Model 5X5 Series
(Chassis No. RC-406)
Five-Tube, Single-Band, AC-DC Multiplex Superheterodyne Receiver

Model PLF-10
Power Line Filter Coupling Unit

Electrical and Mechanical Specifications

FREQUENCY RANGE
Receiver ..... 540-1,720 kc
Remote Control Oscillator ..... 540-800 kc

TUBE COMPLEMENT
(1) RCA-12SA7 ..... 1st-Detector-Oscillator
(2) RCA-12C8 ..... I-F Amp., 2nd-Det., and A.V.C.
(3) RCA-12SC7 ..... 1st A-F and Remote Control Osc.
(4) RCA-35L6GT ..... Power Output
(5) RCA-35Z5GT ..... Half-Wave Rectifier

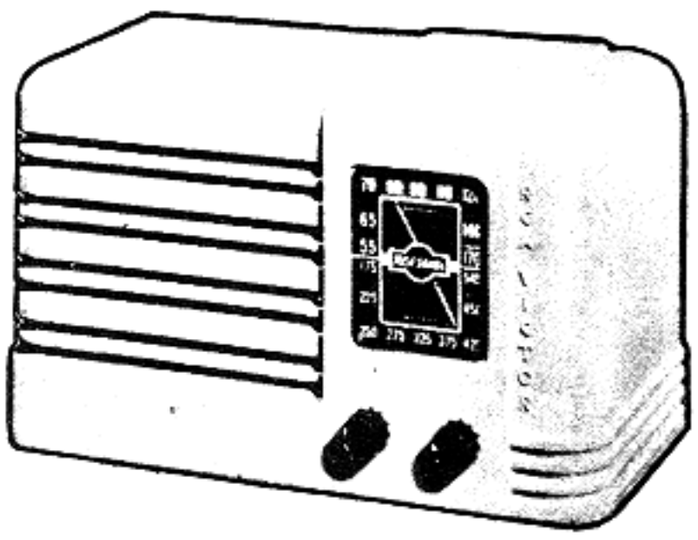
Intermediate Frequency ..... 455 kc

POWER SUPPLY RATINGS
A-C Rating ..... 100-125 volts, 50-60 cycles, 30 watts
D-C Rating ..... 100-125 volts, direct current, 30 watts

POWER OUTPUT (125 volt, 60 cycle supply)
Undistorted ..... 1.5 watts
Maximum ..... 2.0 watts

LOUDSPEAKER
Type ..... 4 inch Electrodynamic
Cabinet Dimensions (inches) Height 5⅛, Width 8⅝, Depth 4½
Weight (net) ..... 5¼ pounds

General Description



Model 5X5I
RC-406A
Ivory Finish

Model 5X5W
RC-406
Walnut Finish

The following features are incorporated in the design of the Little Nipper Multiplex 5X5 Series Receiver:

First, it is a "standard broadcast" receiver. Second, it will operate any other radio in the home by "remote control" without the use of connecting wires. Third, records may be reproduced through the Little Nipper when used with Victrola Attachment. Fourth, the Model 5X5 (when used with Victrola Attachment) will reproduce records through any other radio in the home without the use of connecting wires.

When using the 5X5 as a remote control, the Model PLF-10 Power Line Filter Coupling Unit should be used in conjunction with the receiver to be controlled. The filter is connected between the power line receptacle and the receiver being controlled, as shown in accompanying drawing.

