

# VINTAGE VLF RECEIVERS

## A COLLECTIVE PROFILE

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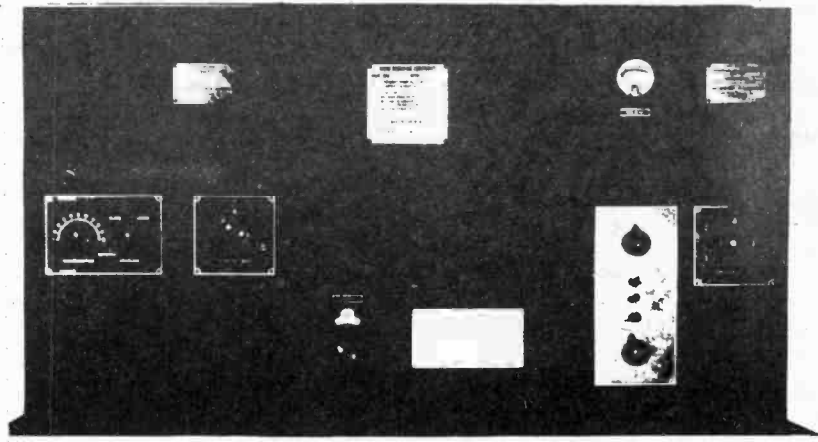
This third edition of my directory attempts to list every vacuum tube radio receiver ever built that could tune within the bands of 3-30 kHz or even 3-3000 Hz.

Radio began in the longwave spectrum and the

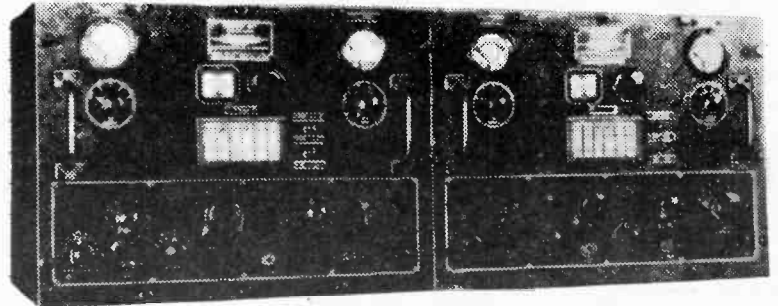
importance of these remarkable sets for military defense, RFI studies and scientific research cannot be overestimated.

Some were state-of-the-art military secrets; consequently, information about them is difficult to find.

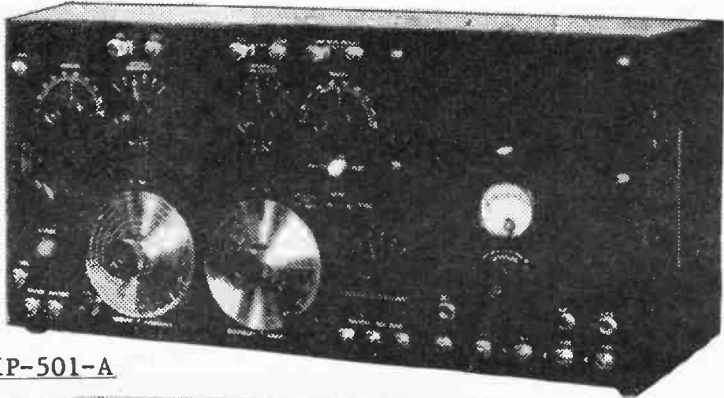
Not included in this list are fixed channel sets, untuned 'sferics direction finders and low-sensitivity tunable voltmeters. Corrections and additions are welcome.



