Diodes, 5 ICs
Meter:	Illuminated, indicates relative power output and received signal strength
Power Bandwidth:	10.5 to 16V

TRANSMITTER

Power:	4 watts — AM, 12 watts PEP — SSB (max. allowed by FCC, at 13.8 volts DC)
Modulation:	High and low level Class B amplitude modulation (AM)
Modulation Capability:	95% Typical (AM)
Harmonic Suppression and Spurious Emmissions:	Better than FCC requirement

Frequency Response:	400 Hz to 5 kHz – AM 400 Hz to 3 kHz – SSB
Output Impedance:	50 Ohms, unbalanced
Output Indicators:	Meter shows relative RF output power, receiving signal strength.

RECEIVER

Sensitivity – AM:	1 μV for 10 dB S/N
Sensitivity – SSB:	0.3 μV for 10 dB S/N
Selectivity:	5 dB at 4 kHz (AM), 5 dB at 2 kHz (SSB), 50 dB at ±10 kHz (AM)
Image Rejection:	More than 50 dB
IF Rejection:	More than 80 dB at 455 kHz
Automatic Gain Control (AGC):	Change in audio output less than 12 dB from 10 μV to .4 volts
Squelch:	Adjustable – threshold less than .7 μV
Audio Frequency Response:	400 to 2.5 kHz
Distortion:	Less than 10% at 3.0 watts output
Adjacent Channel Rejection:	More than 75 dB at .3 μV
Cross Modulation:	More than 50 dB
IF Frequency:	10.695 MHz, 455 kHz
Clarifier:	±800 Hz
Noise Blanker:	IF single gate type
Audio Output Power:	More than 3 watts into 8 Ohms
Built-in Speaker:	8 Ohms, dynamic
External Speaker (optional):	Disables internal speaker when connected

PUBLIC ADDRESS (PA) SYSTEM

Power Output:	3 watts into external speaker
External Speaker for PA (optional):	When PA switch is in PA mode, the unit functions as a public address system.

SECTION I

INSTALLATION

WARNING

Operation of this equipment requires a valid station license issued by the Federal Communications Commission. Do not transmit with your equipment until you have received your license. Illegal operation can result in severe penalties. Be certain that you have read Part 95 of the FCC Rules and Regulations before operating your station.

License applications are to be made on FCC Form 505. A copy of this form is included with your new transceiver.

You are required to maintain a current copy of Part 95 of the FCC Rules as a part of your station records. Copies of Part 95 are available from Superintendent of Documents, GPO, Washington, D.C., 20402.

FCC Rules require that ALL transmitter adjustments, other than those supplied by the manufacturer as front panel operating controls, be made by or under the supervision of the holder of an FCC issued 1st or 2nd class radio operator license.

Replacement or substitution of crystals, transistors, regulator diodes or any other part of a unique nature, with parts other than those recommended by us, may cause violation of the technical regulations of Part 95 of the FCC Rules or violation of the Type Acceptance requirements of Part 2 of the Rules.

Location

Plan the location of the transceiver and microphone bracket before starting the installation. Select a location that is convenient for operation and does not interfere with the driver or passengers in the vehicle. In automobiles, the transceiver is usually mounted to the underneath of the dash panel, with the microphone bracket beside it.

Mounting and Connection

The Colt 485 is supplied with a universal mounting bracket. The transceiver is held in the bracket by two bolts, permitting adjustment at the most convenient angle.

The bracket must be mounted with the machine screws and the nuts supplied. The mounting must be mechanically strong and also provide a good electrical connection to the chassis of the vehicle. Proceed as follows to mount the transceiver.

1. After you have determined the most convenient location in your vehicle, hold the Colt 485 with mounting bracket in the exact location desired. If nothing will interfere with mounting it in the desired position, remove the mounting bracket and use it as a template to mark the location for the mounting bolts. Before drilling the holes, make sure nothing will interfere with the installation of the mounting bolts.

2. Connect the antenna cable plug to the standard receptacle on the rear panel. Most CB antennas are terminated with a type PL-259 plug and mate with the receptacle.

3. Connect the power cord plug to the DC power socket on rear panel of the unit.

4. **Negative Ground Systems.** Almost all automobiles and trucks have negative ground systems. The red lead at the end of the power cord connects to the positive pole of the battery or electrical system and the black lead connects to the negative pole of the battery or suitable chassis ground.

NOTE

In Positive Ground Vehicles connect the red lead to the positive pole of the battery or suitable chassis ground, and the black lead to the negative pole of the battery or electrical system.

5. Mount the microphone bracket to dashboard or, any other convenient location.

Ignition Noise Interference

Use of the mobile receiver at low signal levels is normally limited by the presence of electrical noise. The primary source of noise in automobile installations is from the generator and ignition system in the vehicle. Under most operating conditions, when signal level is adequate, the background noise does not present a serious problem. Also, when extremely low level signals are being receivied, the transceiver may be operated with vehicle engine turned off. The unit requires very little current and therefore will not significantly discharge the vehicle battery.

Even though the Colt 485 has a selective automatic noise blanker and a selective automatic noise limiter, in some installations ignition interference may be high enough to make good communications impossible. The electrical noise may come from several sources. Many possibilities exist and variations between vehicles require different solutions to reduce the noise. Consult your Colt dealer or a 2-way radio technician for help in locating and correcting the source of severe noise.

Antenna

Since the maximum allowable power output of the transmitter is limited by the FCC, the antenna is one important factor affecting transmission distance. Only a properly matched antenna system will allow maximum power transfer from the 50 Ohm transmission line to the radiating element. In mobile installations (cars, trucks, boats, etc.), an antenna system that is non-directional should be used.

A vertically polarized quarter-wavelength whip antenna provides the most reliable operation and greatest range. The shorter loaded-type whip antennas are more attractive, compact and adequate for applications where the maximum possible distance is not required. Also the loaded whips do not present the problems of height imposed by full quarter-wavelength whip.

Mobile whip antennas utilize the metal body of the vehicle as a ground plane. When mounted at a corner of the vehicle they are slightly directional, in the direction of the body of the vehicle. For all practical purposes, however, the radiation pattern is non-directional. The slight directional characteristic will be observed only at extreme distances. A standard antenna connector is provided on the transceiver for easy connection to a standard cable termination.

If the transceiver is not mounted on a metal surface, it is necessary to run a separate ground wire from the unit to a good metal electrical ground in the vehicle. When installed in a boat, the transceiver will not operate at maximum efficiency without a ground plane, unless the vessel has a steel hull.

Before installing the transceiver in a boat, consult your dealer for information regarding an adequate grounding system and prevention of electrolysis between fittings in the hull and water.

Base Station Operation
(Operation from 110–120V AC, house current)

To operate your transceiver from your home or office, using the regular house current as the power source, you will require a separate power supply capable of supplying three amps at a 13.8 volt DC output with a nominal input voltage of 120 volts AC, 50/60 Hz. Simply connect the red (+) and black (–) leads of the transceiver to the corresponding terminals of the AC power supply.

NOTE

Do not attempt to operate this transceiver by connecting directly to 110–120 Volt AC. When an AC power supply is used with the transceiver for base station operation, any Citizens Band beam, dipole, ground plane or vertical antenna may be used. A ground plane and vertical antenna will provide the most uniform horizontal coverage.

Remote Speaker

The external speaker jack (EXT. SP) on the rear panel is used for remote receiver monitoring. The external speaker should have 8 Ohms impedance and be able to handle at least 3 watts. When the external speaker is plugged in, the internal speaker is disconnected.

Public Address

An external 8 Ohm, 3 watt speaker must be connected to the PA SP jack located on the rear panel when the transceiver is used as a public address system. The speaker should be directed away from the microphone to prevent acoustic feedback. Physical separation or isolation of the microphone and speaker is important when operating the PA at high output levels.

SECTION II

OPERATION

CONTROLS AND INDICATORS

There are nine controls and two indicators on the front panel of your Colt 485.

A. CONTROL FUNCTIONS

1. **VOLUME.** Turn clockwise to apply power to the unit and to set the desired listening level.

2. **SQUELCH.** This control is used to cut off or eliminate receiver background noise in the absence of an incoming signal. For maximum receiver sensitivity it is desired that the control be adjusted only to the point where the receiver background noise or ambient background noise is eliminated. Turn fully counterclockwise then slowly clockwise until the receiver noise disappears. Any signal to be received must now be slightly stronger than the average received noise. Further clockwise rotation will increase the threshold level which a signal must overcome in order to be heard. Only strong signals will be heard at a maximum clockwise setting.

3. **RF GAIN.** This control is used primarily to optimize reception in strong signal areas. Under normal operating conditions the control should be turned fully clockwise. When strong overload or distorted signals are received rotate control counterclockwise to reduce gain. Note: The Squelch control may require readjustment with reduced RF Gain.

4. **CLARIFIER.** This control provides fine tuning of the receiver. On regular AM reception, this will permit adjustment of off-frequency transmissions. In the SSB mode (LSB-USB) this control is used as a voice clarifier to adjust for clearer voice reception.

5. **CHANNEL SELECTOR.** This switch selects any one of the forty citizens band channels desired. The selected channel is digitally displayed in the window directly above the channel selector knob. Channels 1 thru 8 and 10 thru 40 may be used for communications between stations operating under the same license. Channel 9 has been reserved by the FCC for emergency communications involving the immediate safety of life of individuals or immediate protection of property. Channel 9 may also be used to render assistance to a motorist.

6. **ANL (Automatic noise limiter).** This switch introduces the automatic noise limiter in the audio. The ANL may be used when noises generated from such sources as atmospheric discharge, electric machinery are present.

7. **NB SWITCH.** When the switch is placed in the NB position the RF noise blanker is activated. The RF noise blanker is very effective for repetitive impulse noise such as ignition interference.

8. **CB-PA SWITCH.** Selects the mode of operation. The PA function should not be used unless an external speaker is connected as described in INSTALLATION SECTION of this manual. In the CB position, the PA function is disabled and the unit will transmit and receive on the selected frequency.

