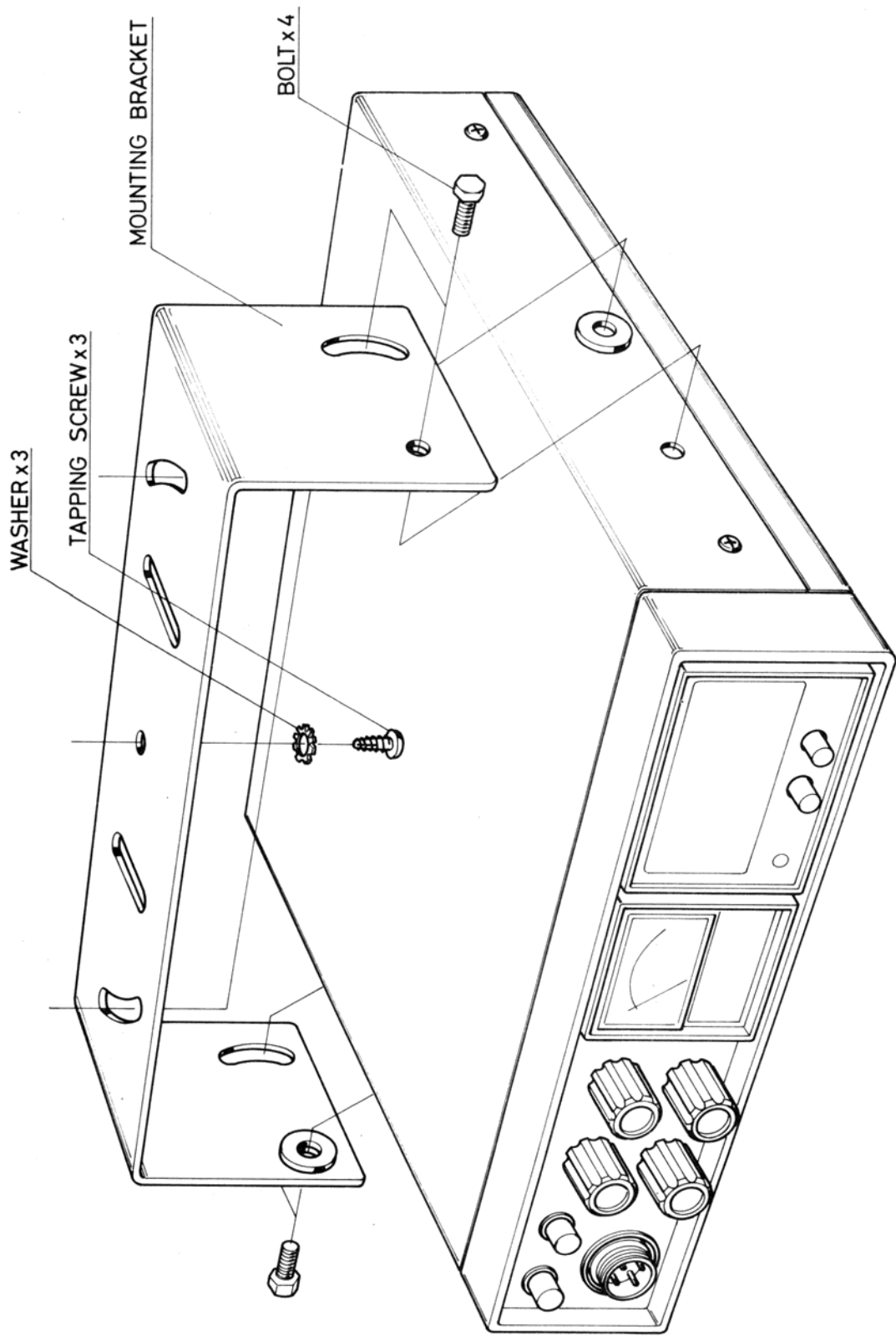


# MOUNTING INSTRUCTIONS



## GENERAL OPERATING PROCEDURE

**CAUTION: BEFORE OPERATING THIS TRANSCEIVER, YOU ARE REQUIRED BY LAW TO READ AND UNDERSTAND PART 95 OF THE FCC RULES AND REGULATIONS.**