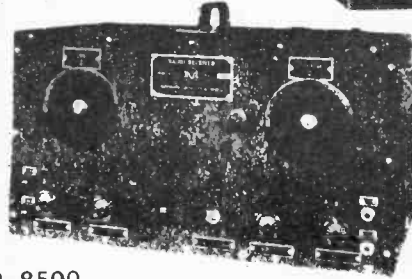
RAA FIRST VLF SUPERHET



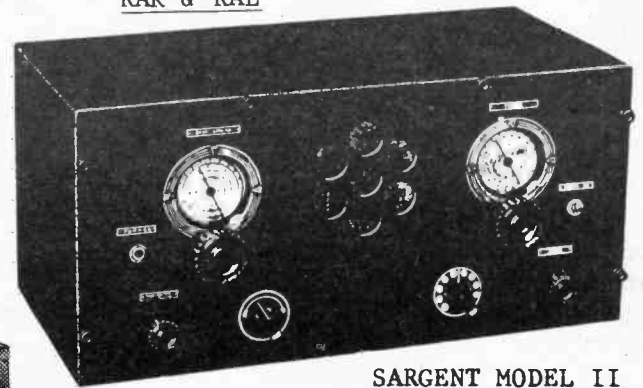
RAK & RAL



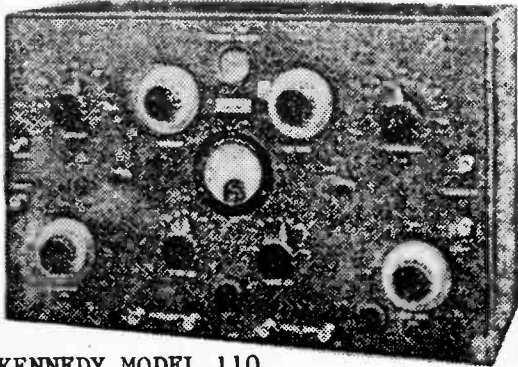
IP-501-A



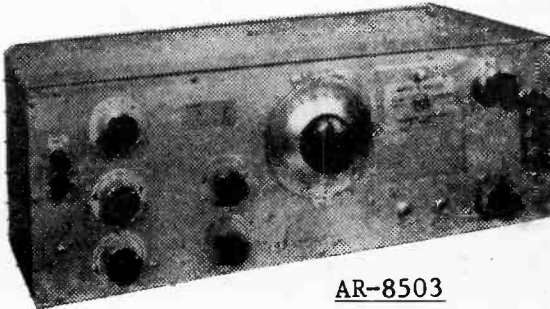
AR-8500



SARGENT MODEL II



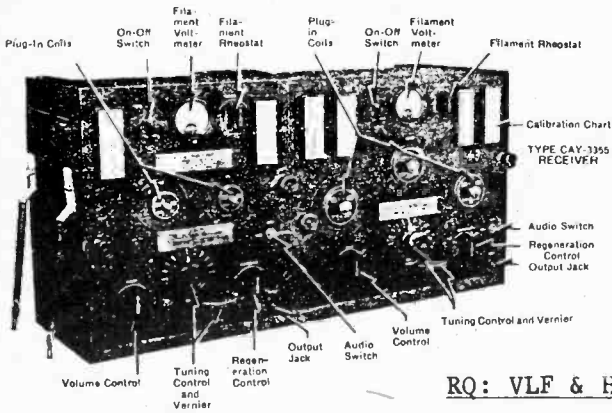
KENNEDY MODEL 110



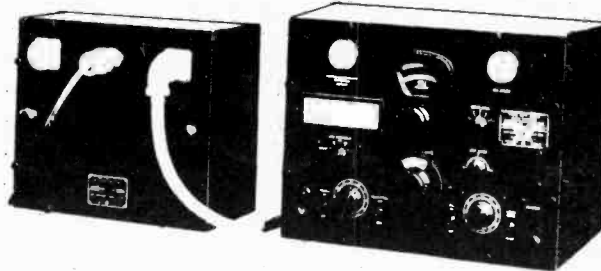
AR-8503



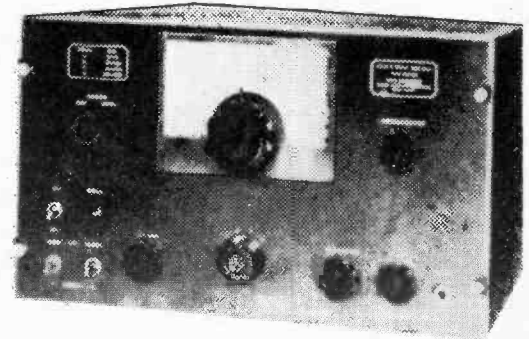
117B



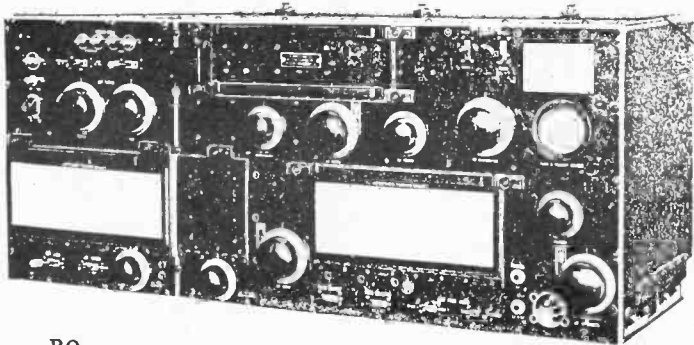
RQ: VLF & HF



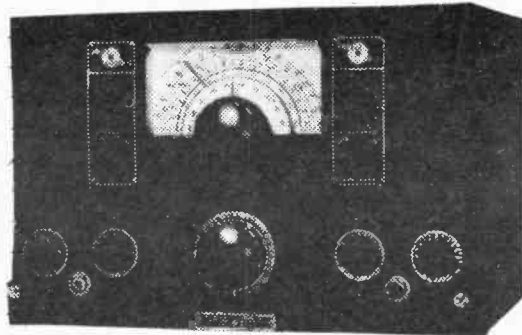
RBA W/POWER SUPPLY



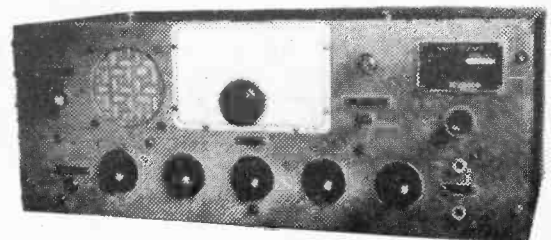
128AY



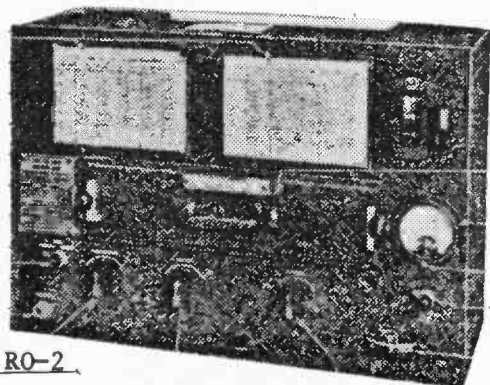
RO



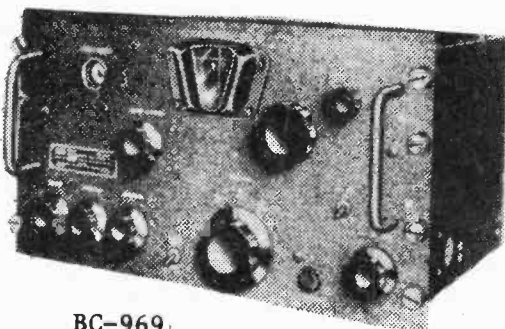
RBL



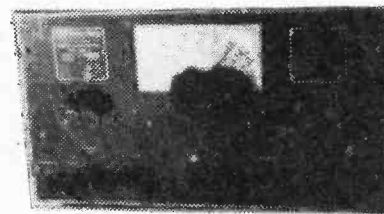
AR-8510



RO-2



BC-969



3001-A

Chart follows on next page. Pictures continue on p. 19.

