

**DAYTON INDUSTRIAL CORPORATION**

**MANUAL  
SCA RECEIVER  
Models AF155 & AF161  
(Mfd 1987 & 1988)**

**2237 Industrial Blvd.  
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## 1.0 INTRODUCTION:

The Dayton Industrial Corporation Models AF155 & AF161 SCA Receivers are a specially designed FM receiver with additional circuitry to detect and demodulate 67 or 92 KHz SCA signals.

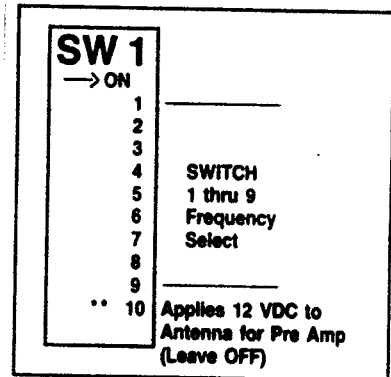
Both models are a Phase Locked Loop (PLL) design that covers the main F.M. band of 88 to 108 MHz in 100 KHz steps.

## 2.0 OPERATION:

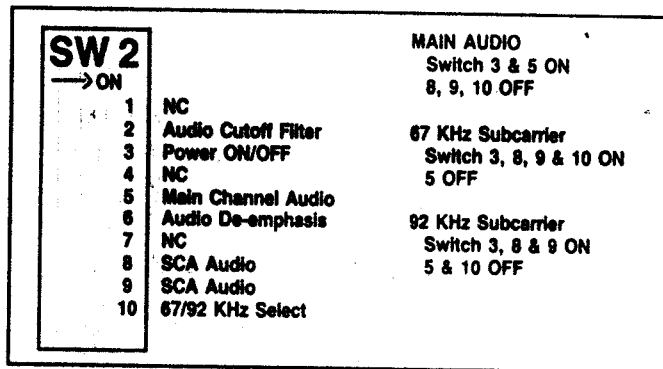
When received from the factory, the receiver is ready to operate. You must however set the 10 position D.I.P. switch (SW1) to the desired operating frequency and set D.I.P. switch (SW2) to select the mode of operation.

Models AF155 and AF161 have a single receive channel and the audio output can be selected between the Main audio, the 67 KHz SCA audio, or the 92 KHz SCA audio.

2.1 **Operating frequency:** The switch positions for SW1 vs. operating frequency are provided in the Frequency Table on Page 5. Set the switch positions for the desired operating frequency as indicated in the table.



2.2 **Mode of Operation:** The switch positions for SW2 selects either main channel audio or the 67 KHz or 92 KHz SCA audio. See chart below.



## 2.4 Other settings:

1. **R71** Audio Tone (Full CCW for Bass)
2. **R72** Speaker Audio Level
3. **R85** System Audio Gain
4. **R77** Squelch

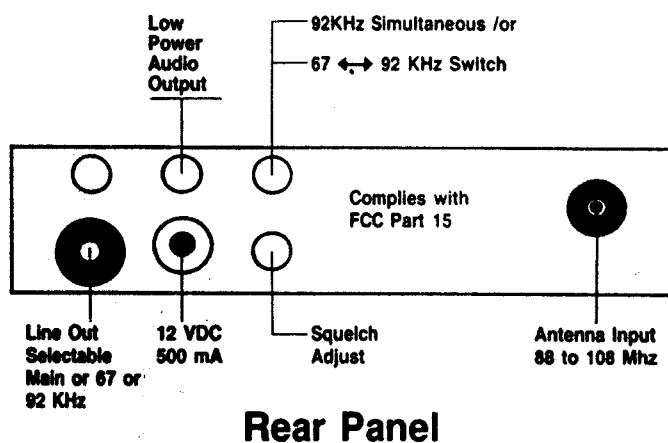
## 2.5 Connections: The following cable connections are then made:

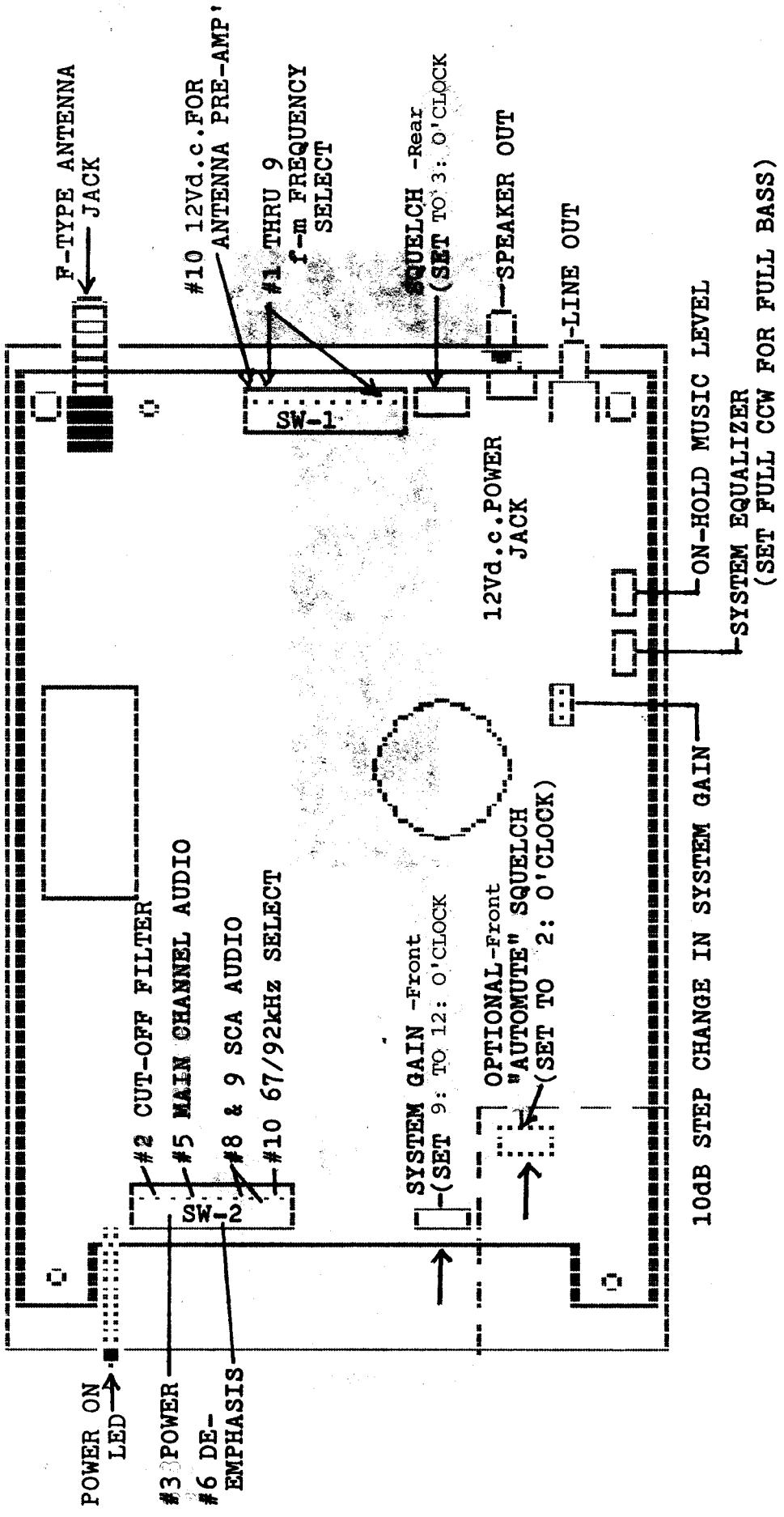
1. The 75-Ohm antenna cable is connected to the "F" connector, located on the rear panel of the receiver.

*NOTE: When making antenna connections where a pre-amp' is used, ensure that power is NOT applied to the receiver.*

If an antenna mounted pre-amplifier or "active antenna" is used, set SW1 position 10 to ON; however, DO NOT power up the receiver until the antenna connection is made. *Check the download for shorting with an ohmmeter first.*

2. The audio LINE OUTPUT (1 volt p.p.) is connected to the RCA jack located on the rear panel of the receiver.
3. An 8 Ohm, low power audio SPEAKER output is located on the rear panel of the receiver. This audio output is controlled by the **R72** audio level control. If an additional lower level is required, move jumper J2 to connect pins 1 and 2.





10dB STEP CHANGE IN SYSTEM GAIN  
 SYSTEM EQUALIZER  
 (SET FULL CCW FOR FULL BASS)  
 ON-HOLD MUSIC LEVEL