### Receiver

- a. Turn all rotary controls fully counter clockwise.
- b. Put PA-CB switch to the CB position.
- c. Put ANL-OFF switch to the ANL position.
- d. Put Bright-Dim switch to the Bright position.
- e. Connect the power leads and antenna to the unit.
- f. Rotate the Tune control clockwise to its center position.
- g. Rotate the Volume/Power On-Off switch clockwise until an audible "click" is heard. The Digi-Tron dial and meter lights will come on. Continue advancing this control clockwise until the desired listening level is reached.
- h. Depress either the front panel channel dial switch or remote channel change switch (on microphone) until the desired channel is attained.
- i. With no signal present, rotate the Squelch control clockwise until the "rushing" noise coming from the speaker disappears. Careful adjustment of the squelch control is a necessity. If the squelch is advanced too far, you may miss a call from a weak station.
- j. Whenever a signal is heard, adjust the Tune control for maximum reading of the unit's receiving meter.
- k. Adjust the Tone control for desired sound quality level.

## TRANSMITTER

**WARNING: IT IS ILLEGAL AND AGAINST THE RULES OF THE FEDERAL COMMUNICATIONS COMMISSION TO OPERATE THE TRANSMITTER SECTION OF THIS TRANSCEIVER WITHOUT HOLDING A VALID CLASS D CITIZENSBAND LICENSE.**

- a. Select the channel you desire to operate.
- b. Plug in the microphone.
- c. Depress the Push-To-Talk switch on the microphone. Hold the microphone 3 to 4 inches from your mouth and talk in a normal voice.

**NOTE: IF THE WPC LIGHT COMES AND THE TRANSMIT METER SHOWS NO OUTPUT THERE IS A PROBLEM WITH YOUR ANTENNA OR CABLE. CHECK YOUR ANTENNA SYSTEM FOR DEFECTS.**

### Public Address

Your 1-610 can be used as a hailer or paging system. An optional paging speaker (Royce 2-060 or equivalent) should be connected to the PA jack. To operate, put the PA-CB switch to the "PA" position. The Digi-Tron dial will display the letters PA to give you a visual indication of the PA mode. Depress the Push-To-Talk switch on the microphone to activate the system. Hold the microphone 3 to 4 inches from your mouth and talk in a normal voice level.

## **SERVICING YOUR TRANSCEIVER**

The technical information, diagrams and charts provided in this manual are supplied for the use of a qualified holder of a first or second class radiotelephone license in servicing this transceiver. It is the users responsibility to see that this unit is operating at all times in accordance with the F.C.C. citizens radio service regulations.

If you install your own transceiver, do not attempt to make any transmitter tuning adjustment. Adjustments are prohibited by the F.C.C. unless you hold or are in the presence and under the supervision of a first or second class radiotelephone licensed person. A Citizens Band or Amateur license is not sufficient.

## CRYSTAL FREQUENCY CHART

(A) Group 6 pcs.

X<sup>1</sup> 37.60 MHz  
 X<sup>2</sup> 37.65 MHz  
 X<sup>3</sup> 37.70 MHz  
 X<sup>4</sup> 37.75 MHz  
 X<sup>5</sup> 37.80 MHz  
 X<sup>6</sup> 37.85 MHz

(B) Group 4 pcs.  
 (Transmitting)

X<sup>7</sup> 10.635 MHz  
 X<sup>8</sup> 10.625 MHz  
 X<sup>9</sup> 10.615 MHz  
 X<sup>10</sup> 10.595 MHz

