

standing wave ratio). A VSWR over 2.5 results in reduced radiated power and may cause instability and damage to the final output stage of the transceiver.

## BASE STATION OPERATION

Although the 13-892 is designed for mobile operation, it will work equally well as a base station when connected to a suitable base station power supply.

When the 13-892 is used as a base station, any Citizens Band beam, dipole, ground plane or vertical antenna may be used. A ground plane type antenna will provide good coverage, and since it is essentially non-directional, it is ideal in base station to mobile operation. From base station to base station or point-to-point operation a directional beam will give greater distance even under adverse conditions. The range of the transceiver also depends on the height of the antenna so whenever possible, select the highest location within F.C.C. limits.

## OPERATING INSTRUCTIONS

1. Insert the MIC plug into the MIC Jack (side panel).
2. Make sure your antenna is securely connected to the antenna connector.
3. Make sure the PA-CB switch is placed in the CB position.
4. Also make sure the RF Gain control is in full clockwise position and the SQUELCH control in full counter-clockwise position.
5. Turn the power on and adjust the VOLUME control for proper sound level.
6. Place the CLARIFIER control in 12 o'clock position.
7. Place the channel selector in a desired channel.
8. Place the LSB-USB-AM control in a desired position.
9. To transmit, press the Push-to-Talk bar on the microphone and to receive release the bar.

**IMPORTANT:** Do not short circuit the antenna or do not try to transmit without an antenna connected to the Antenna connector on the rear panel. This may cause damage to the output power transistors. Transmit only after carefully checking the installation of connector and coaxial cable.

## SPECIFICATIONS

### GENERAL

Circuitry :	1 IC, 35 Transistors, 6 FETs, 42 Diodes
Frequency Control :	Crystal Synthesizing System
Channels :	23 channels all installed
Mode of Operations :	AM, Lower Sideband-Upper Sideband
Controls :	RF Gain, Clarifier, Volume/PA, Squelch Controls, LSB-USB-AM, Channel Selector, PA-CB, NB-OFF, Tone Hi-Lo Switches
Jacks and Connectors :	Microphone, Antenna, PA speaker, External speaker, DC power connectors
Power Source :	DC 13.8V
Speaker :	3" dynamic, 8 ohms
Microphone :	Dynamic CB mike
PA Audio Output :	More than 3 W
Size :	2- $\frac{1}{2}$ (H) x 7- $\frac{3}{4}$ (W) x 9- $\frac{1}{2}$ (D) inches
Weight :	4.4 lbs
Accessories :	DC Power cord , Microphone, Mounting Bracket

### RECEIVER

Receiving system :	Single conversion superheterodyne
Sensitivity :	More than $1\mu\text{V}$ (S/N 10 dB)

Selectivity : More than 50 dB  
Clarifier :  $\pm 600$  Hz (receiving only)  
Audio output power : More than 3 W (into 8 ohm)  
Squelch range :  $1\mu\text{V} - 500\mu\text{V}$  (AM & SSB)  
Intermediate Frequency : 11.275 MHz

#### SSB TRANSMITTER

SSB Generation : Balance Modulation  
RF Output Power : 12 Watts PEP (F. C. C. Maximum)  
Carrier Suppression : More than 40 dB  
Unwanted Sideband  
Suppression : More than 50 dB  
Harmonic Suppression : More than 50 dB

#### AM TRANSMITTER

Modulation : High Level  
RF Output Power : 4.0 watts (F. C. C. Maximum)  
Harmonic Suppression : More than 50 dB