9. **LSB-USB-AM MODE.** This control selects the mode of operation in either standard AM, Upper Sideband or Lower Sideband modes. Transmissions in the AM or Sideband modes can only be communicated to stations operating in the same mode.

B. INDICATORS

1. **PWR/S METER.** Shows relative transmitter power when transmitting and input signal strength when receiving. Illuminated when power is on.

2. **CHANNEL INDICATOR.** This is an LED Digital readout (located above channel selector knob) which indicates the channel selected by the channel selector switch.

C. PRESS-TO-TALK MICROPHONE

The receiver and transmitter are controlled by the press-to-talk switch on the microphone. Press the switch and the transmitter is activated; release switch to receive. When transmitting, hold the microphone two inches from the mouth and speak clearly in a normal voice. The radio comes complete with the low impedance dynamic microphone.

D. OPERATING PROCEDURE TO RECEIVE

1. Place CB-PA switch in CB position.

2. Turn the set ON by turning the VOLUME control clockwise, until a click is heard.

3. Set the VOLUME for a comfortable listening level.

4. Listen to the background noise from the speaker. Turn the SQUELCH control slowly clockwise, until the noise just disappears. (No signal should be present.) Leave the control at this setting. The SQUELCH is now properly adjusted. The receiver will remain quiet until a signal is actually received. Do not advance the control too far, or some of the weaker signals will not be heard.

5. Set the CLARIFIER control to the center (12 o'clock position).

6. Set the LSB-USB-AM mode switch to either AM for standard AM reception or to LSB or USB depending upon whether the signal to be received is on upper or lower sideband.

E. OPERATING PROCEDURE TO TRANSMIT

1. Select the desired channel and mode of transmission.

2. If the channel is clear, depress the push-to-talk switch on the microphone. Speak in a normal tone of voice.

F. ACCESSORY CIRCUIT OPERATION

1. **ANL OPERATION.** If you feel that actual noise interruption is not so excessive, you may set this switch in Off position for best sensitivity.

2. **NB OPERATION.** If excessive ignition noise interference is present, activate the noise blanker circuitry by placing the NB switch to the NB position.

3. **RF GAIN.** If signal received is very strong, set the control counterclockwise. If signal received is very weak, rotate fully clockwise.

4. **PUBLIC ADDRESS (PA) OPERATION.** To use this feature, a speaker having a voice coil impedance of 8 Ohms and a power handling capability of at least 3 watts should be used. Connect speaker to PA SP jack on rear panel.

Complete elimination of outside signals can be obtained by disconnecting the antenna cable from the transceiver. With the PA speaker connected, be sure that there is physical separation between the microphone and the speaker itself. If the speaker is located close to the microphone, acoustic feedback will result when the public address system is operated at high volume.

SECTION III

MAINTENANCE AND ADJUSTMENT

The Transceiver is specifically designed for the environment encountered in mobile installations. The use of all solid state circuitry and its light weight result in high reliability. Should a failure occur, however, replace parts only with identical parts. Do not substitute. Refer to the schematic diagram and parts list.

WARNING

Federal law requires that adjustment of the radio frequency section of this transceiver may not be made by a citizens band operator. Only a United States licensed first or second class commercial license holder may tune the transmitter sections of this transceiver. FCC part 95D section 95.97d.

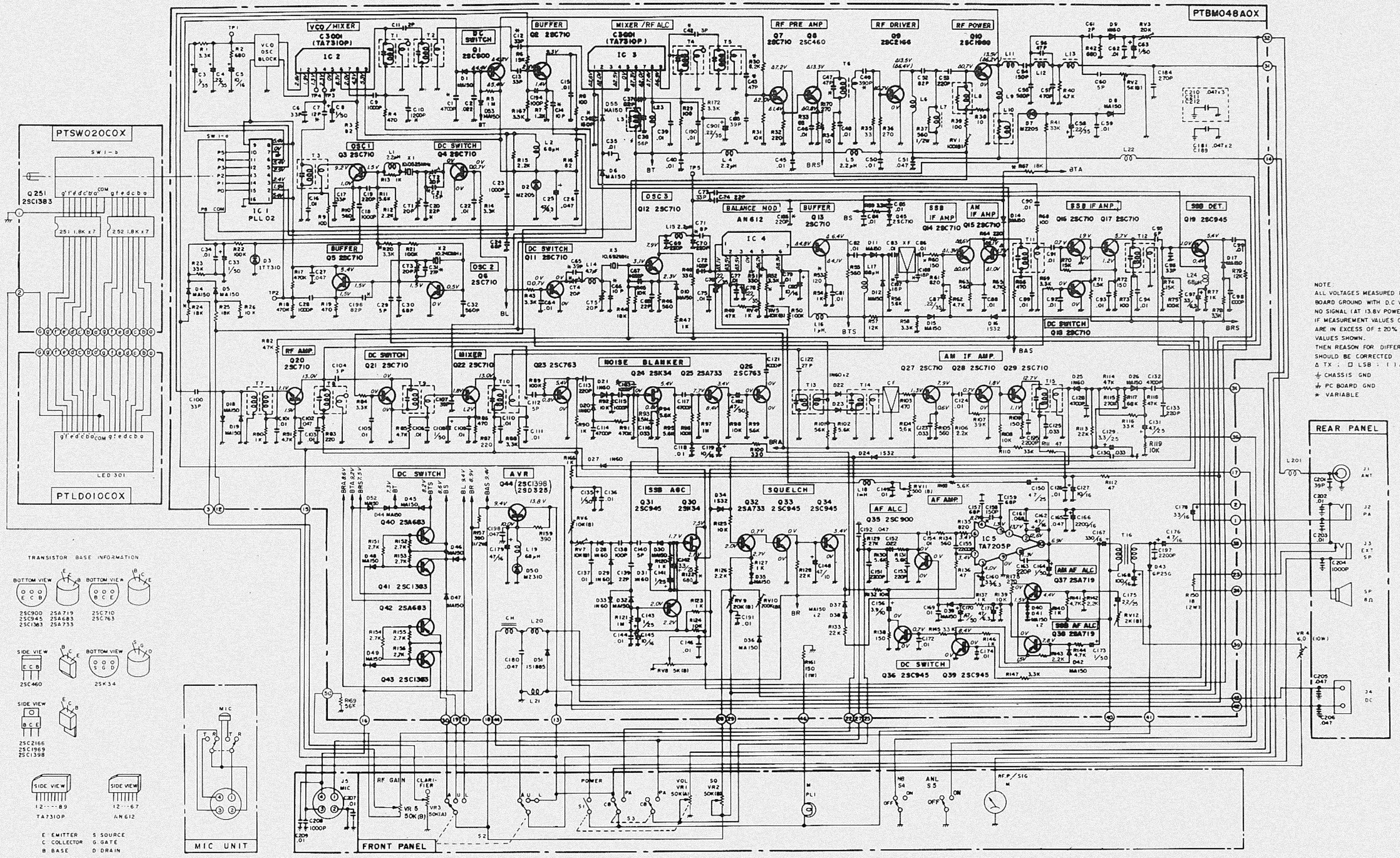
ADJUSTMENT

The transceiver is factory aligned and should not require any adjustments when used with a 50 Ohm antenna. If an antenna other than 50 Ohms impedance is used, adjustment of the transmitter output circuit may be made to obtain optimum power transfer to the antenna. This adjustment should be made only by qualified personnel using a high quality in-line R-F wattmeter which will not produce standing waves when inserted in the antenna cable.

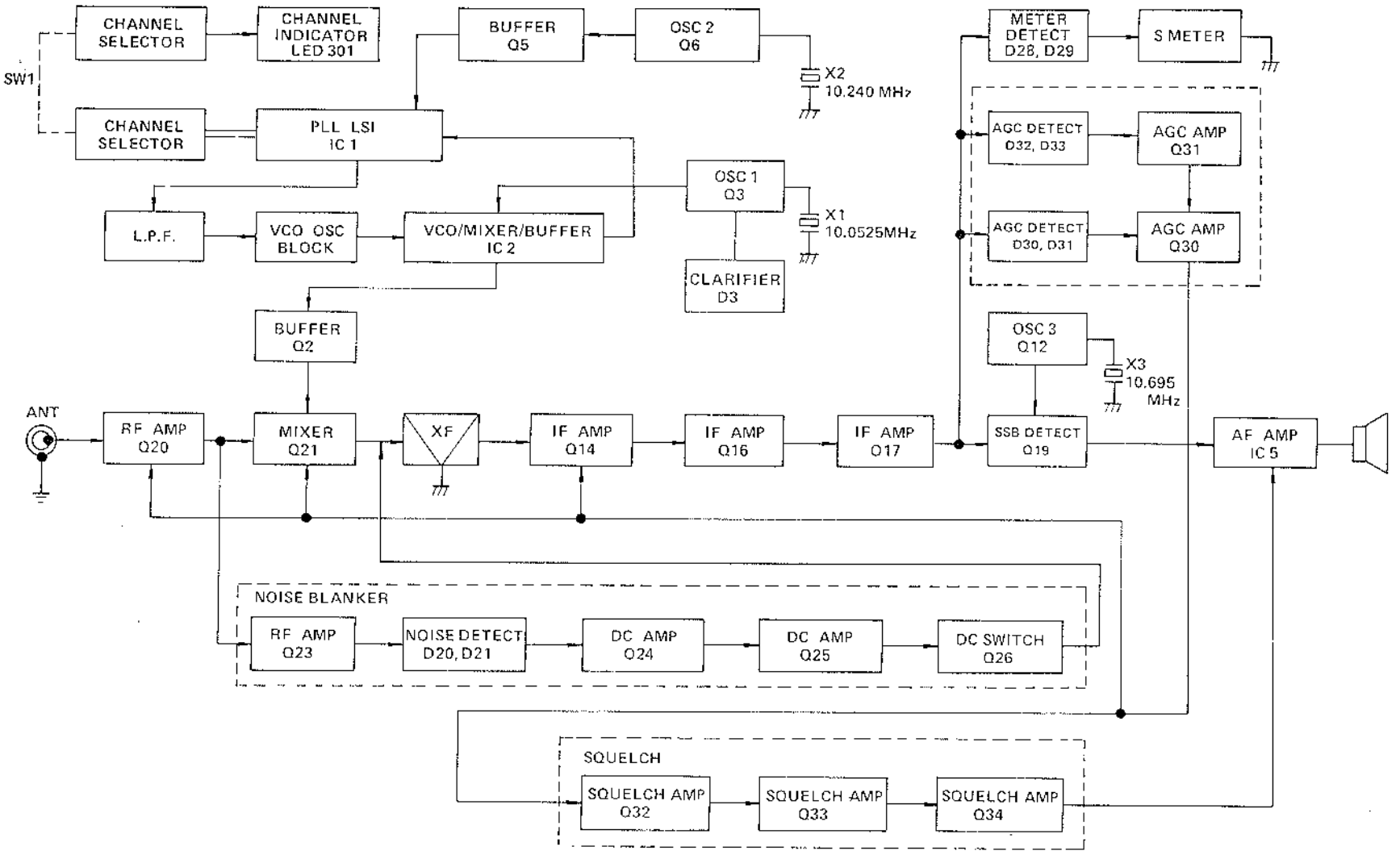
NOTE

If the performance described in the OPERATION and MAINTENANCE AND ADJUSTMENT sections is not obtained, review the operating instructions to insure that proper procedures were followed. If a problem still exists, refer to WARRANTY SERVICE INSTRUCTIONS on the last page of this manual.

