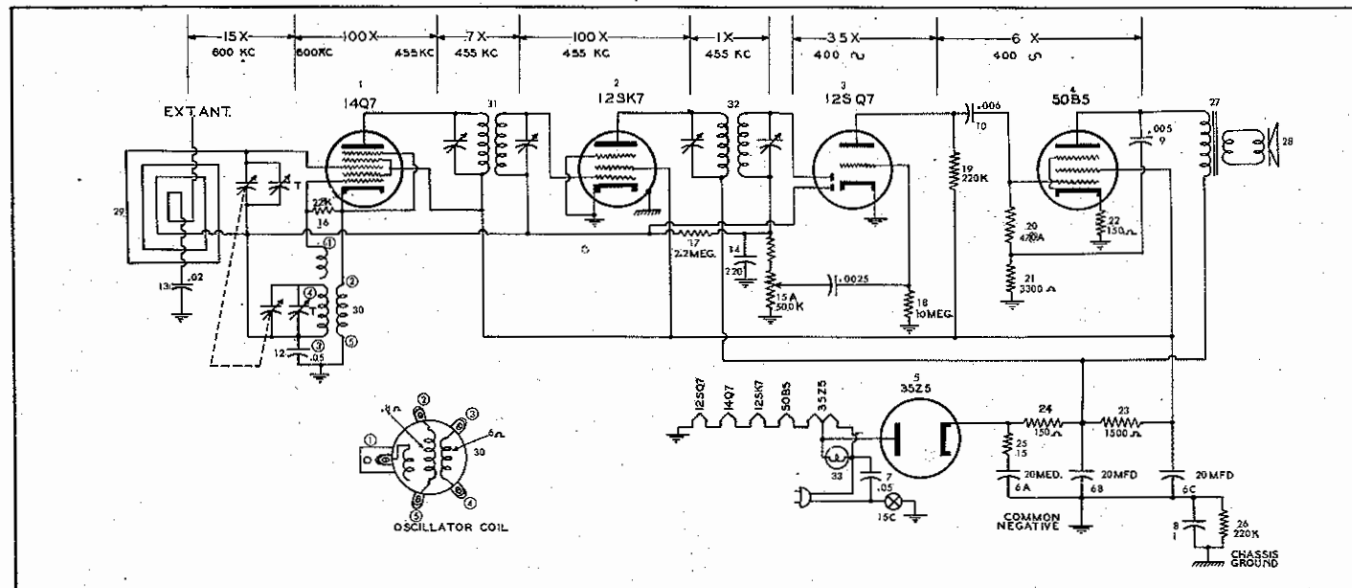
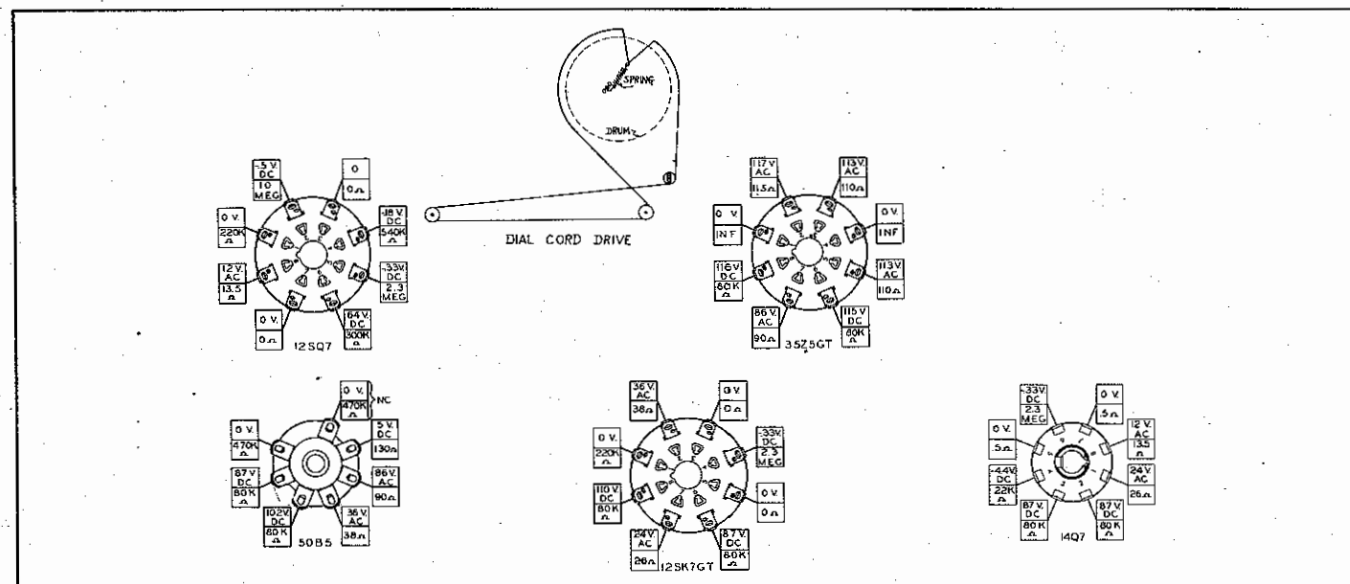


