

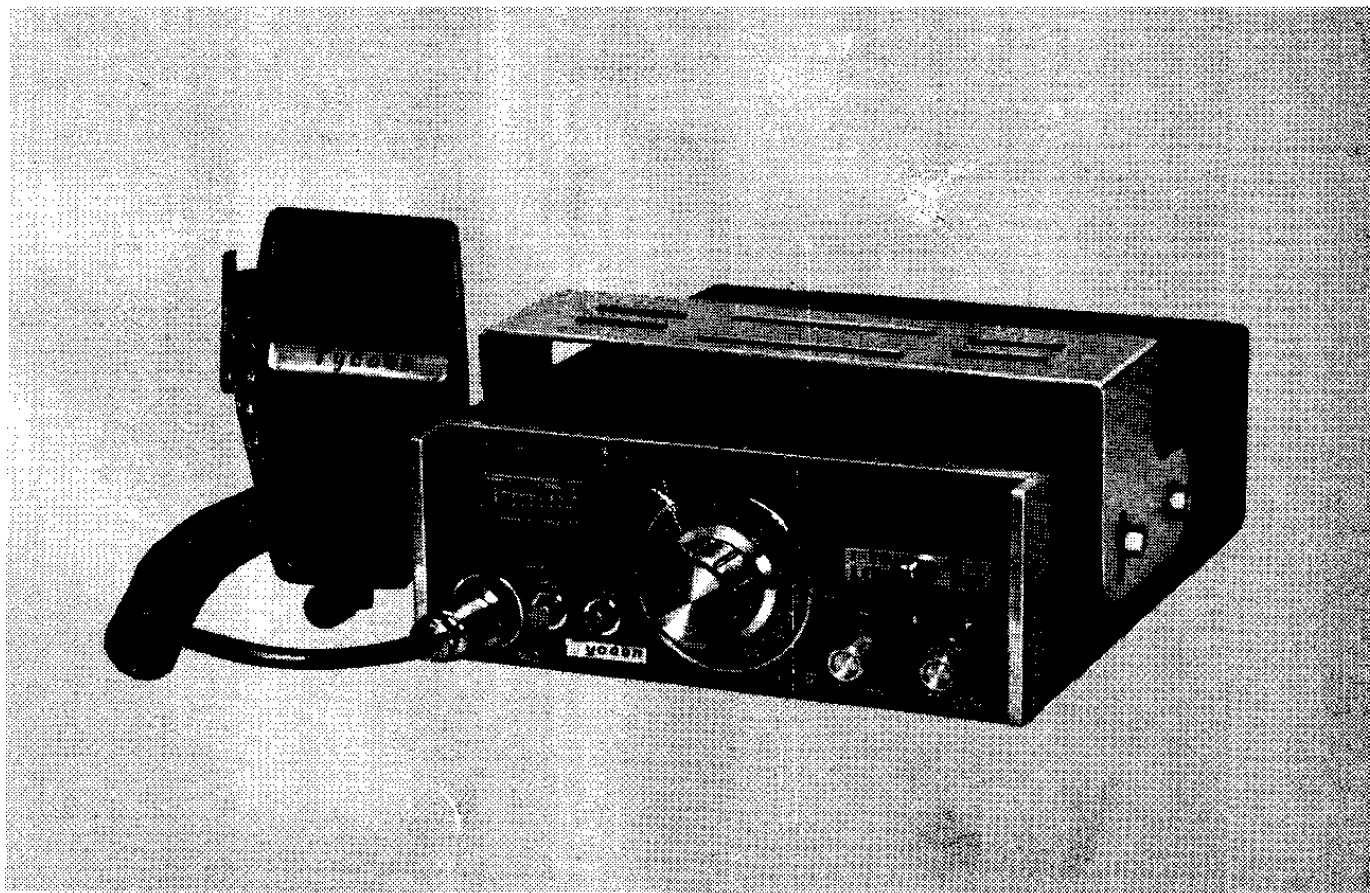
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Tycoon

Model : CB-746

46 CHANNEL MOBILE/MARINE SYNTHESIZED TRANSCEIVER



INSTRUCTION HANDBOOK

POWER CONNECTION

When the CB-746 is used in a car or boat, the 12V battery supplied the necessary power.

