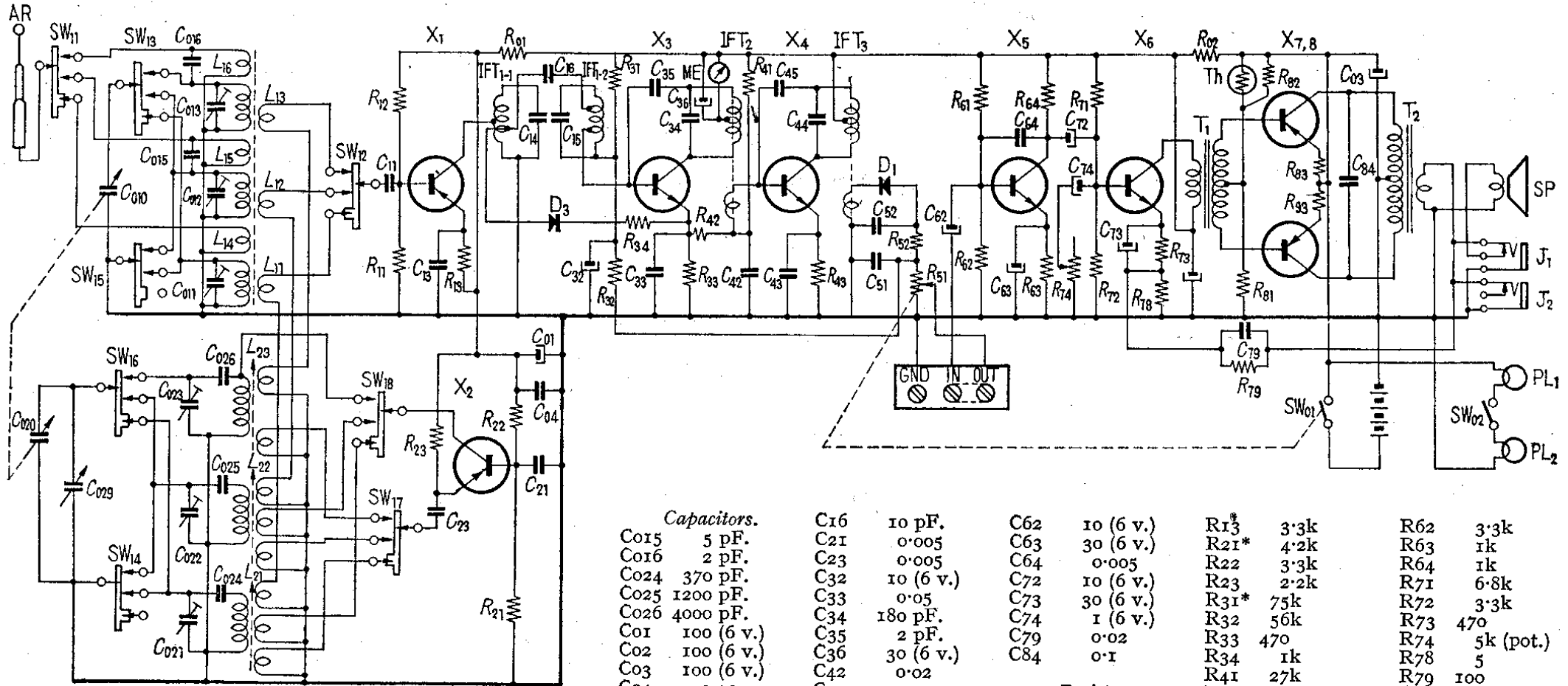


**Model TR812:** Eight transistor, three-waveband (M.W. 535-1605 kc/s.; S.W.1 2-6 Mc/s.; S.W.2 6-18 Mc/s.), portable receiver using four 1.5-volt cells (6-volts). No-signal current about 12 mA. I.F. 455 kc/s. A mixture of *n-p-n* and *p-n-p* transistors. (X<sub>1</sub>, X<sub>2</sub>) 2T20 (2SA122) *p-n-p*; (X<sub>3</sub>, X<sub>4</sub>) 2T76 (2SC76) *n-p-n*; (X<sub>5</sub>) 2T6 (2SD64) *n-p-n*; (X<sub>6</sub>) 2T6 (2SD65) *n-p-n*; (X<sub>7</sub>, X<sub>8</sub>) 2T3 (2SB52) *p-n-p*. Diodes (D<sub>1</sub>, D<sub>3</sub>) 1T23G. Thermistor (Th) S250. Pilot lamps (PL<sub>1</sub>, PL<sub>2</sub>) 3-volt, 30 mA. Speaker impedance

8 ohms. Transistor collector currents: X<sub>1</sub> 240-330  $\mu$ A.; X<sub>2</sub> 750-850  $\mu$ A.; X<sub>3</sub> 350  $\mu$ A.; X<sub>4</sub> 700-810  $\mu$ A.; X<sub>5</sub> 800-860  $\mu$ A.; X<sub>6</sub> 3.1-3.35 mA. *Notes:* When L<sub>15</sub> or L<sub>16</sub> is connected in wrong "sense" sensitivity may be much reduced in lower frequency region of SW<sub>1</sub> or SW<sub>2</sub>. Reduced frequency coverage in SW<sub>1</sub> or SW<sub>2</sub> may be due to excessive emitter current of X<sub>2</sub> or excessive minimum capacitance of trimmer or stray capacitance. Any tap on the volume control must be kept from touching the metal cover.



CIRCUIT DIAGRAM—SONY MODEL TR812

*Capacitors.*

C015	5 pF.
C016	2 pF.
C024	370 pF.
C025	1200 pF.
C026	4000 pF.
C01	100 (6 v.)
C02	100 (6 v.)
C03	100 (6 v.)
C04	0.02
C11	0.005
C13	0.005
C14	180 pF.
C15	180 pF.

C16	10 pF.
C21	0.005
C23	0.005
C32	10 (6 v.)
C33	0.05
C34	180 pF.
C35	2 pF.
C36	30 (6 v.)
C42	0.02
C43	0.05
C44	180 pF.
C45	2 pF.
C51	0.02
C52	0.02

C62	10 (6 v.)
C63	30 (6 v.)
C64	0.005
C72	10 (6 v.)
C73	30 (6 v.)
C74	1 (6 v.)
C79	0.02
C84	0.1

*Resistors.*

R01	470
R11	27k
R12	8.2k

R13*	3.3k
R21*	4.2k
R22	3.3k
R23	2.2k
R31*	75k
R32	56k
R33	470
R34	1k
R41	27k
R42	3.3k
R43	470
R51	5k (pot.)
R52	1k
R61	15k

R62	3.3k
R63	1k
R64	1k
R71	6.8k
R72	3.3k
R73	470
R74	5k (pot.)
R78	5
R79	100
R81	5k
R82	220
R83	5
R93	5

\* May be adjusted.