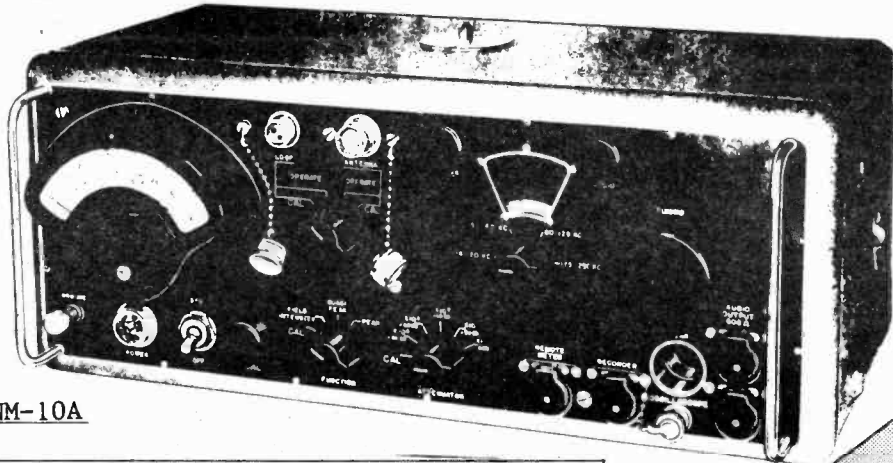
## VINTAGE RECEIVERS from p.13

DATE	MODEL	MAKE	TUNING	SELECTIVITY	WT.	TUBES	PWR	FEATURES
c.1918	SE-1617		18k-43k			6	B	TRF;3 RF stages;reg. det.; 2 AF stages
c.1920	IP-501 & IP-501A	WSA, RMCA	15k-1.2M	var.coupling	55	3	B	Reg. det. or xtal det.;requires IP-503 long-wave loading unit for 15-37.5kHz range; 2 AF stages.
1920	CR-7	Grebe	15k-1.7M			1	B	Reg. det.
c.1921	RA		16k-1.2M				B	TRF; submarine use
c.1921	RB		10k-40k				B	TRF; requires SE-1530 receiver unit
c.1922	110(Universal) (280)	Kennedy	12k-1.7M	var. coupling	27	1	B	Reg. detector
c.1922	RD		12k-1.2M				B	TRF
c.1924	RE	NRL	10k-100k	audio filter		6	B	TRF;requires SE-1834 PF amp with 3 peanut-tube stages; reg.det.;2 AF stages
c.1925	SE-2300	NRL	10k-2.3M			4	B	TRF; 1 RF stage; reg.det.; 2 AF stages
c.1926	RK		12k-375k				B	TRF
c.1929	RQ(CAY-3355)	Westinghouse	15k-1.0M	700Hz audio ftr		5	B	TRF;3 RF stages;reg.det.;plug-in coils, HF twin is CAY-3356
1930	RO(CG-3362)	NRL & GE	15k-1.0M	500Hz audio ftr	100	6	B	TRF;2 RF stages;heterodyne det. below 45kHz, autodyne det. above;plug-in coils, HF twin
1930	RO-2(CAY-3940)	Westinghouse	15k-1.0M	800Hz audio ftr	60	7	B	TRF;4 RF stages;reg.det.;plug-in coils, HF twin is CAY-3941
1931	RAA	RCA	10k-1.0M	1kHz audio ftr	465	11/3	AC	Superhet; 1 RF stage; 2 IF stages with four switched IF freq.;AVC;BFO;HF twin is RAB
1932	RAC	NRL	12k-80k	800 & 1kHz audio filter	170	7/2	AC	TRF;3 RF stages; heterodyne det.; 2 AF stages;requires SE-4511 RF amp/det.unit
1932	GK-1	Westinghouse	15k-1.0M			7	B/AC	TRF;3 RF stages; heterodyne det.; variable AVC; HF twin is RAH
1933	RAG(CHS-46042)	Sylvania	14k-600k	multi-1 audio filter	93	8/1	B/AC	TRF;3 RF stages; heterodyne det.; variable AVC; HF twin is RAH
c.1935	AR-8500	RMCA	15k-1.7M	fixed bandwidth		4	B	TRF;1 RF stage;reg. det.; plug-in coils
1935	RAK	RCA	15k-600k	multi-1 audio filter	116	6/2	B/AC	TRF;2 RF stages; autodyne det.; variable AVC; HF twin is RAL
c.1937	11-U(Universal)	Sargent	15k-31.6M		35	4/1	B/AC/ DC Reg.	TRF; reg.det., built-in speaker
1938	CXS	Bendix	15k-1.5M			10	DC	Superhet; directionfinder; 1 RF stage; 2 IF stages; BFO; does not tune 70 kHz-100kHz range
1939	DZ(ADF)	RCA	15k-1.5M	1020kHz audio	37	8	DC	TRF;1 RF stage: reg.det.: optional preselector
1939	RAZ(AR-8503)	RMCA	15k-600k	fixed bandwidth	29	4/1	B/AC	TRF;1 RF stage; reg.det.: optional preselector