NOTE: CB-746 has a floating chassis and may be used with either positive or negative ground systems, but it is designed for 12V power source.

Negative Ground: When using the CB-746 with a 12V negative ground system, the positive wire (red) must be connected to the plus terminal of the battery, and the negative wire (black) should be grounded to the minus terminal of the battery or chassis.

Positive Ground: When using the CB-746 with a 12V positive ground system, the negative wire (black) must be connected to the minus terminal of the battery and the positive wire (red) should be grounded to the plus terminal of the battery or chassis.

To insure proper operation, care should also be taken in attaching the transceiver and mounting bracket to your car or boat in such a way as to obtain a good ground connection at this point.

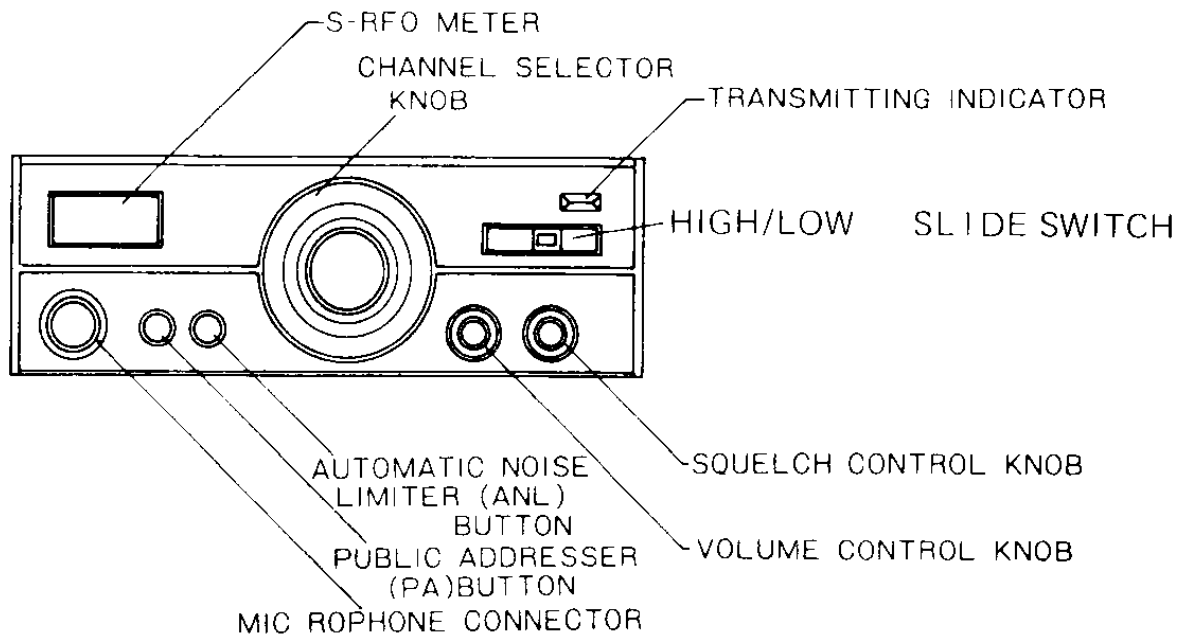
ANTENNA INSTALLATION

A vertical whip antenna which is a six foot fibreglass covered antenna with self contained lay-down mounting hardware and does not require a ground plate is best suited for boat operation.

For mobile use a base loaded antenna of a quarter wave length should be used. This antenna uses the car frame as a ground plane and the shield of the base lead as well as the metal case of CB-746 should be grounded.

OPERATING CONTROLS AND FUNCTIONS

FIG. 2



VOLUME CONTROL AND ON-OFF SWITCH

The volume control varies the sound output of the loud speaker. To turn set on and to increase volume, turn on-off switch clockwise.

To turn set off and to decrease volume, turn on-off switch counterclockwise.