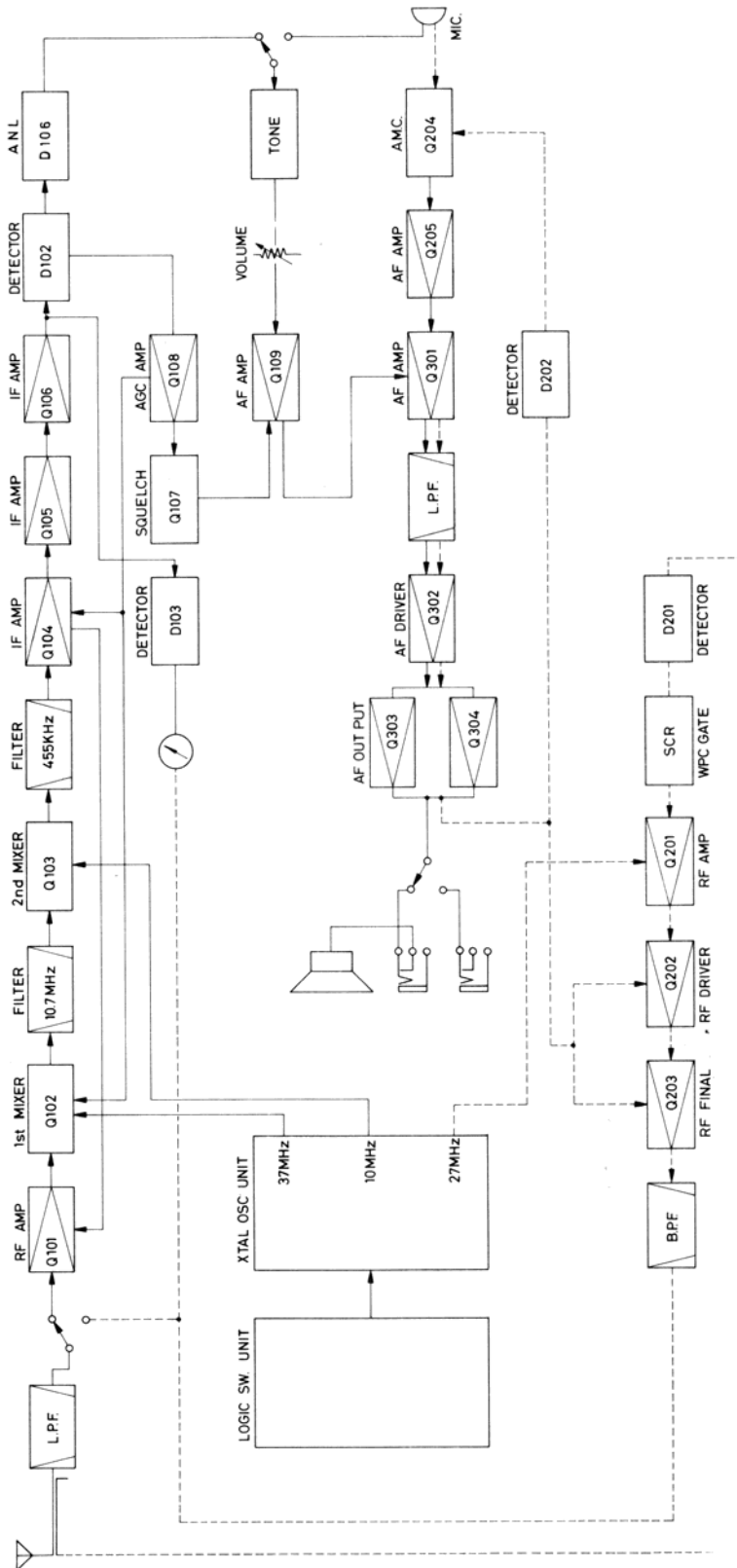
(C) Group 4 pcs.  
 (Receiving)