c.1940	117B	Mackay	16k-20M	fixed bandwidth		5/1	B/DC	TRF;1 RF stage; reg.det.; plug-in coils
1940	RBA	Federal	15k-600k	1 kHz audio ftr	147	8/2	AC	TRF;3 RF stages; heterodyne det.; BFO; variable volume limiter
1941	128AY(R-212/SR) (RC-123)	Federal	15k-650K	fixed bandwidth	43	5/1	B/AC	TRF;1 RF stage; 1 RF regenerator; grid-bias det.
1941	RBL	National	15k-600k	var BW to 600Hz	75	6/1	B/AC	TRF;2 RF stages;reg.det.; variable volume limiter;HF twins are RAO or RBH
1942	AR-8510 (R-215/SR)	RMCA	15k-650k	fixed bandwidth	39	5/1	B/AC	TRF;2 RF stages; regenerative detector; speaker
1943	BC-969 (SCR-614)	Majestic	15k-150k	variable BW	119	11/2	AC	Superhet;1 RF stage;2 IF stages with crystal filter;AVC;BFO;noise limiter
c.1943	AN/URR-2	RCA	14k-32M					Small Navy craft use
c.1947	3001-A	Mackay	15k-650k	fixed bandwidth		5/1	B/AC	TRF;1 RF stage;1 RF regenerator;grid-bias det.;built-in speaker
1949	NM-10A (AN/URM-6)	Stoddart	15k-250k	var BW to 100Hz	51	16/5	AC	RFI-laboratory superhet;1 RF stage;3 IF stages;AGC;BFO;calibrator
1950	AN/SRR-11(R-439)	RCA	14k-600k	var BW to 300Hz	65	24/3	AC	Superhet;duo-conversion;2 RF stages;4 IF stages;BFO;noise & output limiters; xtal calibrator;peanut tubes;HF twins are SRR-12 and SRR-13
1954	AN/FRR-211(R-501) AN/MRR-1							Superhet;duo-conversion;2 RF stages;6 IF stages;crystal osc;AGC;BFO;variable noise limiter;digital tuning;HF twins are R-390 and R-391
1954	R-389/URR	Collins	15k-1.5M	var BW;100Hz-8kHz	70	30/7	AC	RFI-lab.superhet;3 RF stages;quad diode balanced mixer;4 cascaded IF stages; BFO;AGC;calibrator
1956	NM-40A (AN/URM-41)	Stoddart	30Hz-15k	var BW:8Hz-60Hz	120	33-4/ 4-1	AC	Superhet;duo-conversion;2 RF stages;3 IF stages with crystal filter;noise limiter;BFO;AVC;HF twin is SP-600
1956	SP-600VLF Dero 2F	Hammarlund/Dero	10k-540k	var BW:200Hz-6kHz	70	17/4	AC	Superhet;duo-conversion;2 RF stages;3 IF stages with crystal filter;noise limiter;BFO;AVC;HF twin is SP-600
1960	AN/BRR-3(R-988)	Federal (ITT)	14k-30k	var BW:60/120/ 150Hz	85	26/3 & 17 diodes	AC	Superhet;single-conversion;3 RF stages; 5 IF stages;BFO;AGC;noise limiter;CRT display;digital tuning,built-in FSK decoder
1961	NF-105/TX	Empire	14k-1Ghz	fixed bandwidth	71	22 & diodes	AC	RFI-lab. superhet;calibraotr;5 large plug-in tuning modules with diff. IF stages;BFO
1962	AN/WRR-3(R-1134)	Magnavox	14k-600k	var BW:350/1k/ 3kHz	70	16-4/ 5	AC	Superhet;duo-conversion;2 RF stages; BFO;noise & ouput lim.;xtal calib.; digital dial