CHANNEL SELECTOR:

The channel selector control on the front panel selects both receiver and transmitter frequencies simultaneously. Make sure the switch is set to desired channel.

A lamp which indicates the selected channel is located behind the front panel and illuminates the selector dial.

SQUELCH CONTROL

The squelch control is designed to reduce excessive noise such as highline interference, ignition noise, etc. Turn the control fully counterclockwise and increase the volume until noise or a signal is heard.

When only noise is present, turn the squelch control clockwise until the noise is blanked out.

TRANSMITTER INDICATION LAMP:

This red lens light operates when you press the push-to-talk button on the microphone and shows that your transceiver is in the transmit mode.

S-RFO METER:

This is a dual purpose meter that measures the relative strength of incoming signals, indicated on the top scale, when receiving and the relative power output, indicated on the bottom scale, when transmitting.

PUBLIC ADDRESSER (PA):

This unit may be used as a paging amplifier by connecting a suitable 8-16 ohms speaker or trumpet speaker to the PA. SP jack located on the rear and setting the PA-CB switch to the PA position. Press and hold the push-to-talk button on the microphone and speak to the microphone at normal voice.

AUTOMATIC NOISE LIMITTER (ANL):

This switch controls the noise limiter circuit which has been designed to reduce excessive electrical interference, ignition noise etc.

HIGH/LOW SLIDE SWITCH:

Set this switch to **LOW** position for Channel No. 1 (26.965 MHz) ~ Channel No. 23 (27.255 MHz). Set to **HIGH** position for Channel No. 24 (27.265 MHz) ~ Channel No. 46 (27.555 MHz).

GENERAL OPERATING INSTRUCTIONS

1. Check to see if proper connections have been made on power cable and antenna.

CAUTION: Do not transmit until an antenna or suitable dummy load has been connected to the antenna output connector.

2. Set the channel selector and the HIGH/LOW Slide Switch to the desired channel.
3. Turn the set on.
4. Adjust the volume and squelch controls.
5. To transmit, press the push-to-talk button on the microphone and hold it down. Hold the microphone 2 to 3 inches from your lips and speak in a normal tone of voice.
To receive, release the push-to-talk button.

SPECIFICATIONS

Receiver System	: Dual conversion superheterodyne with 455 KHz ceramic filter and automatic noise limiter
Frequency Tolerance	: $\pm 0.005\%$
Transmitter Circuit	: Crystal controlled
Transmitter Power	: 5 Watts input power to final amplifier
Modulation system	: AM Emitter Modulation
Intermediate Frequency	: 1st 10.000 MHz/10.020/10.040 2nd 455 KHz
Receiver Sensitivity	: 1 μ V at 10 db S/N
Squelch Sensitivity	: 1 μ V Max
Speaker	: 3" PM Dynamic 8 ohm
Antenna Impedance	: 50 ohm
Audio Power	: 3.5 Watts external
Dimension	: 6-1/2"(W) x 2-7/16"(H) x 9-1/2"(D)
Weight	: 4.5 lbs
Accessories	: Microphone 1 pc. Microphone hanger 1 pc. Mobile mounting bracket 1 pc. DC power cord (Wired into unit) 1 pc.
Power supply	: DC 12V