X<sup>11</sup> 10.18 MHz  
 X<sup>12</sup> 10.17 MHz  
 X<sup>13</sup> 10.16 MHz  
 X<sup>14</sup> 10.14 MHz

CHANNEL	FREQUENCY (MHz)	Combination (Transmit)	Combination (Receive)
1.	26.965	X <sup>1</sup> - X <sup>7</sup>	X <sup>1</sup> - X <sup>11</sup>
2.	26.975	X <sup>1</sup> - X <sup>8</sup>	X <sup>1</sup> - X <sup>12</sup>
3.	26.985	X <sup>1</sup> - X <sup>9</sup>	X <sup>1</sup> - X <sup>13</sup>
4.	27.005	X <sup>1</sup> - X <sup>10</sup>	X <sup>1</sup> - X <sup>14</sup>
5.	27.015	X <sup>2</sup> - X <sup>7</sup>	X <sup>2</sup> - X <sup>11</sup>
6.	27.025	X <sup>2</sup> - X <sup>8</sup>	X <sup>2</sup> - X <sup>12</sup>
7.	27.035	X <sup>2</sup> - X <sup>9</sup>	X <sup>2</sup> - X <sup>13</sup>
8.	27.055	X <sup>2</sup> - X <sup>10</sup>	X <sup>2</sup> - X <sup>14</sup>
9.	27.065	X <sup>3</sup> - X <sup>7</sup>	X <sup>3</sup> - X <sup>11</sup>
10.	27.075	X <sup>3</sup> - X <sup>8</sup>	X <sup>3</sup> - X <sup>12</sup>
11.	27.085	X <sup>3</sup> - X <sup>9</sup>	X <sup>3</sup> - X <sup>13</sup>
12.	27.105	X <sup>3</sup> - X <sup>10</sup>	X <sup>3</sup> - X <sup>14</sup>
13.	27.115	X <sup>4</sup> - X <sup>7</sup>	X <sup>4</sup> - X <sup>11</sup>
14.	27.125	X <sup>4</sup> - X <sup>8</sup>	X <sup>4</sup> - X <sup>12</sup>
15.	27.135	X <sup>4</sup> - X <sup>9</sup>	X <sup>4</sup> - X <sup>13</sup>
16.	27.155	X <sup>4</sup> - X <sup>10</sup>	X <sup>4</sup> - X <sup>14</sup>
17.	27.165	X <sup>5</sup> - X <sup>7</sup>	X <sup>5</sup> - X <sup>11</sup>
18.	27.175	X <sup>5</sup> - X <sup>8</sup>	X <sup>5</sup> - X <sup>12</sup>
19.	27.185	X <sup>5</sup> - X <sup>9</sup>	X <sup>5</sup> - X <sup>13</sup>
20.	27.205	X <sup>5</sup> - X <sup>10</sup>	X <sup>5</sup> - X <sup>14</sup>
21.	27.215	X <sup>6</sup> - X <sup>7</sup>	X <sup>6</sup> - X <sup>11</sup>
22.	27.225	X <sup>6</sup> - X <sup>8</sup>	X <sup>6</sup> - X <sup>12</sup>
23.	27.255	X <sup>6</sup> - X <sup>10</sup>	X <sup>6</sup> - X <sup>14</sup>