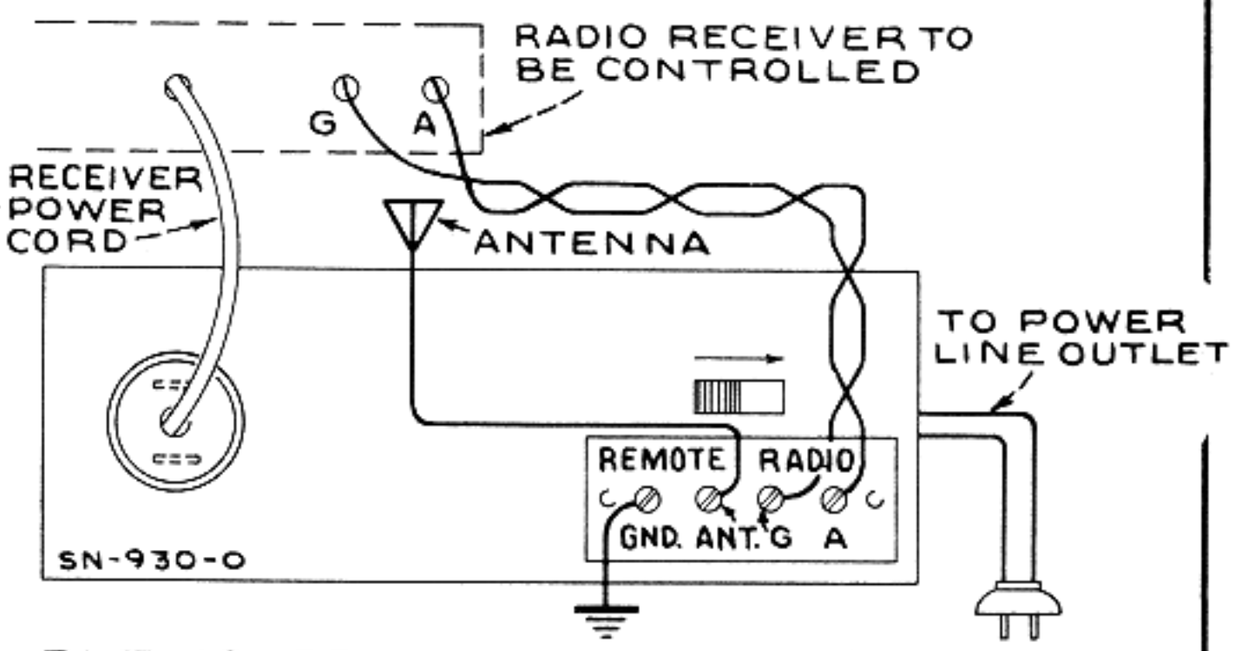
Set-up Procedure for Remote Control

1. Install the 5X5 and tune in any desired station.
2. Turn the control switch on the back of the 5X5 to its clockwise position marked "Remote." The 5X5 becomes silent.

   The 5X5 now becomes a small relay station for signalling to the controlled receiver via the power line wiring.
3. Next tune the main receiver to the exact frequency of transmission of the 5X5, usually 540 kc. Tune carefully to this frequency, setting the volume control as high as permissible with regard to hum and noise conditions. The station to which the 5X5 was tuned will be heard. If the receiver is equipped with tuning indicator (Magic Eye) the correct point will most easily be obtained by observing the indicator.
4. Now any station tuned in on the 5X5 dial will be heard on the controlled receiver. The volume will also be controlled with the 5X5 volume control.
5. If it is desired to operate the controlled receiver on its own controls it is only necessary to set the switch on the Power Line Filter Coupling Unit to its position marked "Radio."
6. In the event that, with the 5X5 being used as a remote control, other receivers in the home are in use, trouble may be experienced due to noise and hum. To avoid this, connect a Power Line Filter Coupling Unit, RCA Victor PLF-10, to each of these other receivers, as shown in accompanying drawing.

Precautionary Lead Dress

1. Dress 1st I-F plate and grid leads against chassis and away from each other. Dress plate lead from 12C8 close to chassis.
2. Dress A.V.C. condenser (0.1) close to chassis and tight to 0.25 mfd. condenser.



PLF-10 COUPLING UNIT

Antenna.—The set is equipped with length of antenna wire. Do not connect the antenna to ground. If an outdoor antenna is used, it should not be longer than 100 feet, including lead-in. If it is longer, connect a 100 to 200 mmf. capacitor in series with the lead-in.

Victrola Attachment.—A jack is provided on the rear of chassis for connecting a Victrola Attachment into the audio-amplifying circuit. The cable from the Victrola Attachment should be terminated in a Stock No. 31048 plug to fit the jack.

Alignment Procedure

Output Meter Alignment.—Connect the meter across the voice coil, and turn the receiver volume control to maximum.