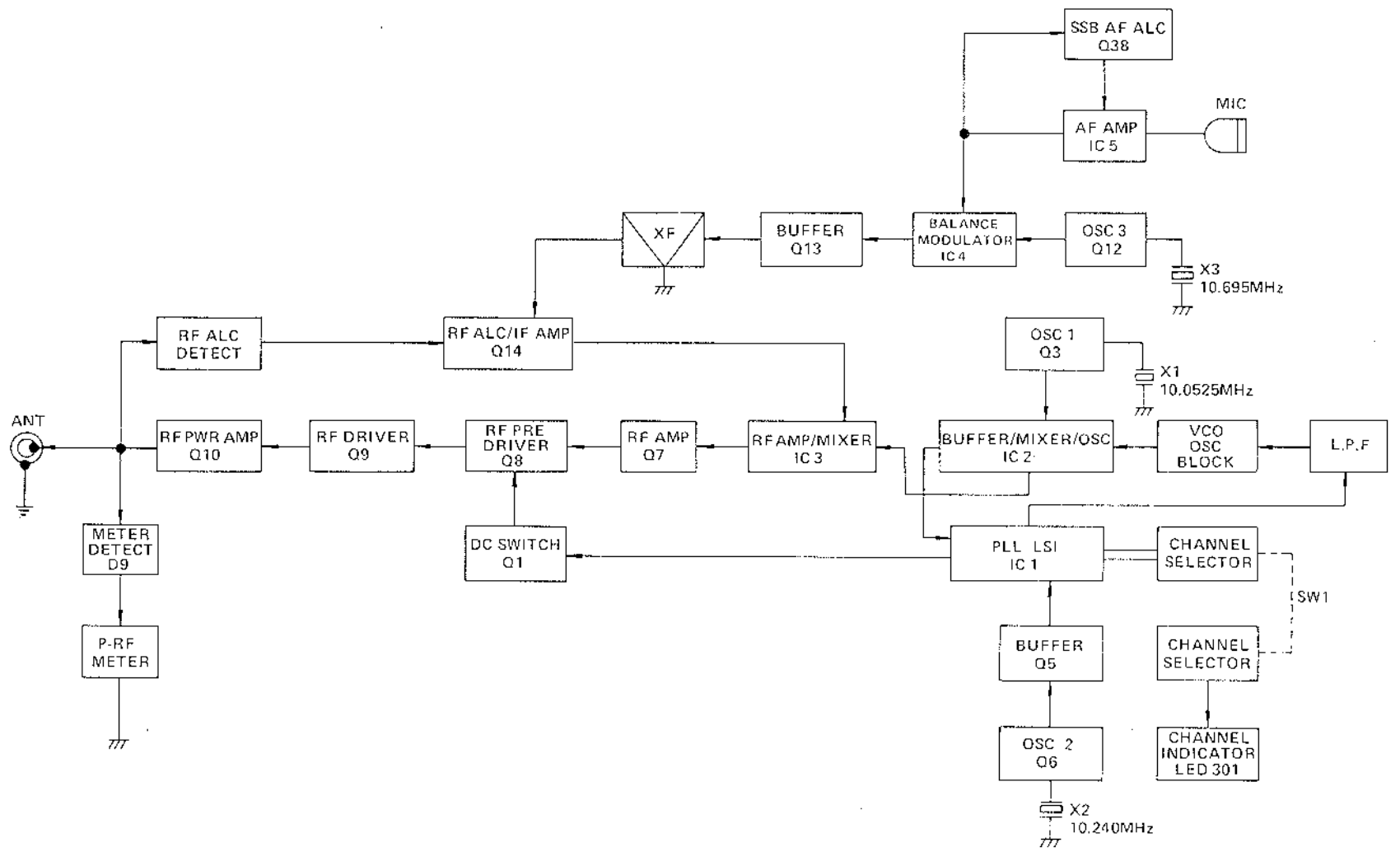
SCHEMATIC DIAGRAM



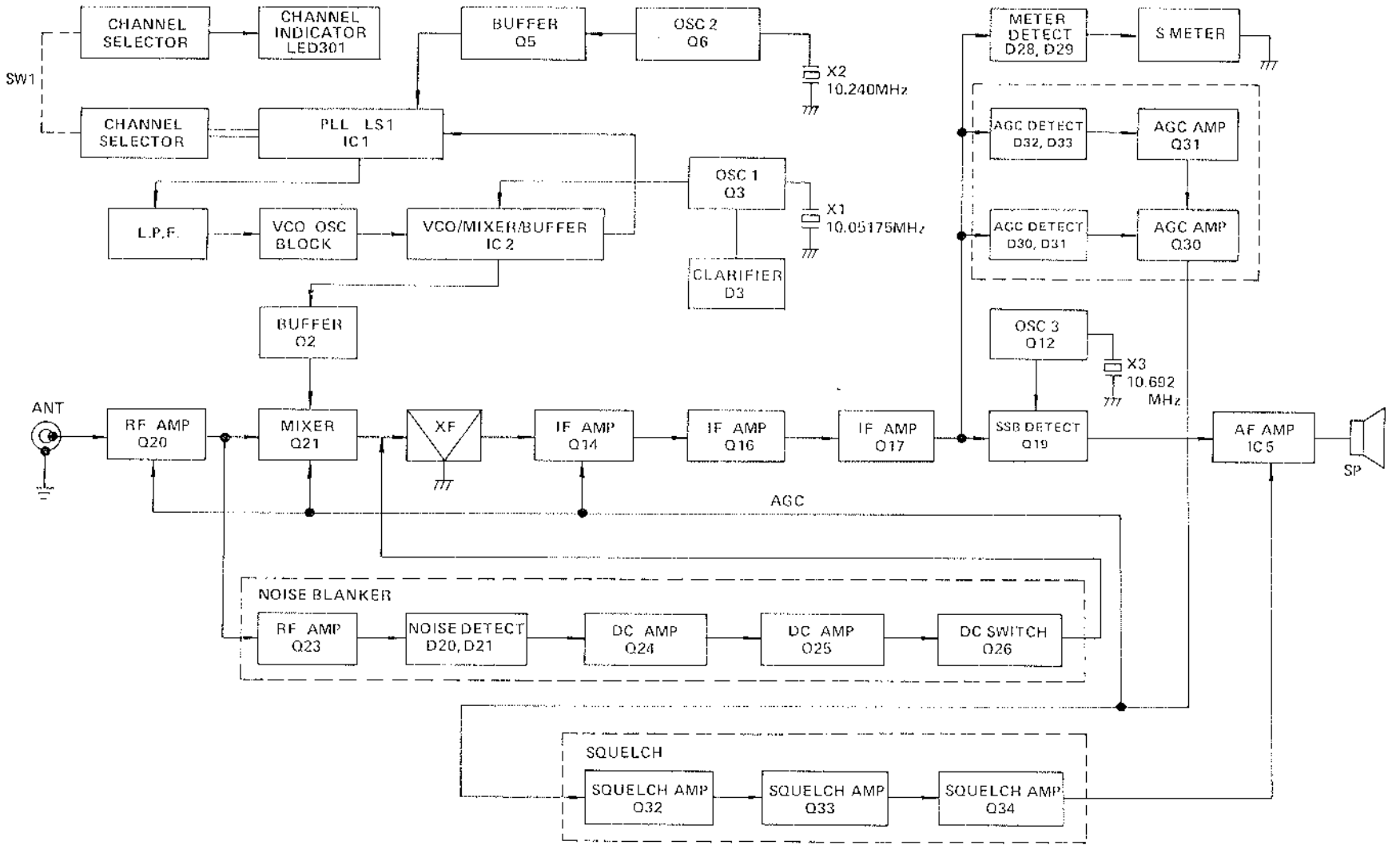
BLOCK DIAGRAM



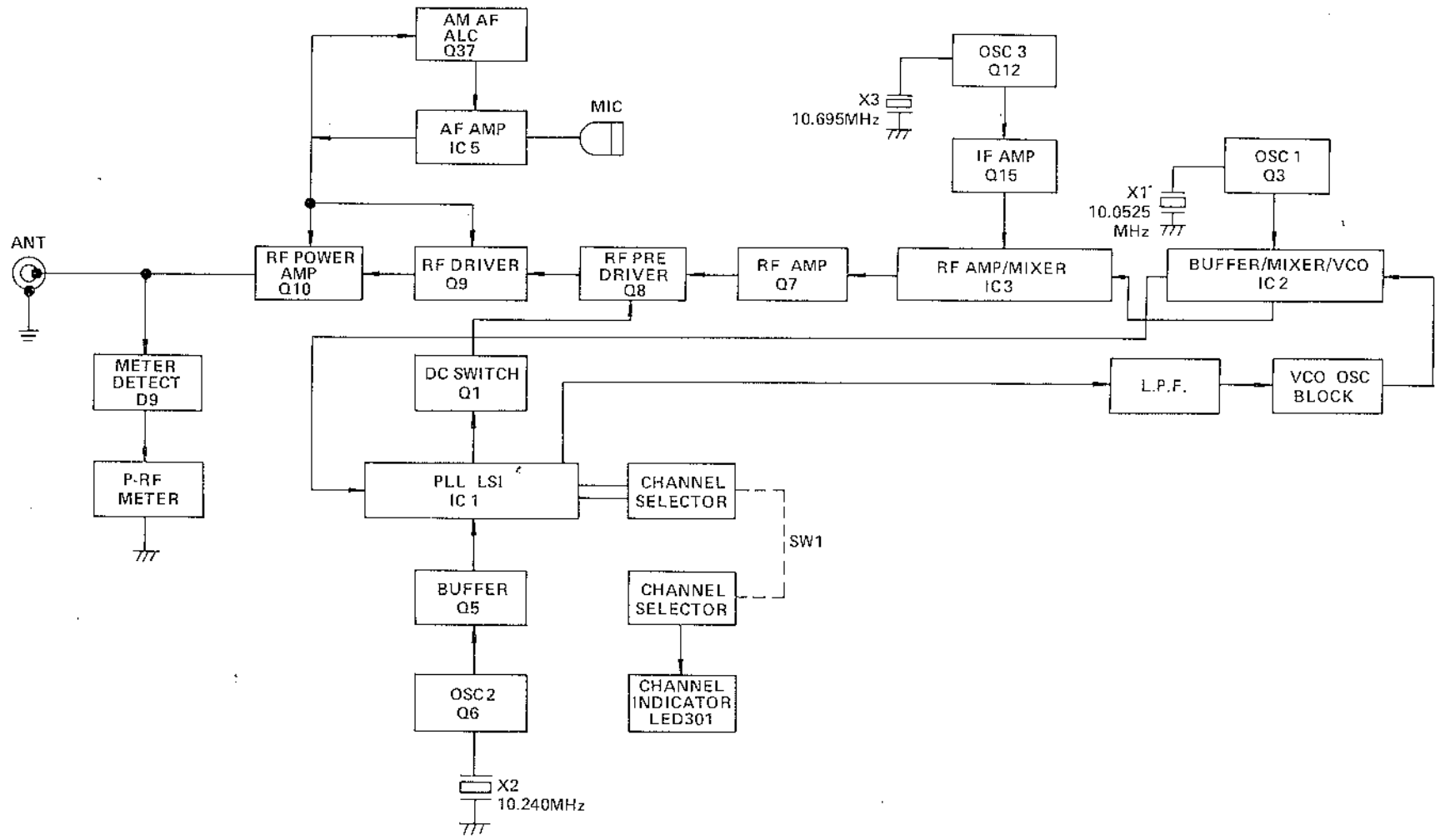
USB RX



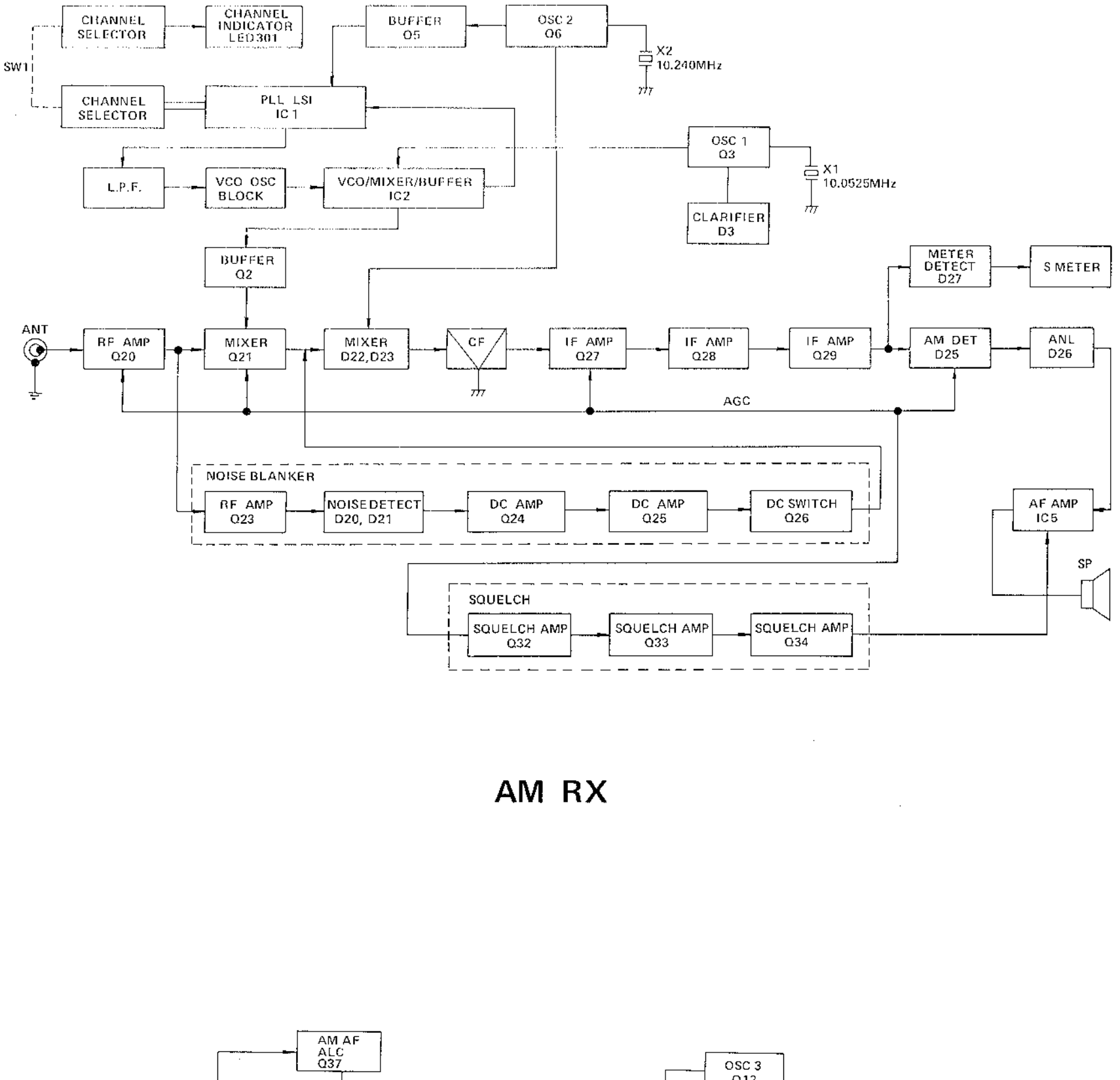
USB TX


CHANNEL SELECTOR
CHANNEL INDICATOR LED301
BUFFER Q5
OSC 2 Q6
X2 10.240MHz
SW1
CHANNEL SELECTOR
PLL LSI IC1
OSC 1 Q3
X1 10.05175MHz
L.P.F.
VCO OSC BLOCK
VCO/MIXER/BUFFER IC 2
CLARIFIER D3
BUFFER Q2
METER DETECT D28, D29
S METER
AGC DETECT D32, D33
AGC AMP Q31
AGC DETECT D30, D31
AGC AMP Q30
OSC 3 Q12
X3 10.692 MHz
ANT
RF AMP Q20
MIXER Q21
XF
IF AMP Q14
IF AMP Q16
IF AMP Q17
SSB DETECT Q19
AF AMP IC 5
SP
AGC
NOISE BLANKER
RF AMP Q23
NOISE DETECT D20, D21
DC AMP Q24
DC AMP Q25
DC SWITCH Q26
SQUELCH
SQUELCH AMP Q32
SQUELCH AMP Q33
SQUELCH AMP Q34

LSB RX


AM AF ALC Q37
AF AMP IC 5
MIC
OSC 3 Q12
X3 10.695MHz
IF AMP Q15
OSC 1 Q3
X1 10.0525 MHz
ANT
RF POWER AMP Q10
RF DRIVER Q9
RF PRE DRIVER Q8
RF AMP Q7
RF AMP/MIXER IC3
BUFFER/MIXER/VCO IC 2
METER DETECT D9