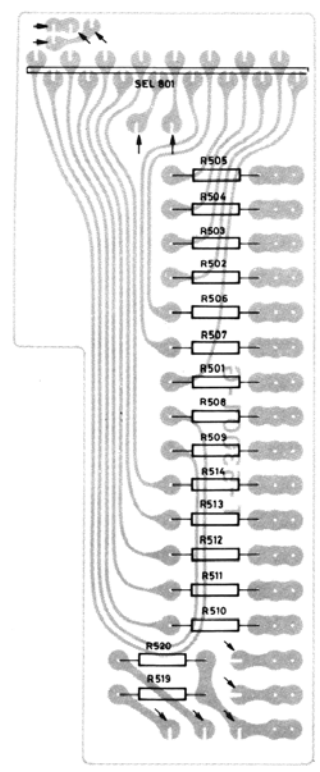
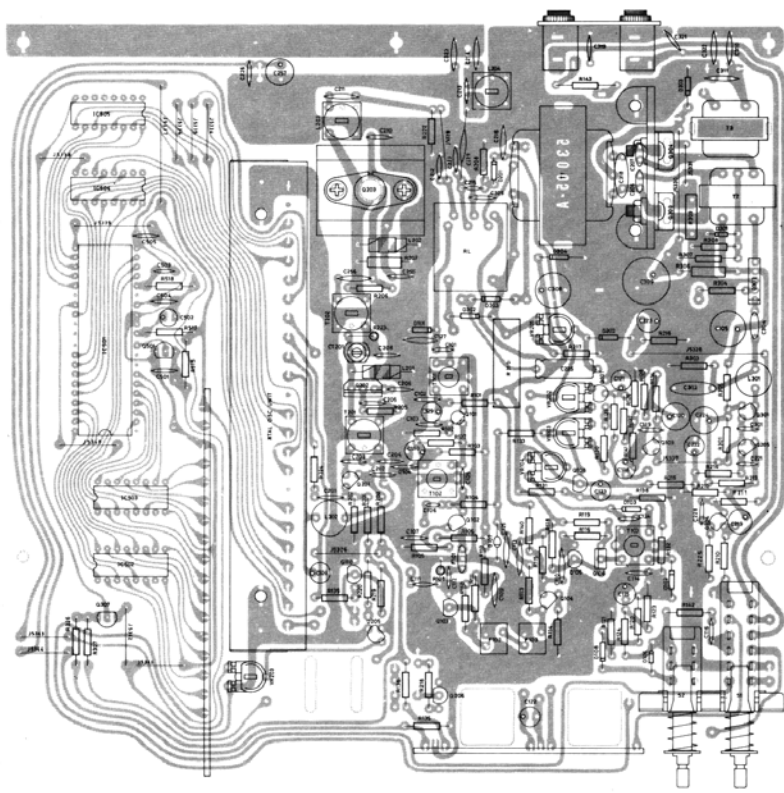
**WARNING: ANY CHANGE OF CRYSTALS OR OTHER COMPONENTS WHICH WOULD RESULT IN VIOLATIONS OF THE FCC TECHNICAL REQUIREMENTS MUST NOT BE MADE. THESE UNAUTHORIZED CHANGES WILL VOID TYPE ACCEPTANCE OF THIS UNIT.**