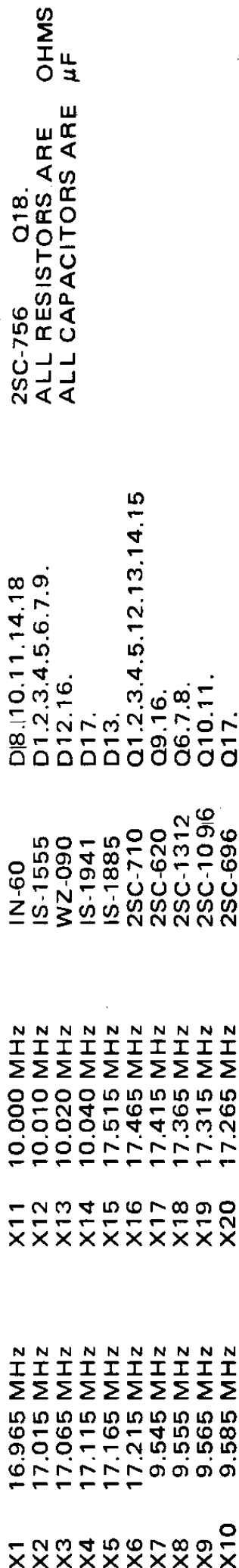
CHANNEL FREQUENCY

Semiconductors : 18-Transistor, 17-Diode and 2-Varistor

Channel : 46 Channel

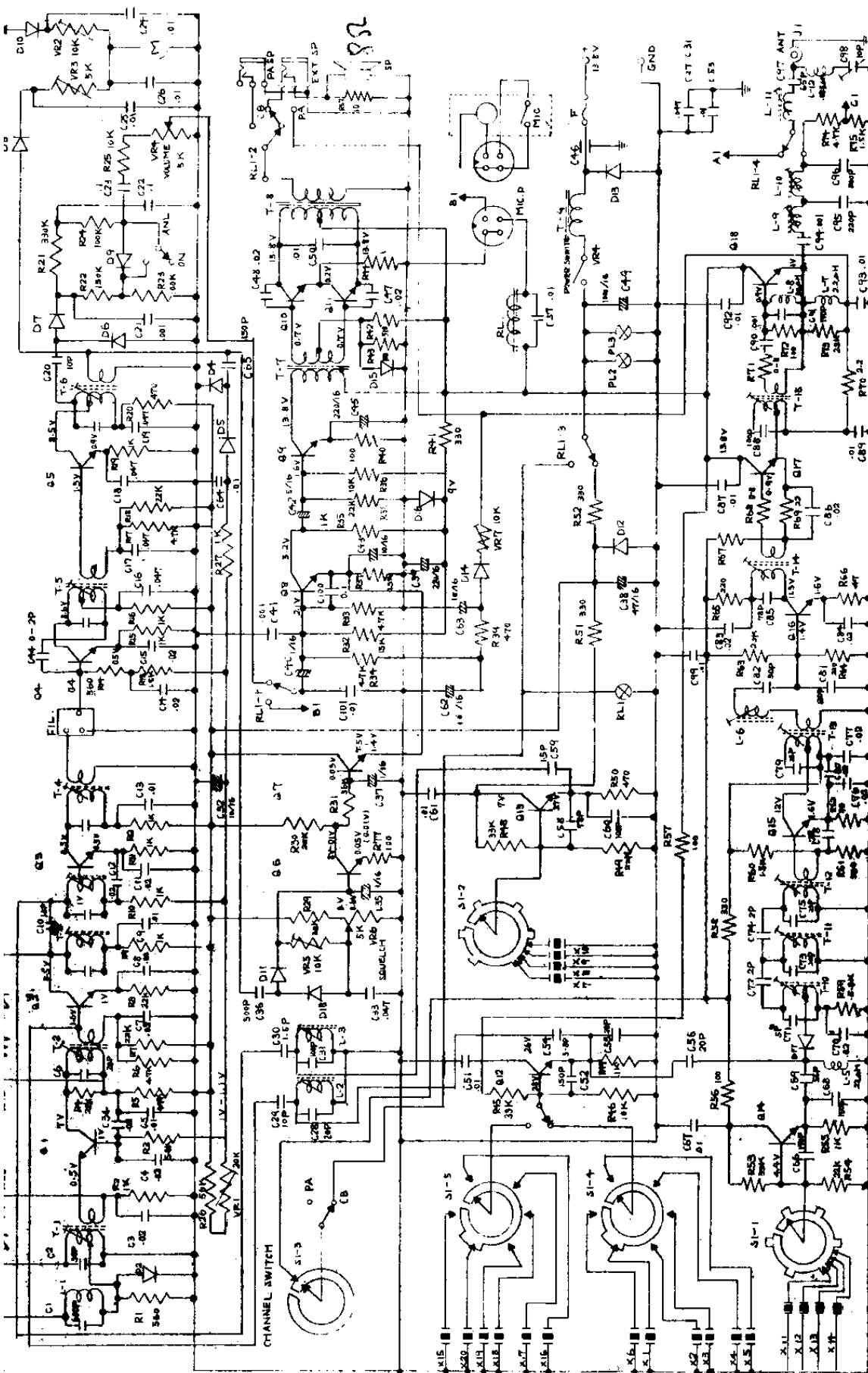
Frequency	: Channel	Frequency(MHz)	Channel	Frequency(MHz)
	1.	26.965	24.	27.265
	2.	26.975	25.	27.275
	3.	26.985	26.	27.285
	4.	27.005	27.	27.305
	5.	27.015	28.	27.315
	6.	27.025	29.	27.325
	7.	27.035	30.	27.335
	8.	27.055	31.	27.355
	9.	27.065	32.	27.365
	10.	27.075	33.	27.375
	11.	27.085	34.	27.385
	12.	27.105	35.	27.405
	13.	27.115	36.	27.415
	14.	27.125	37.	27.425
	15.	27.135	38.	27.435
	16.	27.155	39.	27.455
	17.	27.165	40.	27.465
	18.	27.175	41.	27.475
	19.	27.185	42.	27.485
	20.	27.205	43.	27.505
	21.	27.215	44.	27.515
	22.	27.225	45.	27.525
	23.	27.255	46.	27.555