DC SWITCH Q1
L.P.F.
VCO OSC BLOCK
P-RF METER
PLL LSI IC 1
CHANNEL SELECTOR
SW1
BUFFER Q5
CHANNEL SELECTOR
OSC2 Q6
CHANNEL INDICATOR LED301
X2 10.240MHz

LSB TX


CHANNEL SELECTOR
CHANNEL INDICATOR LED301
BUFFER Q5
OSC 2 Q6
X2 10.240MHz
SW1
CHANNEL SELECTOR
PLL LSI IC 1
OSC 1 Q3
X1 10.0525MHz
L.P.F.
VCO OSC BLOCK
VCO/MIXER/BUFFER IC2
CLARIFIER D3
BUFFER Q2
METER DETECT D27
S METER
ANT
RF AMP Q20
MIXER Q21
MIXER D22,D23
CF
IF AMP Q27
IF AMP Q28
IF AMP Q29
AM DET D25
ANL D26
AGC
NOISE BLANKER
RF AMP Q23
NOISE DETECT D20, D21
DC AMP Q24
DC AMP Q25
DC SWITCH Q26
AF AMP IC5
SP
SQUELCH
SQUELCH AMP Q32
SQUELCH AMP Q33
SQUELCH AMP Q34
AM AF ALC Q37
MIC
AF AMP IC 5
OSC 3 Q12
X3 10.695MHz
IF AMP Q15
OSC 1 Q3
X1 10.0525 MHz
ANT
RF POWER AMP Q10
RF DRIVER Q9
RF PRE DRIVER Q8
RF AMP Q7
RF AMP/MIXER IC3
BUFFER/MIXER/VCO IC2
METER DETECT D9
P-RF METER
DC SWITCH Q1
L.P.F.
VCO OSC BLOCK
PLL LSI IC 1
CHANNEL SELECTOR
SW1
BUFFER Q5
CHANNEL SELECTOR
OSC2 Q6
CHANNEL INDICATOR LED301
X2 10.240MHz