## SERVICING YOUR TRANSCEIVER

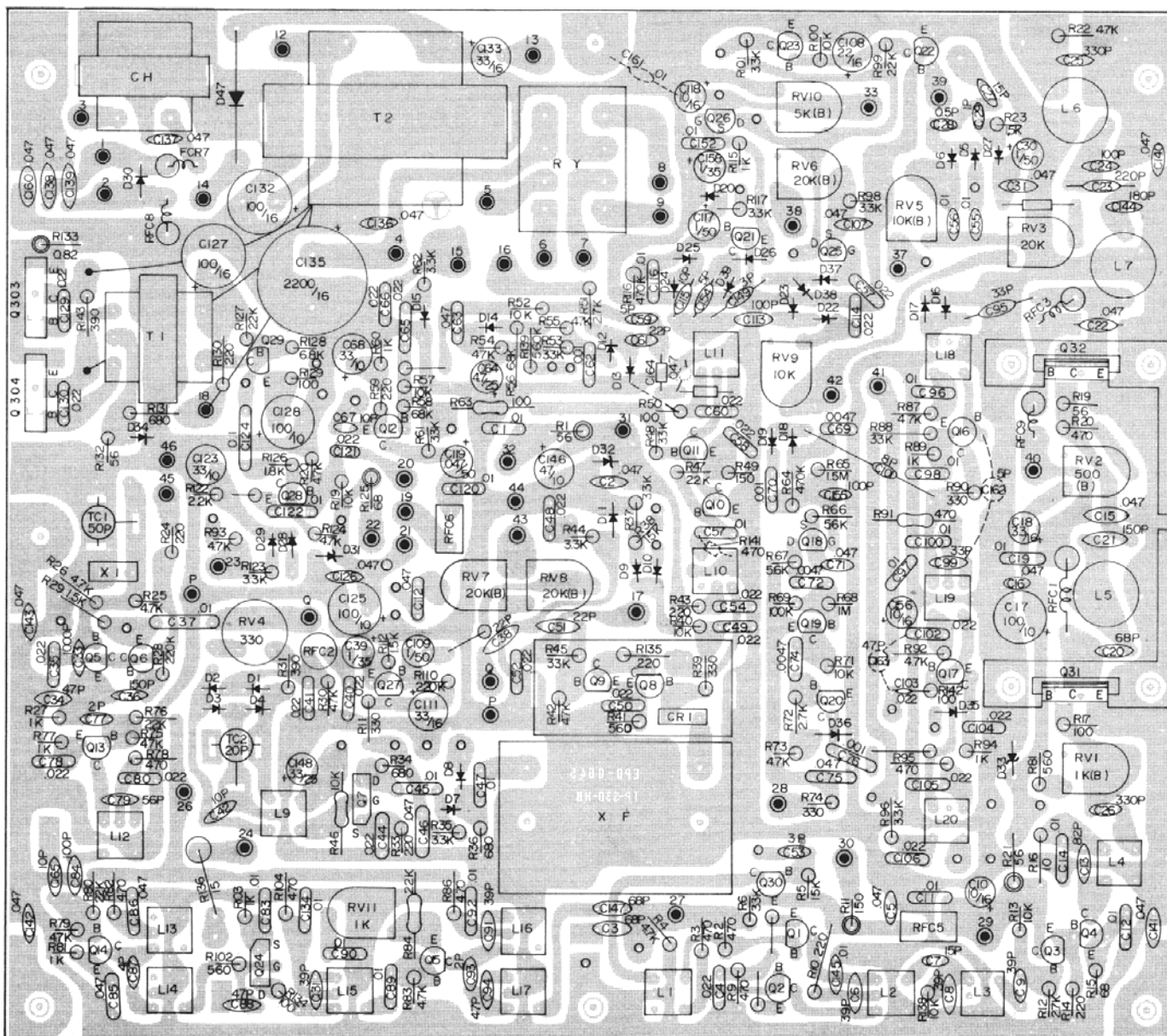
The technical information, diagrams and charts provided in this manual are supplied for the use of a qualified holder of a first or second class radiotelephone license in servicing this transceiver. It is the users responsibility to see that this unit is operating at all times in accordance with the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

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

When service is performed by a authorized and licensed person, care must be taken in the replacement of parts to use only authorized parts, in order not to void the type acceptance of this unit.