SCHEMATIC DIAGRAM



The stage gain measured values listed above are approximate values for an average operative stage, rather than an absolute value. It should be borne in mind that it is possible to introduce so many variables into the measurement operation, such as, type of equipment used for measuring, handling and placement of probes, the accuracy of alignment, etc., that an absolute reading is impractical. AVC is made inoperative and 3-volt battery bias substituted for measurement.

VOLTAGE AND RESISTANCE ANALYSIS CHART



- 1 - DC Voltage measurements are at 20,000 ohms per volt: AC Voltages measured at 1000 ohms per volt.
- 2 - Socket connections are shown as bottom views.
- 3 - Measured values are from socket pin to common negative.
- 4 - Line voltage maintained at 117 volts for voltage readings.
- 5 - Nominal tolerance on component values makes possible a variation of $\pm 10\%$ in voltage and resistance readings.
- 6 - Volume control at maximum, no signal applied for voltage measurements.

HOWARD W. SAMS & CO., INC.

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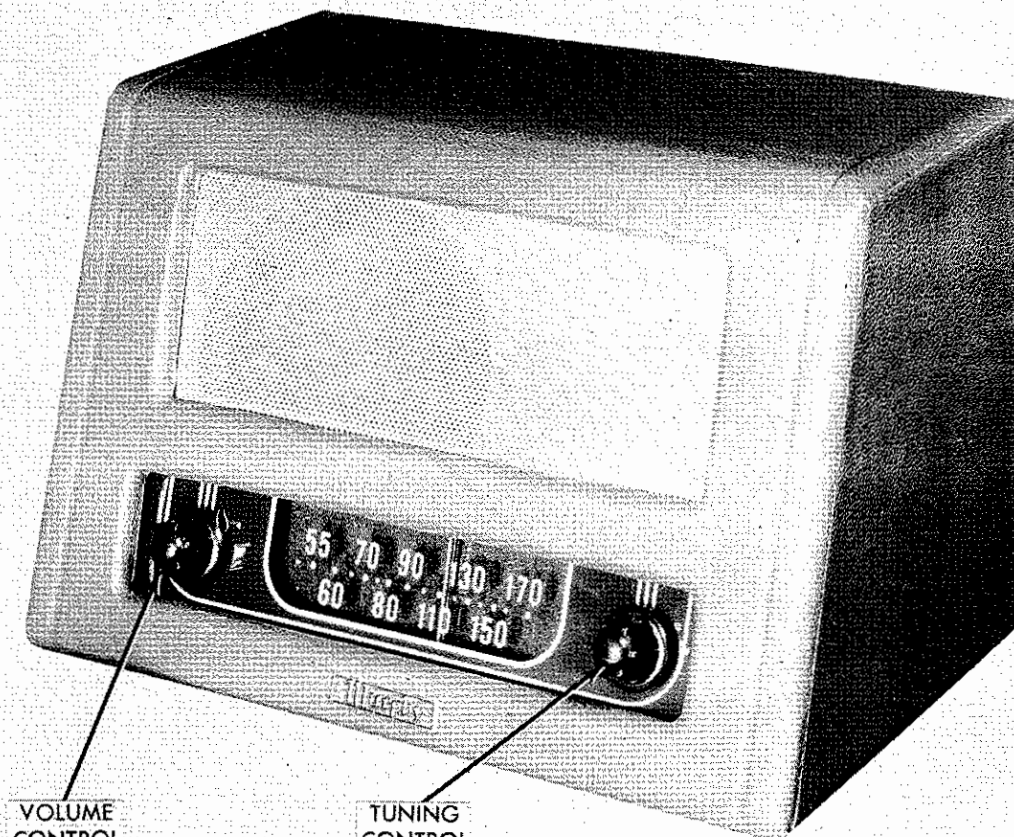
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PHOTO FACT* Folder