AM RX

AM TX

REPLACEMENT PARTS LIST

Model Colt 485

Symbol No.	Part Name, Description			Part Code
SW	Rotary SW (Channel Sel.)	40CH		SR-2040302H
S2	Rotary SW (Mode)			SR-0303103E
S3	Slide SW (CB-PA)			SS-020224ZL
S4	Slide SW (NB)			SS-020224ZL
S5	Slide SW (ANL)			SS-020224ZL
VR1	VR (Volume/PWR)	50K (A)		RV-NB503A06
VR2	VR (Squelch)	50K (B)		RV-NA503B06
VR3	VR (Clarifier)	50K (A)		RV-NA503A05
VR4	VR (AM Power Cont.)	6Ω	10W	RW-VA060B02
VR5	VR (RF Gain)	50K (B)		RV-NA503B06
J1	Ant. Jack			YJ-C02S009Z
J2	3P Jack (PA)	3.5φ		YJ-T03S003Z
J3	3P Jack (EXT. CB)	3.5φ		YJ-T03S003Z
J4	DC Jack (DC)	2P		YJ-B02S007Z
J5	Mic Jack (MIC)	4P Metal		YJ-Z04S002Z
SP	Speaker	8Ω	2W	ZQ-A0920802
M/PL1	Meter	500μA		ZM-J2030N04
R201	Carbon R	56K		RD-25TJ563X
C201	Ceramic Cap	39P	PH	CC-DB390KPM
C202	Ceramic Cap	.01	E	CK-DB103PEM
C203	Ceramic Cap	.01	E	CK-DB103PEM
C204	Ceramic Cap	1,000P	E	CK-DB102PEM
C205	Ceramic Cap	.047	F	CK-DB473ZFM
C206	Ceramic Cap	.047	F	CK-DB473ZFM
C207	Ceramic Cap	.01	E	CK-DB103PEM
C208	Ceramic Cap	1,000P	E	CK-DB102PEM
C209	Ceramic Cap	.01	E	CK-DB103PEM
C210	Ceramic Cap	.047	F	CK-DB473ZFM
C211	Ceramic Cap	.047	F	CK-DB473ZFM
C212	Ceramic Cap	.047	F	CK-DB473ZFM
L201	RF Coil			LA-2JG1503A
	Front Panel			MB-762SZ064
	Bracket (Meter)			MZ-512SZ001
	Spacer (L.E.D PC board)			MX-531SB001
	Side Chassis			ML-681SZ013
	Side Chassis			ML-681SZ014
	Rear Chassis			MS-766SZ019
	Shield (RF power Tr.)			MS-635SX004
	Cover (Top)			MU-874SM019
	Cover (Bottom)			MU-874SM021
	Bracket (PCB)			ML-122SZ004
	Terminal (DC Jack)			ML-522BN001
	Terminal			ML-622BN001
	Bracket (Volume)			ML-332SZ008
	Ser No Plate			MV-SCLT4851
	Bracket (Speaker)			ML-121SZ007

Symbol No.	Part Name, Description		Part Code
	CH Knob		MN-276AA093
	VR Knob (5)		MN-276AA069
	Spacer (Channel Sel.)		VS-426FF001
	Washer (SP Jack)		VF-176DN002
	Washer (PA Jack)		VS-605FB001
	Spacer (Mic Jack)		VS-205FB002
	Frame (Front decoration)		VE-76JSP032
	Escutcheon (L.E.D covering)		VE-65XAX001
	Instruction Manual		KT-CLT485XX
	Part 95 Book		KW-000037BX
	Warranty Card (Unavailable additionally)		KW-000114AX
	Form 505		KZ-000017DX
	Form 555-B		KZ-000024XX
	Display Box		KK-CLT48501
	Mounting Bracket		MU-576SM003
	Mic Hanger		MZ-331SZ002
	Microphone		ZG-AAZ50137
	DC Cord Ass'y		AC-DC046GEA
IC1	IC	PLL02A	QQ-OPLL02AN
IC2	IC	C3001A (TA7310P)	QQ-MC3001AT
IC3	IC	C3001A (TA7310P)	QQ-MC3001AN
IC4	IC	AN612	QQ-MAN612AN
IC5	IC	TA7205P	QQ-M07205AT
Q1	Transistor	2SC900 (F)	QT-C0900XBA
Q2	Transistor	2SC710 (C)	QT-C0710XAE
Q3	Transistor	2SC710 (D)	QT-C0710XBE
Q4	Transistor	2SC710 (D)	QT-C0710XBE
Q5	Transistor	2SC710 (D)	QT-C0710XBE
Q6	Transistor	2SC710 (D)	QT-C0710XBE
Q7	Transistor	2SC710 (D)	QT-C0710XBE
Q8	Transistor	2SC460 (A or B)	QT-C0460XBB
Q9	Transistor	2SC2166	QT-C2166XAE
Q10	Transistor	2SC1969	QT-C1969XAE
Q11	Transistor	2SC710 (D)	QT-C0710XBE
Q12	Transistor	2SC710 (D)	QT-C0710XBE
Q13	Transistor	2SC710 (C)	QT-C0710XAE
Q14	Transistor	2SC710 (C)	QT-C0710XAE
Q15	Transistor	2SC710 (C)	QT-C0710XAE
Q16	Transistor	2SC710 (C)	QT-C0710XAE
Q17	Transistor	2SC710 (C)	QT-C0710XAE
Q18	Transistor	2SC710 (D)	QT-C0710XBE

Symbol No.	Part Name, Description		Part Code
Q19	Transistor	2SC945 (A~Q)	QT-C0945ABA
Q20	Transistor	2SC710 (C)	QT-C0710XAE
Q21	Transistor	2SC710 (D)	QT-C0710XBE
Q22	Transistor	2SC710 (C)	QT-C0710XAE
Q23	Transistor	2SC763 (D)	QT-C0763XAE
Q24	FET	2SK34 (C or D)	QT-K0034XAE
Q25	Transistor	2SA733 (Q)	QT-A0733XAA
Q26	Transistor	2SC763 (D)	QT-C0763XAE
Q27	Transistor	2SC710 (C)	QT-C0710XAE
Q28	Transistor	2SC710 (C)	QT-C0710XAE
Q29	Transistor	2SC710 (D)	QT-C0710XBE
Q30	FET	2SK34 (E)	QT-K0034XBE
Q31	Transistor	2SC945 (A~Q)	QT-C0945ABA
Q32	Transistor	2SA733 (Q)	QT-A0733XAA
Q33	Transistor	2SC945 (A~Q) (A~P)	QT-C0945AEA
Q34	Transistor	2SC945 (A~Q) (A~P)	QT-C0945AEA
C35	Transistor	2SC900 (U)	QT-C0900XCA
Q36	Transistor	2SC945 (A~Q) (A~P)	QT-C0945AEA
Q37	Transistor	2SA719 (Q)	QT-A0719XAN
Q38	Transistor	2SA719 (Q)	QT-A0719XAN
Q39	Transistor	2SC945 (A~Q) (A~P)	QT-C0945AEA
Q40	Transistor	2SA683 (R)	QT-A0683XBN
Q41	Transistor	2SC1383 (R)	QT-C1383XDN
Q42	Transistor	2SA683 (R)	QT-A0683XBN
Q43	Transistor	2SC1383 (R)	QT-C1383XDN
Q44	Transistor	2SD325 (D,E)	QT-D0325XCC
Q45	Transistor	2SC710 (C)	QT-C0710XAE
D1	SI Diode	MA150	QD-SMA150XN
D2	Zener Diode	MZ205	QD-ZMZ205XE
D3	Vari-Cap	ITT310	QD-CTT310XQ
D4	SI Diode	MA150	QD-SMA150XN
D5	SI Diode	MA150	QD-SMA150XN
D6	SI Diode	MA150	QD-SMA150XN
D7	Zener Diode	MZ205	QD-ZMZ205XE
D8	SI Diode	MA150	QD-SMA150XN
D9	GE Diode	IN60	QD-GIN60XXT
D10	SI Diode	MA150	QD-SMA150XN
D11	SI Diode	MA150	QD-SMA150XN
D12	SI Diode	MA150	QD-SMA150XN
D14	SI Diode	MA150	QD-SMA150XN
D15	SI Diode	MA150	QD-SMA150XN
D16	GE Diode	IS32	QD-GIS32XXT
D17	SI Diode	MA150	QD-SMA150XN
D18	SI Diode	MA150	QD-SMA150XN
D19	SI Diode	MA150	QD-SMA150XN
D20	GE Diode	IN60	QD-GIN60XXT
D21	GE Diode	IN60	QD-GIN60XXT
D22	GE Diode	IN60	QD-GIN60XXT
D23	GE Diode	IN60	QD-GIN60XXT
D24	GE Diode	IS32	QD-GIS32XXT
D25	GE Diode	IN60	QD-GIN60XXT
D26	SI Diode	MA150	QD-SMA150XN
D27	GE Diode	IN60	QD-GIN60XXT
D28	GE Diode	IN60	QD-GIN60XXT
D29	GE Diode	IN60	QD-GIN60XXT
D30	SI Diode	MA150	QD-SMA150XN
D31	GE Diode	IN60	QD-GIN60XXT
D32	SI Diode	MA150	QD-SMA150XN
D33	GE Diode	IN60	QD-GIN60XXT

