

791

41.67 - (397.4)

* 47.25 - (506.4)

45.75 - (481.2)

45.00 - (466.5)

3.8 (440.9)

3.50 (434.8)

EN OF SOUND

EPIC

44.00 - (445.0)

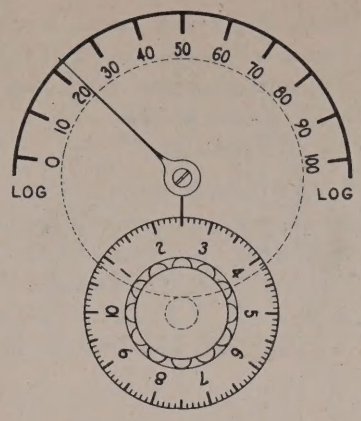
42.75 - (419.5)

42.50 - (414.5)

42.17 - (407.5)

* 41.25 - (388.9)

* 39.75 - (355.5)



239 - (178.5)

CH. 10 - 193.25 - (357.5)

- 197.75 - (372.5)

4.5 - (394.8)

CH. 13 - 211.25 - (482.2)

- 215.75 - (497.3)

CH. 4 - 67.25 - (828.0) PIC

71.75 - (861.6) GEN

(892.0) SOUND

FIG. 2 THE MODEL 479 TV-FM LOGGING DIAL

Fig. 2 is an illustration of the logging arc of the AM Generator dial. The lower arc of this dial is divided into 10 equal divisions 0 to 100. Coupled to the knob shaft is another dial divided into 100 equal divisions and directly above it is an index line to which the Logging dial is set.

One complete revolution of the Logging dial will move the main pointer one complete division on the logging scale. Thus each division of the Logging scale is effectively divided into 100 parts or a total of 1000 divisions for the entire arc. In addition the minor divisions of the small dial may be visually divided to further increase the number of points. As an example, the position of the dial illustrated is 22.5. The main pointer is above 20 and the Logging dial is at 2.5; therefore the setting is registered as 22.5. If the Logging dial were setting half way between 2.5 and 2.6 we could register the setting as 22.55. Taking advantage of visual divisions of these points the setting accuracy is effectively increased to 2000 or more divisions.

DETERMINING AN EXACT FREQUENCY

There are two methods by which a given frequency setting may be obtained.

The first method to be described is the simpler of the two and while perhaps somewhat less accurate than the second and more involved system, it can with practice yield very acceptable results. As an example, let us assume that a frequency of 20.75 megacycles is desired. Referring to Table 1 we see that a strong check point is available at 20 megacycles. The next step is to determine the exact number of Logging dial divisions there are between the 20 MC and 21 MC points on the generator frequency arc. Looking at the frequency arc from a right angle position, rotate the tuning knob until the pointer is EXACTLY over center of the 20 MC division on the arc. Record the position of the Logging scale. Let us say this is 37.0. Looking at the frequency scale from exactly the same position, rotate the tuning knob until the pointer is EXACTLY over the center of the 21 megacycle division on the arc. Again record the position of the Logging scale, for example 41.2. Subtracting the first reading, 37.0, from the second, 41.2, we have a difference of 4.2 which represents the number of divisions of the Logging dial covering one megacycle in frequency. Since the desired frequency is 20.75 MC (20 + .75 MC) it is necessary to determine how many divisions are covered by .75 MC. Multiplying 4.2 divisions by .75 we find that 3.15 divisions on the Logging dial covers .75 megacycles. (4.2 x .75 = 3.15).

The next step is to determine the exact setting for 20 megacycles. Set the AM GENERATOR RANGE switch to range B and the SIGNAL SELECTOR to CAL. Move the main dial pointer to the vicinity of the 20 megacycle point until the beat pattern appears

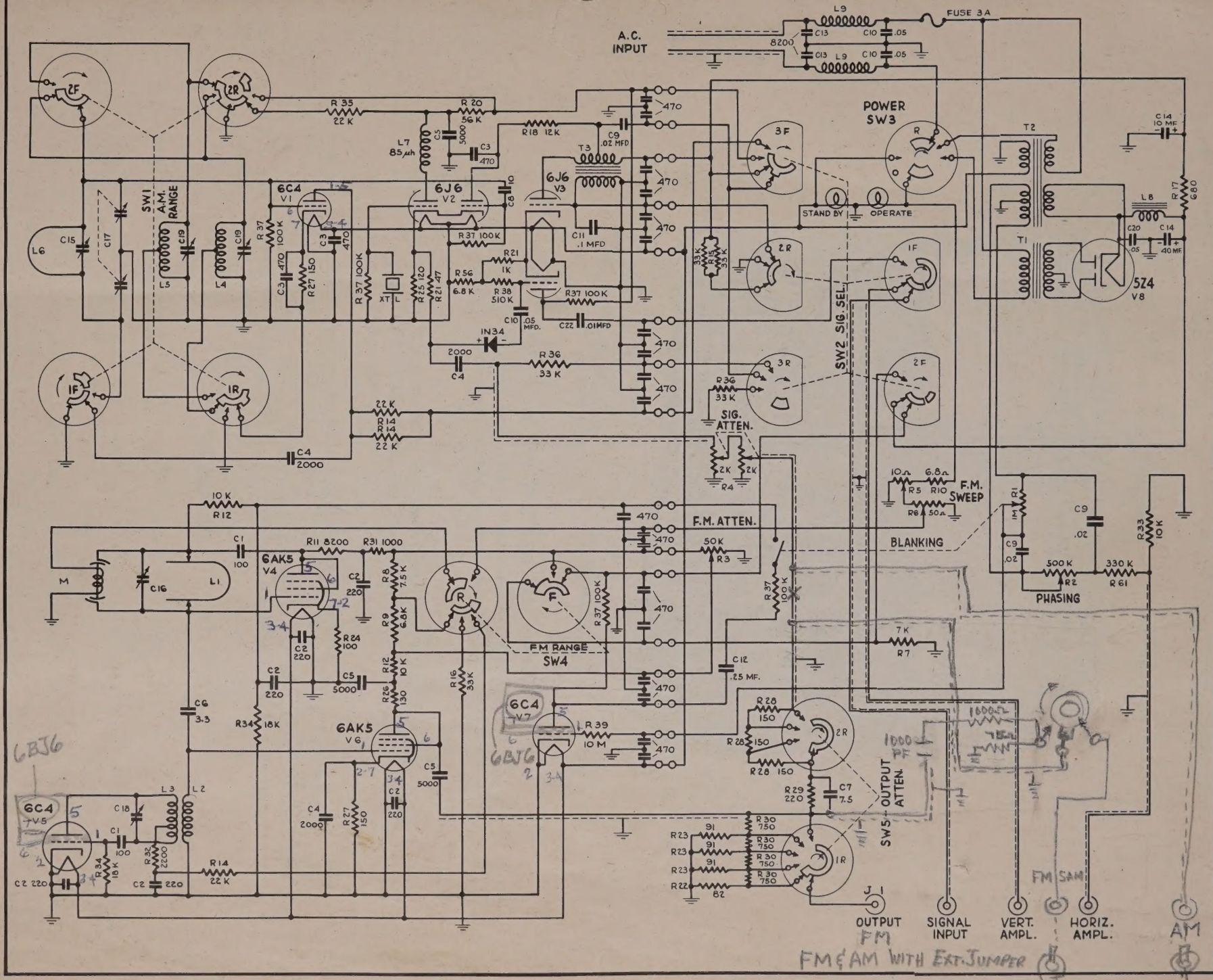


FIG. 19 SCHEMATIC DIAGRAM OF MODEL 479.