TRADE MARK

MURPHY MODEL 112

MURPHY MODEL 112



VOLUME CONTROL
ON-OFF SWITCH

TUNING CONTROL

MURPHY MODEL 122

TRADE NAME: Murphy, Model 122
SUPPLIER: G. C. Murphy Co. 531 5th Ave., McKeesport, Pa.
TYPE SET: AC - DC Superheterodyne - Self Contained Loop Antenna
TUBES(FIVE): Types 14Q7 Converter, 12SK7GT IF Amp., 12SQ7 Det.-AVC-AF, 50B5 Power Output, 35Z5GT Rectifier.

POWER SUPPLY: 117 Volts AC-DC Rating .235 Amp. @ 117V. AC
TUNING RANGE-BROADCAST: 530-1700KC
SHORT WAVE

ALIGNMENT INSTRUCTIONS						
DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	OUTPUT METER	ADJUST	REMARKS
.05 MFD	High side to ant. stator section of tuning gang. Low side to B-.	455KC	High freq. end of dial.	Across voice coil	A1, A2, A3, A4.	Adjust for maximum output. Use isolation transformer if available. If not, isolating capacitor must be connected between generator ground lead and receiver B-. Also decrease dummy ant. to .001 MFD to prevent excessive hum modulation.
200MMFD	High side to ant. (blue) lead. Low side to B-.	1600KC	1600KC	"	A5	Adjust for maximum output.
"	"	1400KC	Tune in 1400 KC signal.	"	A6	" " " "
						Check sensitivity at 600KC and repeat adjustments A5, A6 if necessary.

Volume control at maximum volume and output from signal generator no higher than necessary to obtain output reading. Use insulated alignment screwdriver for adjusting.

MURPHY MODEL 112

CHASSIS—TOP VIEW

TUBES					
ITEM No.	USE	REPLACEMENT DATA		RMA BASE TYPE	INSTALLATION NOTES
		MURPHY PART No.	STANDARD REPLACEMENT		
1	Converter	14Q7	14Q7	9AL	
2	1r Amp.	12SK7GT	12SK7GT	6N	
3	2nd Det.-AVC-AP	12SQ7	12SQ7	8Q	
4	Power Output	50B5	50B5	7BZ	
5	Rectifier	35Z5GT	35Z5GT	6AD	

CAPACITORS

Capacity values given in the rating column are in mfd. for Electrolytic and Paper Capacitors, and in mmfd. for Mica and Ceramic Capacitors.

ITEM No.	RATING		REPLACEMENT DATA					CORNELL DUBLIER PART No.	IDENTIFICATION CODES AND INSTALLATION NOTES
	CAP.	VOLT	MURPHY PART No.	MALLORY PART No.	SOLAR PART No.	SPRAGUE PART No.	AEROVOX PART No.		
6(A)	20	150	TP129	M-2x20-150	TA-220	PRS150-20-20	E242215	Filter - Red	
(B)	20	160		M-20-150		UT-201	PRS150-20	" - Green	
(C)	20	160	TP428	S-4-05	TC-15	484-05	DT455	" - Blue	
7	.05	400	TP428	S-4-1	TC-1	484-1	DT455	Line Filter	
8	.1	200	TP428	S-4-05	TC-25	884-05	DT455	Line Isolating	
9	.005	300	TP408	S-6-005	TC-28	884-005	DT455	S05S Plate Feedback	
10	.008	300	TP409	S-6-008	TC-28	884-008	DT455	Audio Coupling	
11	.0025	600	TP406	S-6-003	TC-53	884-003	DT455	"	
12	.05	400	TP426	S-4-05	TC-15	484-05	DT455	AVC Filter	
13	.02	400	TP423	S-4-02	TC-12	484-02	DT455	Ant. Coupling	
14	.250	500	MO-5385	MO-5-385	IM-328	1468-.00025	SW5725	FF Triacs Diode	