Test-Oscillator.—Connect the low side of the test-oscillator to the receiver chassis, through a .01 mfd. capacitor, and keep the output as low as possible.

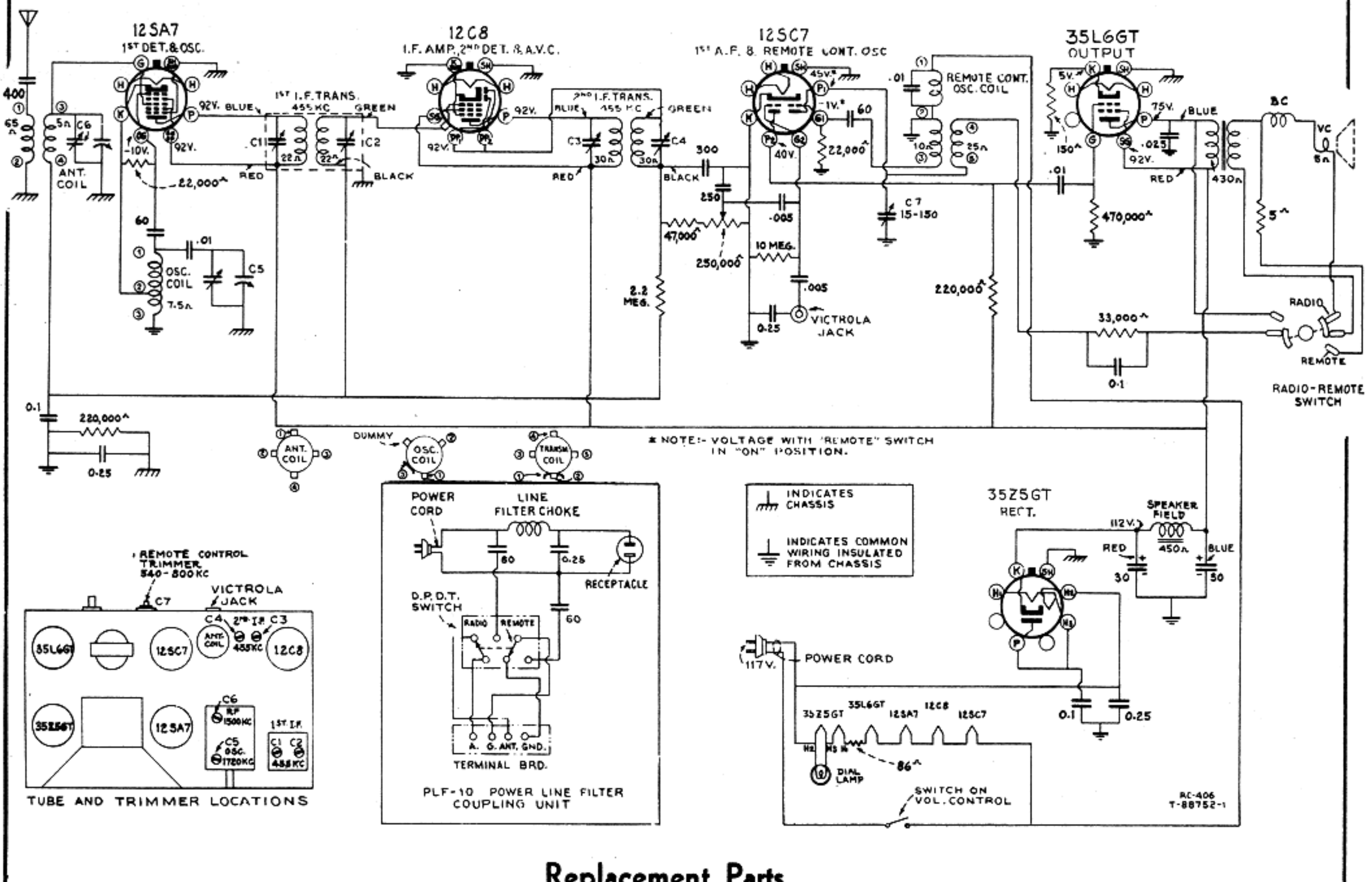
The Remote Control Oscillator in the 5X5 is set at the factory to approximately 540 kc. The frequency may be varied between 540 and 800 kc to suit local conditions by adjusting the trimmer condenser C7.