Symbol No.	Part Name, Description		Part Code
D34	SI Diode	IS32	QD-GIS32XXT
D35	SI Diode	MA150	QD-SMA150XN
D36	SI Diode	MA150	QD-SMA150XN
D37	SI Diode	MA150	QD-SMA150XN
D38	SI Diode	MA150	QD-SMA150XN
D39	SI Diode	MA150	QD-SMA150XN
D40	SI Diode	MA150	QD-SMA150XN
D41	SI Diode	MA150	QD-SMA150XN
D42	SI Diode	MA150	QD-SMA150XN
D43	SI Diode	GP25G	QD-SGP25GAG
D44	SI Diode	MA150	QD-SMA150XN
D45	SI Diode	MA150	QD-SMA150XN
D46	SI Diode	MA150	QD-SMA150XN
D47	SI Diode	MA150	QD-SMA150XN
D48	SI Diode	MA150	QD-SMA150XN
D49	SI Diode	MA150	QD-SMA150XN
D50	Zener Diode	MZ310	QD-ZMZ310XE
D51	SI Diode	IS1885	QD-SS1885XT
D52	SI Diode	MA150	QD-SMA150XN
D53	SI Diode	MA150	QD-SMA150XN
D55	SI Diode	MA150	QD-SMA150XN
VCO	VCO OSC-Block	17MHz	ZZ-Z0000017
T1	RFT	37MHz	TR-10MB003T
T2	RFT	37MHz	TR-10MB005S
T3	IFT	10MHz	TR-10DB002S
T4	RFT	27MHz	TR-10CA006T
T5	RFT	27MHz	TR-10CB003T
T6	RFT	27MHz	TR-10CP006S
T7	RFT	27MHz	TR-10MP003T
T8	RFT	27MHz	TR-10CA006T
T9	RFT	27MHz	TR-10CB001S
T10	IFT	10MHz	TR-10MA013S
T11	IFT	10MHz	TR-10MA015S
T12	IFT	10MHz	TR-10MA015S
T13	IFT	10MHz	TR-10MA014S
T14	IFT	455kHz	TR-10LA021S
T15	IFT	455kHz	TR-10LA022S
T16	AF CAP	EI-28	TB-G28A004W
L1	RFC	2.2μH	LF-2R2KD01N
L2	RFC	68μH	LF-680KD01N
L3	RFC	330Ω Resist. core	LD-ADA3538G
L4	RFC	2.2μH	LF-2R2KD01N
L5	RFC	2.2μH	LF-2R2KD01N
L6	RFC		LD-ADA3038J
L7	RFC	10m/m	TR-10CZ003S
L8	RFC	22Ω Resist. core	LD-ADB3524M
L9	RFC		LD-ADB4024B
L10	RFC	22Ω Resist. core	LD-ADB3524M
L11	RFC	10m/m	TR-10CZ005S
L12	RFC	5φ	LA-1JG1004A
L13	RFC	10m/m	TR-10CZ004S
L14	RFC	47μH	LF-4R7KD01N
L15	RFC	2.2μH	LF-2R2KD01N
L16	RFC	1μH	LF-0R9KD01N
L17	RFC	68μH	LF-680KD01N
L18	RFC	1mH	LF-102KB01S
L19	RFC	68μH	LF-680KD01N
L20	RFC		LB-BJE1008A

Symbol No.	Part Name, Description		Part Code
L21	RFC		LB-BJE1008A
L22	RFC		LD-ADB4024B
L23	RFC		LD-ADB4024B
L24	RFC	68μH	LF-680KD01N
CH	Choke Coil	EI-19	LJ-119H004W
X1	Xtal Osc	10.025MHz HC-18/U	XA-SIC1001X
X2	Xtal Osc	10.24MHz HC-18/U	XA-SIB9001X
X3	Xtal Osc	10.692MHz HC-18/U	XA-ZIA8001X
MXF	M-Xtal Filter	10.6935MHz	FF-10R7S01N
CF	Ceramic Filter	455kHz	FB-R455A13M
RV1	Sub-Mini R	100 (B)	RP-JNB10101
RV2	Sub-Mini R	5K (B)	RP-GNB50201
RV3	Sub-Mini R	20K (B)	RP-GNB20301
RV4	Sub-Mini R	1K (B)	RP-GNB10201
RV5	Sub-Mini R	10K (B)	RP-GNB10301
RV6	Sub-Mini R	10K (B)	RP-GNB10301
RV7	Sub-Mini R	10K (B)	RP-GNB10301
RV8	Sub-Mini R	5K (B)	RP-GNB50201
RV9	Sub-Mini R	20K (B)	RP-GNB20301
RV10	Sub-Mini R	200K (B)	RP-GNB20401
RV11	Sub-Mini R	500 (B)	RP-GNB50101
RV12	Sub-Mini R	2K (B)	RP-GNB20201
CT1	Trimmer Cap	20P	CT-Z7200H01
CT2	Trimmer Cap	20P	CT-Z7200H01
CT3	Trimmer Cap	20P	CT-Z7200H01
CT4	Trimmer Cap	25P	CT-Z7250H01
CT5	Trimmer	20P	CT-Z7200H01
	Xtal Spacer	HC-18/U	VK-111SC001
	Heat Sink	TA7205P (Large)	ML-565AD001
	Heat Sink	TA7205P (Small)	MS-327AD004
	Heat Sink	2SC2166	MQ-531AD001
	Heat Sink	2SC1969	MX-653AD001
	Heat Sink	2SC1398	ML-321AD001
	Shield	Large	MS-765XD001
	Shield	Small	MS-535XD001
	Shield	RF Power	MB-654SX001
	Shield	Mixer	MS-425SX001
	Silicon Sheet	2SC2166, 2SC1969	VS-223RH002

(All resistors are 1/4W rated unless otherwise specified.)

Symbol No.	Part Name, Description			Part Code
R1	Carbon R	3.3K		RD-25VJ332X
R2	Carbon R	680		RD-25VJ681X
R3	Carbon R	82		RD-25VJ820X
R4	Carbon R	470		RD-25VJ471X
R5	Carbon R	1M		RD-25VJ105X
R6	Carbon R	15K		RD-25VJ153X
R7	Carbon R	1.2K		RD-25VJ122X
R8	Carbon R	100		RD-25VJ101X
R9	Carbon R	100		RD-25VJ101X
R10	Carbon R	560		RD-25VJ561X
R11	Carbon R	5.6K		RD-25VJ562X
R12	Carbon R	2.2K		RD-25VJ222X
R13	Carbon R	1K		RD-25VJ102X
R14	Carbon R	3.3K		RD-25VJ332X
R15	Carbon R	2.2K		RD-25VJ222X
R16	Carbon R	82		RD-25VJ820X
R17	Carbon R	470K		RD-25VJ474X
R18	Carbon R	470K		RD-25VJ474X
R19	Carbon R	470		RD-25VJ471X
R20	Carbon R	3.3K		RD-25VJ332X
R21	Carbon R	100K		RD-25VJ104X
R22	Carbon R	100K		RD-25VJ104X
R23	Carbon R	33K		RD-25VJ333X
R24	Carbon R	18K		RD-25VJ183X
R25	Carbon R	18K		RD-25VJ183X
R26	Carbon R	10K		RD-25VJ103X
R29	Carbon R	100		RD-25VJ101X
R30	Carbon R	8.2K		RD-25VJ822X
R31	Carbon R	10K		RD-25VJ103X
R32	Carbon R	220		RD-25VJ221X
R33	Carbon R	68		RD-25VJ680X
R34	Carbon R	10		RD-25VJ100X
R35	Carbon R	33		RD-25VJ330X
R36	Carbon R	270		RD-25VJ271X
R37	M-Oxide Film R	560	1/2W	RG-HANJ561B
R38	Carbon R	10		RD-25VJ100X
R39	Carbon R	100		RD-25VJ101X
R40	Carbon R	4.7K		RD-25VJ472X
R41	Carbon R	33K		RD-25TJ333X
R42	Carbon R	680		RD-25VJ681X
R43	Carbon R	3.3K		RD-25VJ332X
R44	Carbon R	18K		RD-25VJ183X
R45	Carbon R	10K		RD-25VJ103X
R46	Carbon R	560		RD-25VJ561X
R47	Carbon R	1K		RD-25VJ102X
R48	Carbon R	330		RD-25VJ331X
R49	Carbon R	47K		RD-25VJ473X
R50	Carbon R	100K		RD-25VJ104X
R51	Carbon R	330		RD-25VJ331X
R52	Carbon R	3.3K		RD-25VJ332X
R53	Carbon R	120		RD-25VJ121X
R54	Carbon R	1K		RD-25VJ102X
R55	Carbon R	560		RD-25VJ561X
R56	Carbon R	5.6K		RD-25VJ562X
R57	Carbon R	12K		RD-25VJ123X
R58	Carbon R	3.3K		RD-25VJ332X
R59	Carbon R	3.3K		RD-25VJ332X
R60	Carbon R	150		RD-25VJ151X
R61	Carbon R	820		RD-25VJ821X
R62	Carbon R	4.7K		RD-25VJ472X

(All resistors are 1/4W rated unless otherwise specified.)