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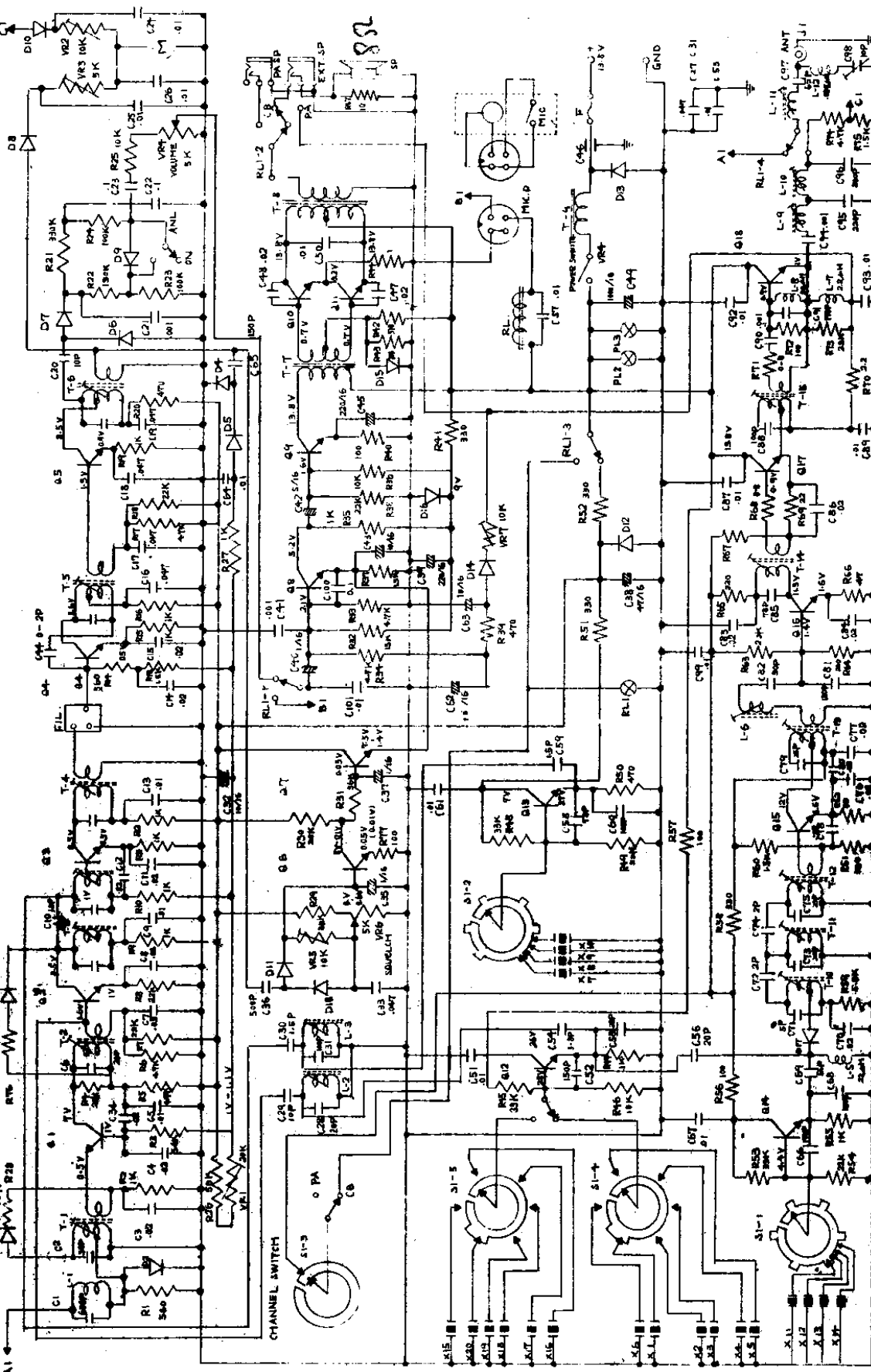
SCHEMATIC DIAGRAM