Power-Supply Polarity.—For operation on d-c, the power plug must be inserted in the outlet for correct polarity. If the set does not function, reverse the plug. On a-c, reversal of the plug may reduce hum.

If the electric supply circuit is a three-wire system, it may be necessary to connect a ½ mfd 700-volt capacitor between the two outside lines of the three-wire system.

Steps	Connect the high side of test-oscillator to—	Tune test-osc. to—	Turn radio dial to—	Adjust the following for max. peak output—
1	Tuning condenser stator (osc.) in series with .01 mfd.	455 kc	Quiet point at 1,600 kc end of dial	C1, C2, C3, C4 (1st and 2nd I-F transformers)
2	Antenna term. of ant. trans. in series with 100 mmfd.	1,720 kc	Full clockwise (out of mesh)	C5 (oscillator)
3		1,500 kc	Resonance on 1,500 kc signal	C6 (antenna)

5X5 SERIES, PLF-10



Replacement Parts

Insist on genuine factory-tested parts, which are readily identified and may be purchased from authorized dealers.

STOCK No.	DESCRIPTION		STOCK No.	DESCRIPTION	
	CHASSIS ASSEMBLIES		32969	Socket—Dial lamp socket	
13057	Capacitor—60 mmfd.		14278	Socket—Phonograph socket	
12488	Capacitor—250 mmfd.		32537	Socket—Tube socket	
12952	Capacitor—300 mmfd.		30585	Spring—Drive cord spring	
30433	Capacitor—400 mmfd.		33319	Transformer—First i-f transformer	
4838	Capacitor—.005 mfd.		32578	Volume control and power switch	
4937	Capacitor—.01 mfd.			**POWER LINE FILTER PLF-10**	
4870	Capacitor—.025 mfd.		13057	Capacitor—60 mmfd.	
4839	Capacitor—0.1 mfd.		12484	Capacitor—0.25 mfd.	
12484	Capacitor—0.25 mfd.		33492	Coil—Choke coil	
33321	Capacitor—Electrolytic, 2 sections 30 mfd. each		33493	Receptacle—Power receptacle	
32572	Coil—Antenna coil		33491	Switch	
33320	Coil—Duplex oscillator coil			**SPEAKER ASSEMBLIES (39105—2)**	
32962	Coil—Oscillator coil		32964	Transformer—Output transformer	
33323	Condenser—Trimmer 20-150 mmfd.			**MISCELLANEOUS ASSEMBLIES**	
32968	Condenser—2-gang variable tuning		X-639	Cabinet—Ivory finish—Model 5X5I.....(net)	
32634	Cord—Drive cord		X-638	Cabinet—Walnut finish—Model 5X5W...(net)	
32946	Drum—Condenser drive drum		32942	Dial—Glass dial scale	
12409	Lead—Antenna lead		33317	Fastener—Push fastener to hold cabinet back	
33322	Resistor—5 ohms, 5 watts		33306	Knob—Black tuning knob—Model 5X5I	
14671	Resistor—33 ohms, ½ watt		32447	Knob—Ivory knob—Model 5X5W	
13428	Resistor—150 ohms, ½ watt		32943	Nut—Speed nut to hold dial	
13998	Resistor—22,000 ohms, ½ watt		31646	Spring—Knob retaining spring	
12454	Resistor—33,000 ohms, ½ watt				
12412	Resistor—47,000 ohms, ½ watt				
12264	Resistor—220,000 ohms, ½ watt				
12285	Resistor—470,000 ohms, ½ watt				
12679	Resistor—2.2 meg., ½ watt				
13601	Resistor—10 meg., ½ watt				
32945	Shaft—Tuning knob shaft and bushing				

Additional Replacement Parts:

Stock No.	
32946	Drum—Condenser drive drum and indicator
11765	Lamp—Dial lamp, Mazda No. 51
33324	Switch—"Remote" switch
32967	Transformer—Second I-F trans.
34569	Speaker—Complete—less transformer