Symbol No.	Part Name, Description		Part Code
R63	Carbon R	560	RD-25VJ561X
R64	Carbon R	220	RD-25VJ221X
R65	Carbon R	4.7K	RD-25VJ472X
R66	Carbon R	470	RD-25VJ471X
R67	Carbon R	18K	RD-25VJ183X
R68	Carbon R	100	RD-25VJ101X
R69	Carbon R	3.3K	RD-25VJ332X
R70	Carbon R	15K	RD-25VJ153X
R71	Carbon R	1.5K	RD-25VJ152X
R72	Carbon R	150	RD-25VJ151X
R73	Carbon R	100	RD-25VJ101X
R74	Carbon R	15K	RD-25VJ153X
R75	Carbon R	100K	RD-25VJ104X
R77	Carbon R	1K	RD-25VJ102X
R78	Carbon R	3.3K	RD-25VJ332X
R79	Carbon R	12K	RD-25VJ123X
R80	Carbon R	1K	RD-25VJ102X
R81	Carbon R	4.7K	RD-25VJ472X
R82	Carbon R	47K	RD-25VJ473X
R83	Carbon R	220	RD-25VJ221X
R84	Carbon R	3.3K	RD-25VJ332X
R85	Carbon R	4.7K	RD-25VJ472X
R86	Carbon R	470	RD-25VJ471X
R87	Carbon R	220	RD-25VJ221X
R88	Carbon R	3.3K	RD-25VJ332X
R89	Carbon R	100K	RD-25VJ104X
R90	Carbon R	1K	RD-25VJ102X
R91	Carbon R	470K	RD-25VJ474X
R92	Carbon R	10K	RD-25VJ103X
R93	Carbon R	1.5M	RD-25VJ155X
R94	Carbon R	5.6K	RD-25VJ562X
R95	Carbon R	5.6K	RD-25VJ562X
R96	Carbon R	100K	RD-25VJ104X
R97	Carbon R	1M	RD-25VJ105X
R98	Carbon R	10K	RD-25VJ103X
R99	Carbon R	5.6K	RD-25VJ562X
R100	Carbon R	330	RD-25VJ331X
R101	Carbon R	56K	RD-25VJ563X
R102	Carbon R	5.6K	RD-25VJ562X
R103	Carbon R	470	RD-25VJ471X
R104	Carbon R	5.6K	RD-25VJ562X
R105	Carbon R	560	RD-25VJ561X
R106	Carbon R	2.2K	RD-25VJ222X
R107	Carbon R	39K	RD-25VJ393X
R108	Carbon R	10K	RD-25VJ103X
R109	Carbon R	150	RD-25VJ151X
R110	Carbon R	33K	RD-25VJ333X
R111	Carbon R	47	RD-25VJ470X
R112	Carbon R	47	RD-25VJ470X
R113	Carbon R	22K	RD-25VJ223X
R114	Carbon R	47K	RD-25VJ473X
R115	Carbon R	270K	RD-25VJ274X
R116	Carbon R	33K	RD-25VJ333X
R117	Carbon R	68K	RD-25VJ683X
R118	Carbon R	47K	RD-25VJ473X
R120	Carbon R	1K	RD-25VJ102X
R121	Carbon R	1M	RD-25VJ105X
R122	Carbon R	680	RD-25VJ681X
R123	Carbon R	1K	RD-25VJ102X

(All resistors are 1/4W rated unless otherwise specified.)

Symbol No.	Part Name, Description			Part Code
R124	Carbon R	10K		RD-25VJ103X
R125	Carbon R	10K		RD-25VJ103X
R126	Carbon R	2.2K		RD-25VJ222X
R127	Carbon R	1K		RD-25VJ102X
R128	Carbon R	22K		RD-25VJ223X
R129	Carbon R	27K		RD-25VJ273X
R130	Carbon R	5.6K		RD-25VJ562X
R131	Carbon R	5.6K		RD-25VJ562X
R132	Carbon R	10K		RD-25VJ103X
R133	Carbon R	22K		RD-25VJ223X
R134	Carbon R	560		RD-25VJ561X
R135	Carbon R	820		RD-25VJ-821X
R136	Carbon R	47		RD-25VJ470X
R137	Carbon R	1K		RD-25VJ102X
R138	Carbon R	150		RD-25VJ151X
R139	Carbon R	10K		RD-25VJ103X
R140	Carbon R	1K		RD-25VJ102X
R141	Carbon R	4.7K		RD-25VJ472X
R142	Carbon R	2.2K		RD-25VJ222X
R143	Carbon R	2.2K		RD-25VJ222X
R144	Carbon R	4.7K		RD-25VJ472X
R145	Carbon R	3.3K		RD-25VJ332X
R146	Carbon R	1K		RD-25VJ102X
R147	Carbon R	3.3K		RD-25VJ332X
R150	M-Oxide Film R	18	2W	RX-2ANJ180B
R151	Carbon R	2.7K		RD-25VJ272X
R152	Carbon R	2.7K		RD-25VJ272X
R153	Carbon R	2.7K		RD-25VJ272X
R154	Carbon R	2.7K		RD-25VJ272X
R155	Carbon R	2.7K		RD-25VJ272X
R156	Carbon R	2.7K		RD-25VJ272X
R157	M-Oxide Film R	390	1/2W	RG-HANJ391B
R159	Carbon R	390		RD-25VJ391X
R161	M-Oxide Film R	150	1W	RG-1ANJ151B
R166	Carbon R	1K		RD-25VJ102X
R167	Carbon R	3.3K		RD-25VJ332X
R168	Carbon R	5.6K		RD-25VJ562X
R169	Carbon R	56K		RD-25TJ563X
R172	Carbon R	3.3K		RD-25TJ332X
R170	Solid R	270		RC-14GK271X
R175	Carbon R	270		RD-25VJ271X
C1	Mylar Cap	4700P		CQ-MB472KCH
C2	Mylar Cap	0.022		CQ-MB223KCH
C3	Tantalum Cap	0.1/35		CS-SF0R1MDC
C4	Tantalum Cap	0.22/35		CS-SFR22MDC
C5	Tantalum Cap	10/16		CS-SD100MDC
C6	Ceramic Cap	33P	PH	CC-CB330KPM
C7	Ceramic Cap	12P	PH	CC-CB120KPM

Symbol No.	Part Name, Description			Part Code
C8	Elyt Cap	1/50		CE-EG010ALX
C9	Mylar Cap	1000P		CQ-MB102KCH
C10	Mylar Cap	1200P		CQ-MB122KCH
C11	Ceramic Cap	2P	PH	CC-CB020CPM
C12	Ceramic Cap	33P	PH	CC-CB330KPM
C13	Ceramic Cap	33P	PH	CC-CB330KPM
C14	Ceramic Cap	10P	PH	CC-CB100DPM
C15	Mylar Cap	0.01		CQ-MB103KCH
C16	Mylar Cap	0.01		CQ-MB103KCH
C17	Ceramic Cap	33P	PH	CC-CB330KPM
C18	Mylar Cap	1000P		CQ-MB102KCH
C19	Ceramic Cap	220P	PH	CC-CB221KPM
C20	Ceramic Cap	22P	CH	CC-CB220KCM
C21	Ceramic Cap	15P	CH	CC-CB150KCM
C22	Mylar Cap	0.01		CQ-MB103KCH
C23	Mylar Cap	1000P		CQ-MB102KCH
C24	Ceramic Cap	68P	PH	CC-CB680KPM
C25	Elyt Cap	47/6.3		CE-EB470ALX
C26	Mylar Cap	0.047		CQ-MB473KCH
C27	Ceramic Cap	0.047		CK-DB473ZFM
C28	Mylar Cap	1000P		CQ-MB102KCH
C29	Ceramic Cap	5P	PH	CC-CB050DPM
C30	Ceramic Cap	68P	PH	CC-CB680KPM
C31	Ceramic Cap	27P	CH	CC-CB270KCM
C32	Ceramic Cap	560P	SL	CC-CB561KOT
C33	Elyt Cap	1/50		CE-EG010ALX
C34	Mylar Cap	0.01		CQ-MB103KCH
C35	Mylar Cap	0.01		CQ-MB103KCH
C36	Ceramic Cap	150P	PH	CC-CB151KPM
C37	Ceramic Cap	82P	PH	CC-CB820KPM
C38	Ceramic Cap	56P	PH	CC-DB560KPM
C39	Mylar Cap	0.01		CQ-MB103KCH
C40	Mylar Cap	0.01		CQ-MB103KCH
C42	Ceramic Cap	3P	PH	CC-CB030CPM
C43	Ceramic Cap	47P	PH	CC-CB470KPM
C45	Mylar Cap	0.01		CQ-MB103KCH
C46	Mylar Cap	0.01		CQ-MB103KCH
C47	Ceramic Cap	47P	PH	CC-CB470KPM
C48	Mylar Cap	0.01		CQ-MB103KCH
C49	Ceramic Cap	390P	SL	CC-CB391KOM
C50	Mylar Cap	0.01		CQ-MB103KCH
C51	Mylar Cap	0.047		CQ-MB473KCH
C52	Ceramic Cap	82P	PH	CC-CB820KPM
C53	Ceramic Cap	220P	PH	CC-CB221KPM
C54	Ceramic Cap	150P	PH	CC-CB151KPM
C55	Ceramic Cap	560P	SL	CC-CB561KOT
C56	Ceramic Cap	47P	PH	CC-CB470KPM
C57	Ceramic Cap	470P	SL	CC-CB471KOT
C58	Tantalum Cap	0.22/35		CS-SFR22MDC
C59	Mylar Cap	0.01		CQ-MB103KCH
C60	Ceramic Cap	5P	PH	CC-CB050DPM
C61	Ceramic Cap	2P	PH	CC-CB020CPM
C62	Mylar Cap	0.01		CQ-MB103KCH
C63	Elyt Cap	1/50		CE-EG010ALX
C64	Mylar Cap	0.01		CQ-MB103KCH
C65	Ceramic Cap	39P	CH	CC-CB390KCM
C66	Ceramic Cap	10P	CH	CC-CB100DCM
C67	Mylar Cap	1000P		CQ-MB102KCH
C68	Ceramic Cap	22P	PH	CC-CB220KPM