ITEM No.	RATING		REPLACEMENT DATA				INSTALLATION NOTES
	RESIST-ANCE	WATTS	MURPHY PART No.	MALORY PART No.	IRC PART No.	CLAROSTAT PART No.	
15(A) (B) Switch (C)	500KΩ	1	684 Not Req.	MR48*	D13-123*	M-90-Z# Not Req. Sw-A	
			Note 1 - Install a 47K resistor of the original control down).			*See Installation Note 1 Attach to ISA per instructions " " " " " "	

ITEM No.	RATING RESISTANCE	WATTS	REPLACEMENT DATA		IDENTIFICATION CODES
			MURPHY PART No.	IRC PART No.	
16	22KΩ	1/4		ETS-22K	Red-Red-Or. Osc. Grid
17	2.2 Meg.	1/4		ETS-2.2 Meg.	Red-Red-Grn. AVC Network
18	10 Meg.	1/4		ETS-10 Meg.	Br.-Blk.-Blue 1st Af Grid
19	220KΩ	1/4		ETS-220K	Red-Red-Yl. 1st Af Plate Load
20	470KΩ	1/4		ETS-470K	Yl.-Vl.-Yl. Output Grid
21	3300Ω	1/4		ETS-3300	Or.-Or.-Red Audio Feedback
22	150	1/4		BM-F-150	Br.-Grn.-Br. Output Cathode
23	1800	1/4		ETS-1500	Br.-Grn.-Red Filter
24	150	1/4		BM-I-150	Br.-Grn.-Br. Filler
25	15	1		BM-F-15	Br.-Grn.-Blk. Surge Limiting
26	220KΩ	1/4		ETS-220K	Red-Red-Yl. Line Isolating

CHASSIS—BOTTOM VIEW

ITEM No.	RATING				REPLACEMENT DATA				INSTALLATION NOTES
	IMPEDANCE		D.C. RES.		MURPHY PART No.	STANCOR PART No.	THORDAR ^N PART No.		
	PRI.	SEC.	PRI.	SEC.					
27	1050Ω	3.2Ω	95Ω	.52Ω	TA-160	A-38651	T-1459821	Bend mounting tabs down; file out mounting holes and mount by original mounting bracket.	

ITEM No.	RATINGS	REPLACEMENT DATA			INSTALLATION NOTES
		MURPHY PART No.	JENSEN PART No.		
26	FIELD RES. VC IMP. PH 8.22	A-SP-1	ST-105#		#Drill holes in front of chassis and mount speaker by the lip holes.
	CONC DIA. 4-5/8"				NOT READILY REPLACEABLE—USE COMPLETE SPEAKER UNIT.

ITEM No.	USE	DC RES.		REPLACEMENT DATA		INSTALLATION NOTES
		PRI.	SEC.	MURPHY PART No.	MEISSNER PART No.	
29	Loop Ant.	.22	1.22	A-LP-1		Add 50 MFD capacitor between osc. grid and lug No. 1 of coil.
30	Osc. Coil	.52	52	A-LC-1	#14-1040	
31	Input IF	212	212	A-LF-1		
32	Output IF	16.52	15.52	A-LF-2	16-6868	
33					16-6860	

ITEM No.	BASE TYPE	VOLTS	AMPS.	BEAD COLOR	REPLACEMENT DATA		INSTALLATION NOTES
					MURPHY PART No.		
33	Bayonet	6-8	0.15	BROWN			Type 47