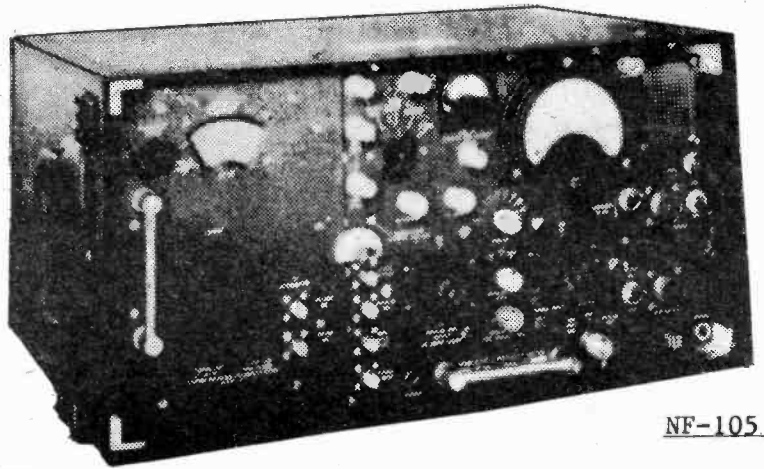
NOTE: "TUBES" column denotes number of tubes/diodes in receiver and tubes/diodes in power supply.