Symbol No.	Part Name, Description			Part Code
C69	Ceramic Cap	220P	PH	CC-CB221KPM
C70	Ceramic Cap	220P	PH	CC-CB221KPM
C71	Ceramic Cap	8P	PH	CC-CB080DPM
C72	Ceramic Cap	100P	PH	CC-CB101KPM
C73	Ceramic Cap	33P	PH	CC-CB330KPM
C74	Ceramic Cap	22P	PH	CC-CB220KPM
C75	Mylar Cap	0.01		CQ-MB103KCH
C76	Tantarum Cap	0.22/35		CS-SFR22MDC
C77	Mylar Cap	0.01		CQ-MB103KCH
C78	Tantarum Cap	0.22/35		CS-SFR22MDC
C79	Mylar Cap	0.01		CQ-MB103KCH
C80	Elyt Cap	10/16		CE-ED100ALX
C81	Mylar Cap	0.01		CQ-MB103KCH
C82	Mylar Cap	0.01		CQ-MB103KCH
C83	Mylar Cap	0.01		CQ-MB103KCH
C84	Mylar Cap	0.01		CQ-MB103KCH
C85	Mylar Cap	0.01		CQ-MB103KCH
C86	Mylar Cap	0.01		CQ-MB103KCH
C87	Tantalum Cap	0.22/35		CS-SFR22MDC
C88	Mylar Cap	0.01		CQ-MB103KCH
C89	Mylar Cap	0.01		CQ-MB103KCH
C90	Mylar Cap	0.01		CQ-MB103KCH
C91	Mylar Cap	0.01		CQ-MB103KCH
C92	Mylar Cap	0.01		CQ-MB103KCH
C93	Mylar Cap	0.01		CQ-MB103KCH
C94	Mylar Cap	0.01		CQ-MB103KCH
C95	Ceramic Cap	6P	PH	CC-CB060DPM
C96	Ceramic Cap	33P	PH	CC-CB330KPM
C97	Elyt Cap	33/6.3		CE-EB330ALX
C98	Mylar Cap	1000P		CQ-MB102KCH
C99	Mylar Cap	0.01		CQ-MB103KCH
C100	Ceramic Cap	33P	PH	CC-CB330KPM
C101	Mylar Cap	0.01		CQ-MB103KCH
C102	Mylar Cap	0.047		CQ-MB473KCH
C103	Mylar Cap	0.01		CQ-MB103KCH
C104	Ceramic Cap	3P	PH	CC-CB030CPM
C105	Mylar Cap	0.01		CQ-MB103KCH
C106	Mylar Cap	0.01		CQ-MB103KCH
C107	Ceramic Cap	39P	PH	CC-CB390KPM
C108	Elyt Cap	1/50		CE-EG010ALX
C109	Mylar Cap	0.01		CQ-MB103KCH
C110	Mylar Cap	0.01		CQ-MB103KCH
C111	Mylar Cap	0.01		CQ-MB103KCH
C112	Ceramic Cap	5P	PH	CC-CB050DPM
C113	Ceramic Cap	220P	PH	CC-CB221KPM
C114	Mylar Cap	4700P		CQ-MB472KCH
C115	Mylar Cap	1000P		CQ-MB102KCH
C116	Mylar Cap	0.033		CQ-MB333KCH
C117	Mylar Cap	4700P		CQ-MB472KCH
C118	Mylar Cap	0.01		CQ-MB103KCH
C119	Elyt Cap	10/16		CE-ED100ALX
C121	Mylar Cap	1000P		CQ-MB102KCH
C122	Ceramic Cap	27P	PH	CC-CB270KPM
C123	Mylar Cap	0.033		CQ-MB333KCH
C124	Mylar Cap	0.01		CQ-MB103KCH
C125	Mylar Cap	0.033		CQ-MB333KCH
C126	Mylar Cap	0.01		CQ-MB103KCH
C127	Tantalum Cap	10/16		CS-SD100MDN
C128	Mylar Cap	4700P		CQ-MB472KCH
C129	Elyt Cap	3.3/25		CE-EE3R3ALX

Symbol No.	Part Name, Description			Part Code
C130	Mylar Cap	0.033		CQ-MB333KCH
C131	Elyt Cap	4.7/25		CE-EE4R7ALX
C132	Mylar Cap	4700P		CQ-MB472KCH
C133	Ceramic Cap	220P	SL	CC-CB221KOM
C135	Elyt Cap	1/50		CE-EG010ALX
C136	Mylar Cap	0.01		CQ-MB103KCH
C137	Mylar Cap	0.01		CQ-MB103KCH
C138	Ceramic Cap	100P	PH	CC-CB101KPM
C139	Ceramic Cap	22P	PH	CC-CB220KPM
C140	Ceramic Cap	5P	PH	CC-CB050DPM
C141	Tantalum Cap	1/25		CS-SE010MDC
C142	Elyt Cap	3.3/25		CE-EE3R3ALX
C143	Tantalum Cap	1/25		CS-SE010MDC
C144	Mylar Cap	0.01		CQ-MB103KCH
C145	Elyt Cap	10/16		CE-ED100ALX
C146	Mylar Cap	0.01		CQ-MB103KCH
C148	Elyt Cap	47/10		CE-EC470ALX
C149	Mylar Cap	0.01		CQ-MB103KCH
C150	Elyt Cap	4.7/25		CE-EE4R7ALX
C151	Mylar Cap	2200P		CQ-MB222KCH
C152	Mylar Cap	0.022		CQ-MB223KCH
C153	Ceramic Cap	220P	SL	CC-CB221KOM
C154	Mylar Cap	0.01		CQ-MB103KCH
C155	Mylar Cap	2200P		CQ-MB222KCH
C156	Tantalum Cap	3.9/10		CS-SC3R9MDC
C157	Ceramic Cap	68P	SL	CC-CB680KOM
C158	Ceramic Cap	150P	SL	CC-CB151KOM
C159	Ceramic Cap	68P	SL	CC-CB680KOM
C160	Elyt Cap	33/6.3		CE-EB330ALX
C161	Mylar Cap	0.068		CQ-MB683KCH
C162	Elyt Cap	47/16		CE-ED470ALX
C163	Ceramic Cap	100P	SL	CC-CB101KOM
C164	Elyt Cap	1/50		CE-EG010ALX
C165	Ceramic Cap	0.047		CK-CB473ZFM
C166	Elyt Cap	2200/16		CE-ED222ALX
C167	Elyt Cap	330/16		CE-ED331ALX
C168	Elyt Cap	100/16		CE-ED101ALX
C169	Mylar Cap	0.01		CQ-MB103KCH
C170	Elyt Cap	0.47/50		CE-EGR47ALX
C171	Elyt Cap	47/6.3		CE-EB470ALX
C172	Mylar Cap	0.01		CQ-MB103KCH
C173	Elyt Cap	1/50		CE-EG010ALX
C174	Mylar Cap	0.01		CQ-MB103KCH
C175	Elyt Cap	2.2/25		CE-EE2R2ALX
C176	Elyt Cap	47/16		CE-ED470ALX
C178	Elyt Cap	33/16		CE-ED330ALX
C179	Elyt Cap	47/16		CE-ED470ALX
C180	Ceramic Cap	0.047		CK-CB473ZFM
C181	Ceramic Cap	0.047		CK-CB473ZFM
C182	Elyt Cap	0.47/50		CE-EGR47ALX
C183	Mylar Cap	1000P		CQ-MB102KCH
C184	Ceramic Cap	270PF	SL	CC-CB271KOM
C185	Ceramic Cap	39PF	PM	CC-CB390KPM
C186	Ceramic Cap	220PF	PH	CC-CB221KPM
C187	Ceramic Cap	18P	PH	CC-CB180KPM
C188	Ceramic Cap	18P	PH	CC-CB180KPM
C189	Ceramic Cap	0.047		CK-CB473ZFM
C190	Mylar Cap	0.01		CQ-MB103KCH

Symbol No.	Part Name, Description			Part Code
C191	Mylar Cap	0.01		CQ-MB103KCH
C192	Mylar Cap	0.047		CQ-MB473KCH
C194	Ceramic Cap	100P	SL	CC-CB101KOM
C195	Mylar Cap	2200P		CQ-MB222KCH
C196	Ceramic Cap	82P	SL	CC-CB820KOM
C197	Ceramic Cap	2200pF (B)		CK-CB222KBM
C198	Ceramic Cap	0.047		CK-DB473ZFM
C901	Tantarum Cap	0.22/35		CS-SFR22MDC
	Resistor Array	1.8Kx7	1/4W	RA-C182M97N
	Transistor	2SC1383 or 2SC2074		QT-C1383XAN
	Carbon R	5.6K		RD-25RJ562X
C251	Ceramic Cap	.01	E	CK-CB103PEM

WARRANTY SERVICE INSTRUCTIONS

1. Refer to instruction manual for adjustments that may be applicable.

2. Defective parts removed from units which are within the warranty period should be sent to the factory prepaid with model and serial number of product from which removed and date of product purchase. These parts will be exchanged at no charge.

3. If the above mentioned procedures do not correct the difficulty, pack the product securely using the same packaging arrangement as supplied by the manufacturer. A detailed list of troubles encountered must be enclosed as well as your name and address. Forward prepaid (enclose $2.50 for return postage, insurance and handling) to the nearest Colt authorized service agency:

   Contact your local Colt Dealer for the name and location of your nearest service agency, or write to:

   COLT SERVICE CENTER
   5424 West Touhy
   Skokie, Ill. 60077

WARRANTY POLICY

This instrument is warranted under the conditions outlined below to its original, registered owner, provided the purchase was made from an authorized Colt dealer.

This instrument is guaranteed to remain free from operating defects for ninety (90) days from the date of purchase. In the event that service is required, all necessary parts and labor will be furnished free of charge during this period.

This warranty is void if the serial number has been altered, removed, or defaced. The warranty is void if the equipment is altered, misused, mishandled, maladjusted, or is serviced by any parties not specifically authorized by Colt. The warranty does not include any transportation costs incurred because of the need for service, unless a special agreement is provided in writing by the Colt National Service Manager.

Colt reserves the right to make changes in design and improve upon its products without any obligation to install these improvements in any of its products previously manufactured.

There is no implied warranty of merchantability with respect to this instrument, nor are there any other warranties which extend beyond the description on the face thereof.

To register this warranty, the enclosed Colt warranty registration card should be completed and mailed five days after date of purchase.

CITIZENS BAND RADIO SERVICE

Channel	Channel Frequency in MHz	Channel	Channel Frequency in MHz
1	26.965	21	27.215
2	26.975	22	27.225
3	26.985	23	27.255
4	27.005	24	27.235
5	27.015	25	27.245
6	27.025	26	27.265
7	27.035	27	27.275
8	27.055	28	27.285
9	27.065	29	27.295
10	27.075	30	27.305
11	27.085	31	27.315
12	27.105	32	27.325
13	27.115	33	27.335
14	27.125	34	27.345
15	27.135	35	27.355
16	27.155	36	27.365
17	27.165	37	27.375
18	27.175	38	27.385
19	27.185	39	27.395
20	27.205	40	47.405

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