# BLOCK DIAGRAM

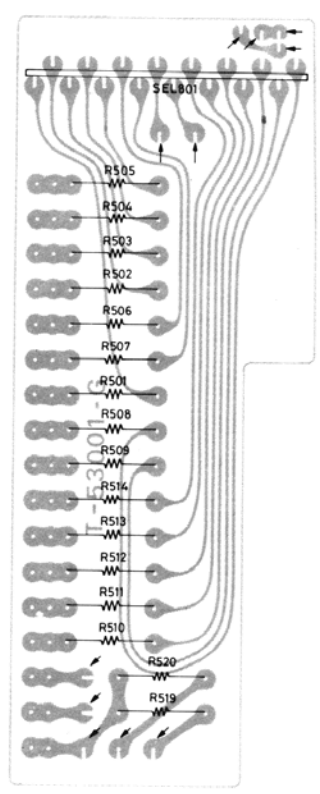
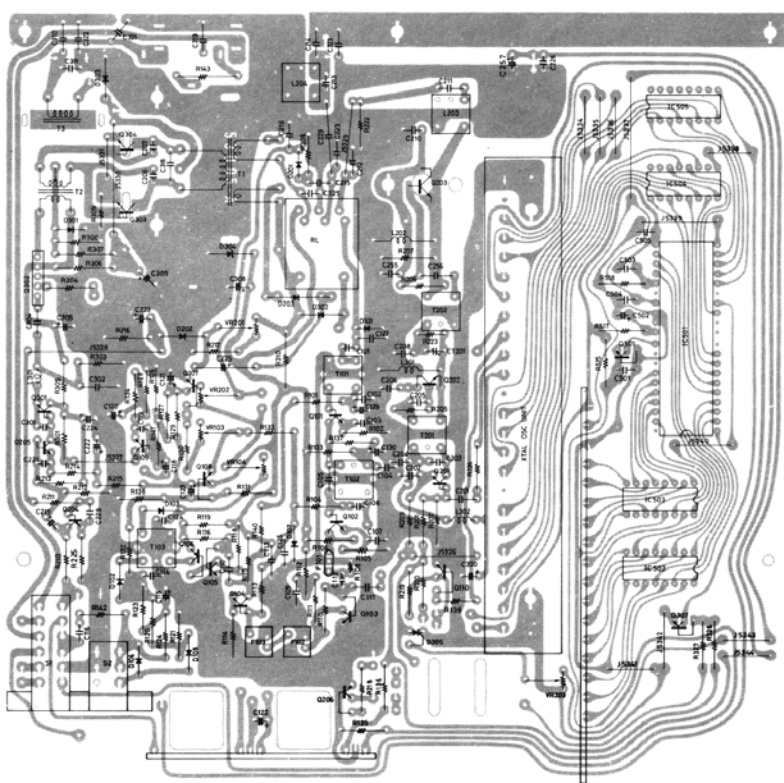