# PARTS LAYOUT

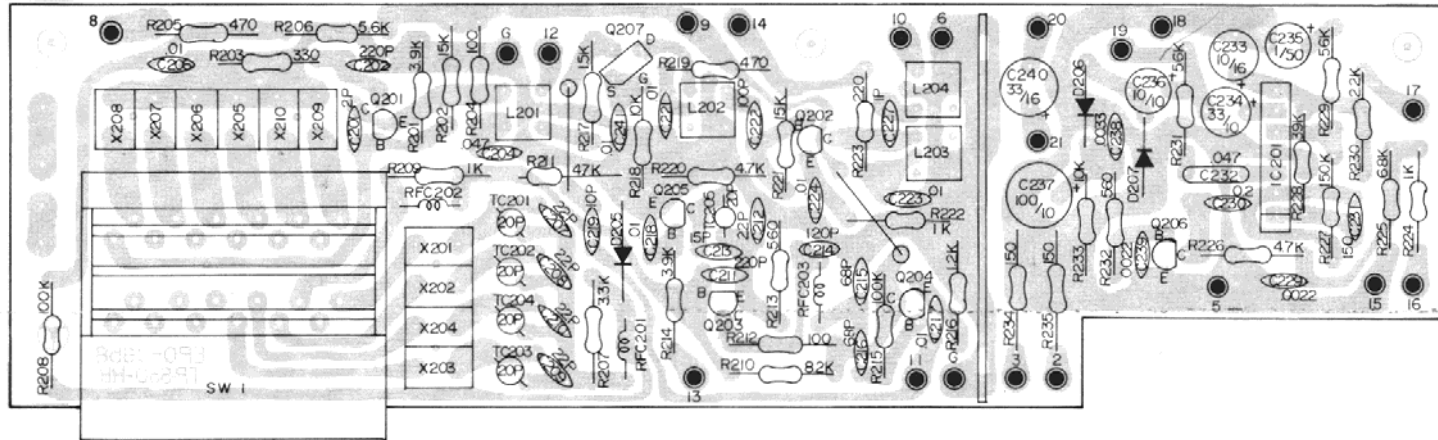
## FRONT VIEW



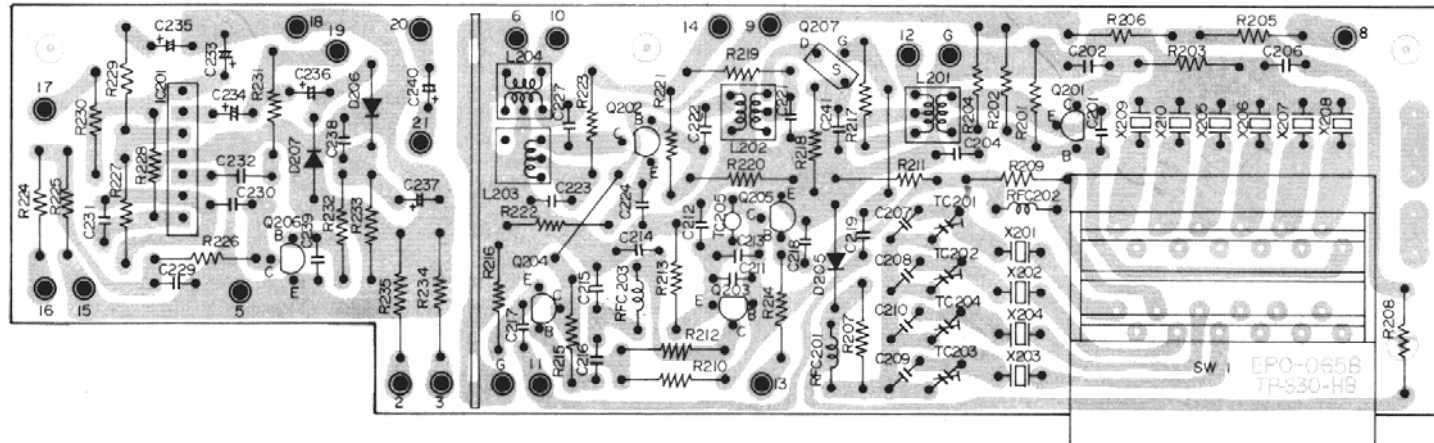
# BACK VIEW



# FRONT VIEW

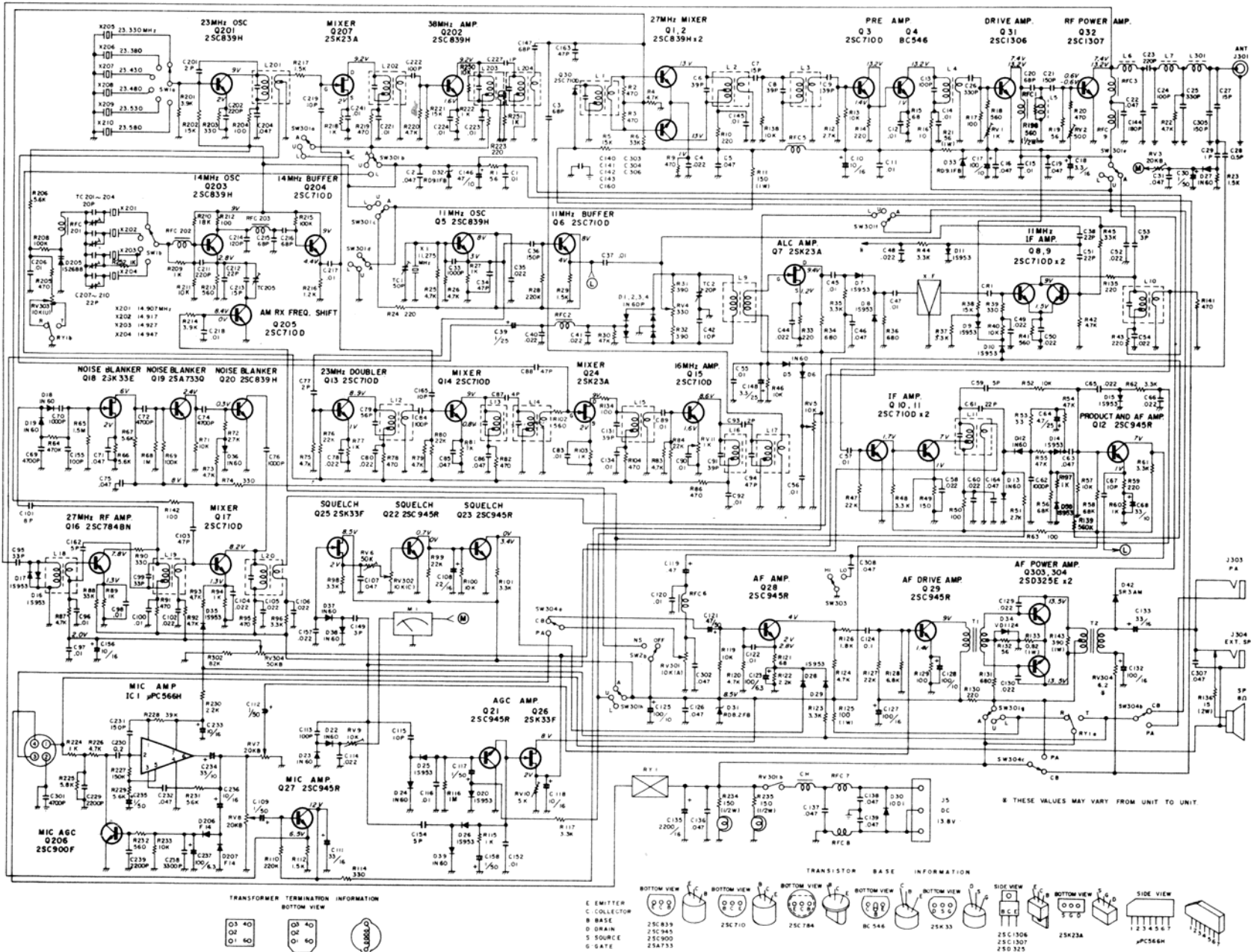


# BACK VIEW





# SCHEMATIC DIAGRAM



## LIMITED WARRANTY

Midland International Corporation, Communications Division warrants each new Midland product to be free from defects in material and workmanship under normal use and service for a period of 90 days after delivery to the ultimate user and will replace or repair the product at our option, at no charge should it become defective and which our examination shall disclose to be defective and under warranty.

This warranty shall not apply to any Midland product which has been subject to misuse, neglect, accident, incorrect wiring not of our own installation, or to use in violation of instructions furnished by us, nor extended to units which have been repaired or altered outside of our factory.

This warranty does not cover carrying cases, earphones, batteries, antenna, broken or cracked cabinets, or any other accessory used in connection with this product.

This warranty is in lieu of all other warranties expressed or implied and no representative or person is authorized to assume for us any other liability in connection with the sale of our products.

Sales receipt must accompany product to validate the date of purchase.



### Communications Division

P.O. Box 19032, Kansas City, Missouri 64141  
Phone: 816/474-5080 • Telex: 42-6344  
Cable Address: MIDELEC-NKC

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