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X1	16.965 MHZ	X11	10.000 MHZ	IN-60	D8,10,11,14,18	2SC-756	Q18.
X2	17.015 MHZ	X12	10.010 MHZ	IS-1555	D1,2,3,4,5,6,7,9.	ALL RESISTORS ARE	OHMS
X3	17.065 MHZ	X13	10.020 MHZ	WZ-090	D12,16.	ALL CAPACITORS ARE	μF
X4	17.115 MHZ	X14	10.040 MHZ	IS-1941	D17.		
X5	17.165 MHZ	X15	17.515 MHZ	IS-1885	D13.		
X6	17.215 MHZ	X16	17.465 MHZ	2SC-710	Q1,2,3,4,5,12,13,14,15		
X7	9.545 MHZ	X17	17.415 MHZ	2SC-620	Q9,16.		
X8	9.555 MHZ	X18	17.365 MHZ	2SC-1312	Q6,7,8.		
X9	9.565 MHZ	X19	17.315 MHZ	2SC-1096	Q10,11.		
X10	9.585 MHZ	X20	17.265 MHZ	2SC-696	Q17.		

SCHEMATIC DIAGRAM



- | | | | | | | | |
|-----|------------|-----|------------|-----------|------------------------|--------------------|------|
| X1 | 16.965 MHZ | X11 | 10.000 MHZ | IN-60 | D18,10.11.14.18 | 2SC-756 | Q18. |
| X2 | 17.015 MHZ | X12 | 10.010 MHZ | IS-1555 | D1.2.3.4.5.6.7.9. | ALL RESISTORS ARE | OHMS |
| X3 | 17.065 MHZ | X13 | 10.020 MHZ | WZ-090 | D12.16. | ALL CAPACITORS ARE | μF |
| X4 | 17.115 MHZ | X14 | 10.040 MHZ | IS-1941 | D17. | | |
| X5 | 17.165 MHZ | X15 | 17.515 MHZ | IS-1885 | D13. | | |
| X6 | 17.215 MHZ | X16 | 17.465 MHZ | 2SC-710 | Q1.2.3.4.5.12.13.14.15 | | |
| X7 | 9.545 MHZ | X17 | 17.415 MHZ | 2SC-620 | Q9.16. | | |
| X8 | 9.555 MHZ | X18 | 17.365 MHZ | 2SC-1312 | Q6.7.8. | | |
| X9 | 9.565 MHZ | X19 | 17.315 MHZ | 2SC-10916 | Q10.11. | | |
| V10 | 0.585 MHZ | V20 | 17.365 MHZ | 2SC-620 | Q17. | | |

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