# PARTS LAYOUT

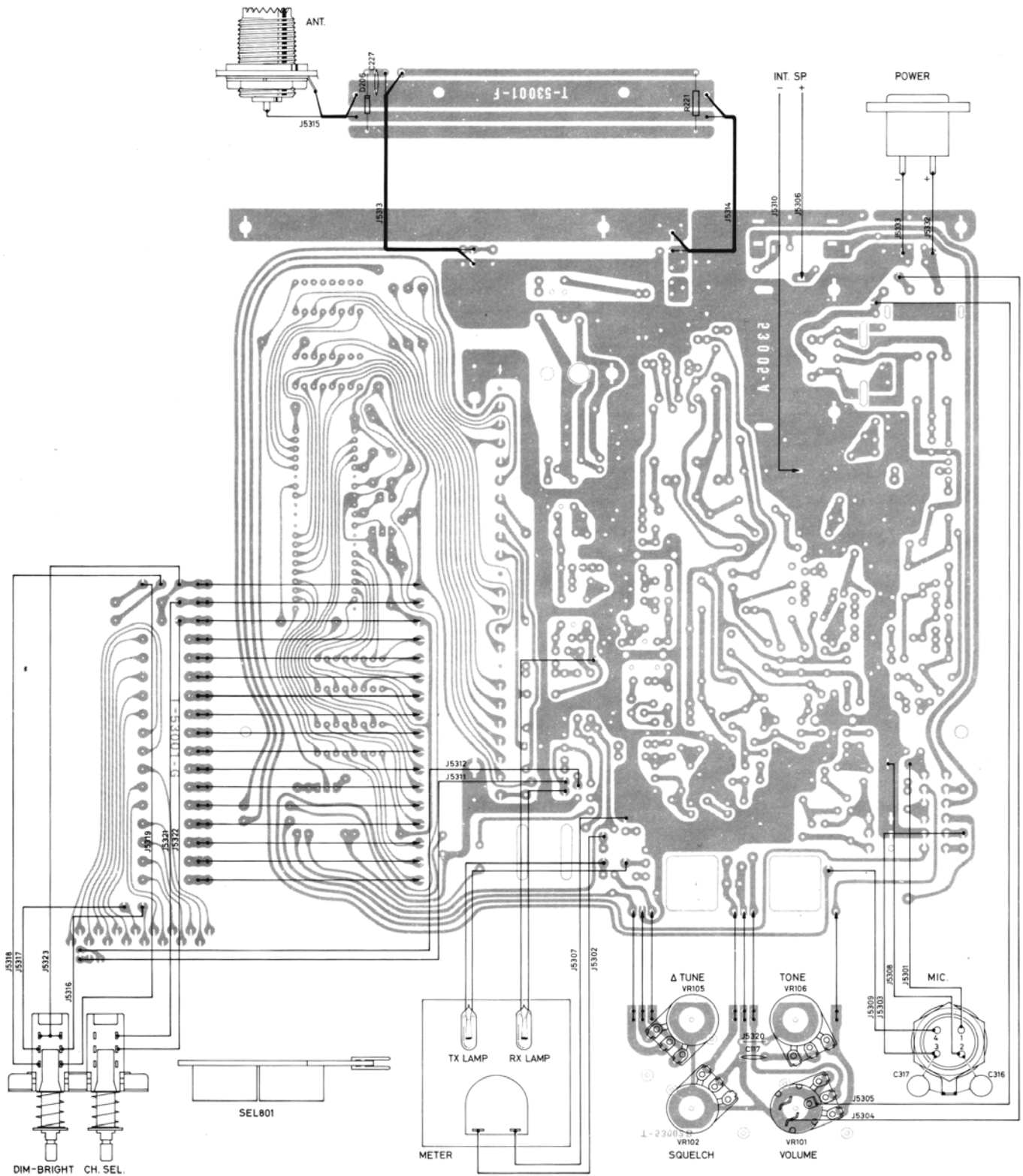
## TOP VIEW



## BACK VIEW



# WIRING DIAGRAM



## FEDERAL COMMUNICATIONS COMMISSIONS REQUIREMENTS

Your new Royce 1-610 is a combination receiver-transmitter designed and built for licensed Class D operation on any of the 23 frequencies designated as citizens band channels by the Federal Communications Commission. You are required to read and understand Part 95 of the F.C.C. rules and regulations prior to operation of this unit. Part 95 regulations are available for \$2.25 from the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402. You are also required to complete F.C.C. form 505 and submit it to the F.C.C in order to receive your license to operate this unit. F.C.C. regulations will be violated if you transmit with this unit prior to receipt of your license.

**NOTE:** The technical information, diagrams, and charts provided in this manual are supplied for the use of a qualified holder of a first or second class radiotelephone license in servicing this transceiver. It is the users responsibility to see that this unit is operating at all times in accordance with the F.C.C. Citizens Radio Service regulations.

If you install or service your own transceiver, do not attempt to make any transmitter tuning adjustment. Transmitter adjustments are prohibited by the F.C.C. unless you hold a first or second class radiotelephone license or are in the presence of a person holding such a license. A Citizens Band or Amateur license is not sufficient.

**ROYCE ELECTRONICS CORPORATION HEREBY CERTIFIES THAT THIS EQUIPMENT HAS BEEN DESIGNED, MANUFACTURED AND FURNISHED IN ACCORDANCE WITH VOL, 6 PART 95 OF THE CURRENT FCC RULES AND REGULATIONS FOR CLASS D CITIZENS BAND OPERATION.**

## FULL 90 DAY WARRANTY POLICY

Royce products are built to rigid specifications and quality audited at several stages in their manufacturing. We warrant each new Royce product to be free from defects in material and craftsmanship for a period of 90 days from date of purchase. We will repair free of charge or replace at no charge any unit which becomes defective during the warranty period, except for products which have been subject to misuse, neglect, accident, modification in wiring not of our own installation, or to use in violation of instructions furnished by us. The warranty does not cover any accessory used in connection with this product. In warranty products should be returned to Royce Electronics freight prepaid.

Royce Electronics Corporation will repair or replace, at their option, and return the item freight prepaid.



**Royce**  **electronics** corporation

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