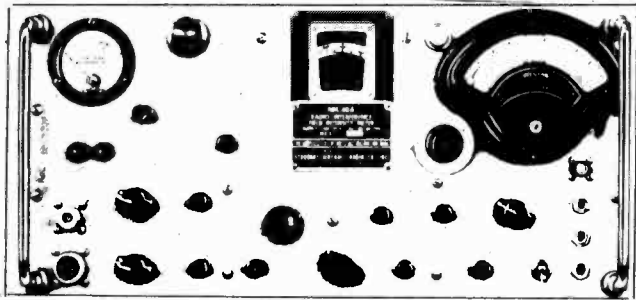
VINTAGE RECEIVERS from p.13



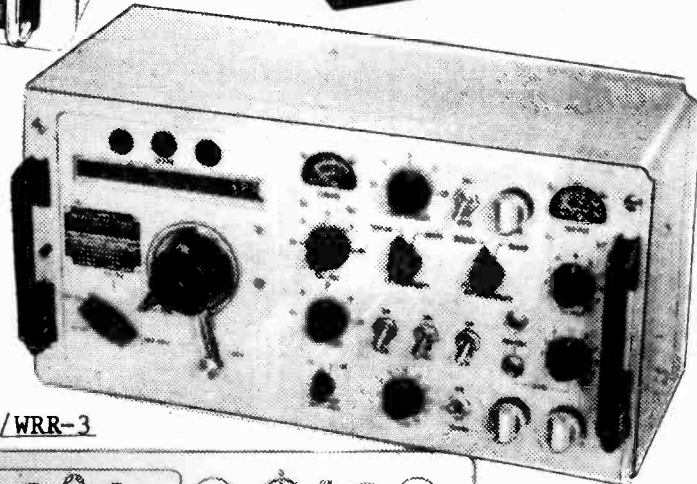
NM-10A



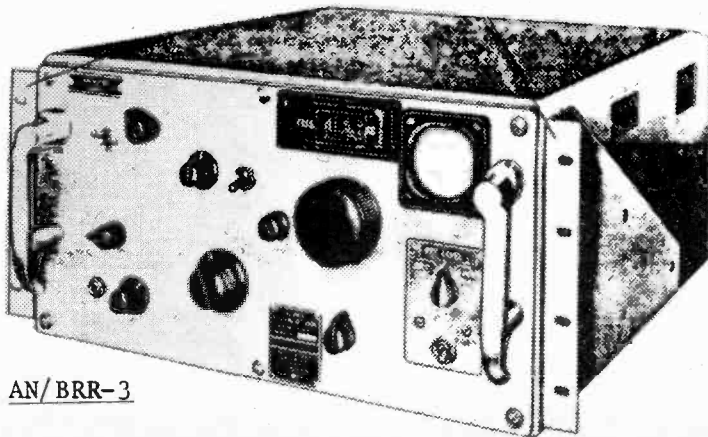
NF-105



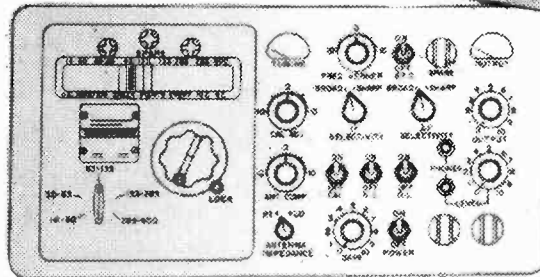
NM-40A FIRST ELF SUPERHET



AN/WRR-3



AN/BRR-3

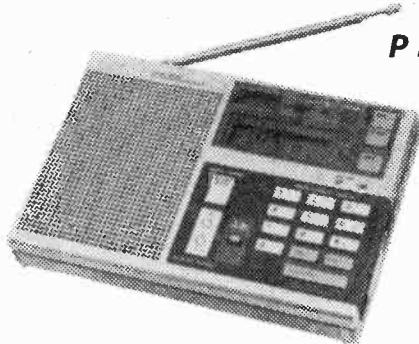


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