



THIRD TRIPLER

POWER AMPLIFIER

CRYSTAL OSCILLATOR

CRYSTAL AMPLIFIER

FIRST TRIPLER

DOUBLER

SECOND TRIPLER

RECTIFIER STAGE

12 V. DC. SUPPLY

115 V. DC. SUPPLY

AUDIO SYSTEM

CONTROL UNIT

NOTE: SOLID ARROWS INDICATE SIGNAL FLOW FOR PHONE OPERATION
DOTTED ARROWS INDICATE SIGNAL FLOW FOR MCX OPERATION

NOTE: ALL RESISTANCE VALUES ARE IN OHMS WHERE UNIT OF MEASUREMENT HAS BEEN OMITTED. ALL COMPONENTS ARE DRAWN IN THEIR DE-ENERGIZED POSITIONS.

POWER SOURCE	AC 60 CY.		AC 50 CY.		DC	
	110	220	110	220	115	230
S105	POS. 2	POS. 3	POS. 1	POS. 2	POS. 1	POS. 2
S109	POS. 2	POS. 3	POS. 1	POS. 2	POS. 1	POS. 2
S110	POS. 2	POS. 3	POS. 1	POS. 2	POS. 1	POS. 2
S111	POS. 2	POS. 3	POS. 1	POS. 2	POS. 1	POS. 2
S112	POS. 2	POS. 3	POS. 1	POS. 2	POS. 1	POS. 2
S116	POS. 2	POS. 3	POS. 1	POS. 2	POS. 1	POS. 2
S117	POS. 2	POS. 3	POS. 1	POS. 2	POS. 1	POS. 2
S118	POS. 2	POS. 3	POS. 1	POS. 2	POS. 1	POS. 2
S119	POS. 2	POS. 3	POS. 1	POS. 2	POS. 1	POS. 2
S121	POS. 2	POS. 3	POS. 1	POS. 2	POS. 1	POS. 2
S122	POS. 2	POS. 3	POS. 1	POS. 2	POS. 1	POS. 2
S123	POS. 2	POS. 3	POS. 1	POS. 2	POS. 1	POS. 2
S124	POS. 2	POS. 3	POS. 1	POS. 2	POS. 1	POS. 2
S125	POS. 2	POS. 3	POS. 1	POS. 2	POS. 1	POS. 2
S126	POS. 2	POS. 3	POS. 1	POS. 2	POS. 1	POS. 2
S127	POS. 2	POS. 3	POS. 1	POS. 2	POS. 1	POS. 2
S128	POS. 2	POS. 3	POS. 1	POS. 2	POS. 1	POS. 2
S129	POS. 2	POS. 3	POS. 1	POS. 2	POS. 1	POS. 2
S130	POS. 2	POS. 3	POS. 1	POS. 2	POS. 1	POS. 2

POWER SOURCE	AC 60 CY.		AC 50 CY.		DC	
	110	220	110	220	115	230
E115	1-2	1-3	1-4	1-5	1-6	1-7
E116	1-2	1-3	1-4	1-5	1-6	1-7
E117	1-2	1-3	1-4	1-5	1-6	1-7
L1	1-2	1-3	1-4	1-5	1-6	1-7
L2	1-2	1-3	1-4	1-5	1-6	1-7
TRANSFORMER CONNECTION	4-6	6-8	4-6	6-8	4-6	6-8

POSITION	440 V.A.C.		220 V.A.C.		110 V.A.C.	
	OPERATION	OPERATION	OPERATION	OPERATION	OPERATION	OPERATION
1	506	254	12	254	12	254
2	462	231	116	231	116	231
3	462	231	116	231	116	231
4	418	209	104	209	104	209
5	395	198	99	198	99	198
6	374	187	93	187	93	187

TFR NO.	WINDING	VOLTAGE		CURRENT	RES.	TFR NO.	WINDING	VOLTAGE		CURRENT	RES.
		VOLTS	AMPS					VOLTS	AMPS		
TFR 1	SEC. 3-4	3.4	4.2	4.2	0.48	TFR 12	SEC. 1-2	110	0.73	6.6	0.48
TFR 2	SEC. 3-4	3.4	4.2	4.2	0.48	TFR 13	SEC. 1-2	110	0.73	6.6	0.48
TFR 3	SEC. 3-4	3.4	4.2	4.2	0.48	TFR 14	SEC. 1-2	110	0.73	6.6	0.48
TFR 4	SEC. 3-4	3.4	4.2	4.2	0.48	TFR 15	SEC. 1-2	110	0.73	6.6	0.48
TFR 5	SEC. 3-4	3.4	4.2	4.2	0.48	TFR 16	SEC. 1-2	110	0.73	6.6	0.48
TFR 6	SEC. 3-4	3.4	4.2	4.2	0.48	TFR 17	SEC. 1-2	110	0.73	6.6	0.48
TFR 7	SEC. 3-4	3.4	4.2	4.2	0.48	TFR 18	SEC. 1-2	110	0.73	6.6	0.48
TFR 8	SEC. 3-4	3.4	4.2	4.2	0.48	TFR 19	SEC. 1-2	110	0.73	6.6	0.48
TFR 9	SEC. 3-4	3.4	4.2	4.2	0.48	TFR 20	SEC. 1-2	110	0.73	6.6	0.48
TFR 10	SEC. 3-4	3.4	4.2	4.2	0.48	TFR 21	SEC. 1-2	110	0.73	6.6	0.48
TFR 11	SEC. 3-4	3.4	4.2	4.2	0.48	TFR 22	SEC. 1-2	110	0.73	6.6	0.48
TFR 12	SEC. 3-4	3.4	4.2	4.2	0.48	TFR 23	SEC. 1-2	110	0.73	6.6	0.48
TFR 13	SEC. 3-4	3.4	4.2	4.2	0.48	TFR 24	SEC. 1-2	110	0.73	6.6	0.48
TFR 14	SEC. 3-4	3.4	4.2	4.2	0.48	TFR 25	SEC. 1-2	110	0.73	6.6	0.48

TFR NO.	WINDING	VOLTAGE		CURRENT	RES.	TFR NO.	WINDING	VOLTAGE		CURRENT	RES.
		VOLTS	AMPS					VOLTS	AMPS		
TFR 1	SEC. 3-4	3.4	4.2	4.2	0.48	TFR 12	SEC. 1-2	110	0.73	6.6	0.48
TFR 2	SEC. 3-4	3.4	4.2	4.2	0.48	TFR 13	SEC. 1-2	110	0.73	6.6	0.48
TFR 3	SEC. 3-4	3.4	4.2	4.2	0.48	TFR 14	SEC. 1-2	110	0.73	6.6	0.48
TFR 4	SEC. 3-4	3.4	4.2	4.2	0.48	TFR 15	SEC. 1-2	110	0.73	6.6	0.48
TFR 5	SEC. 3-4	3.4	4.2	4.2	0.48	TFR 16	SEC. 1-2	110	0.73	6.6	0.48
TFR 6	SEC. 3-4	3.4	4.2	4.2	0.48	TFR 17	SEC. 1-2	110	0.73	6.6	0.48
TFR 7	SEC. 3-4	3.4	4.2	4.2	0.48	TFR 18	SEC. 1-2	110	0.73	6.6	0.48
TFR 8	SEC. 3-4	3.4	4.2	4.2	0.48	TFR 19	SEC. 1-2	110	0.73	6.6	0.48
TFR 9	SEC. 3-4	3.4	4.2	4.2	0.48	TFR 20	SEC. 1-2	110	0.73	6.6	0.48
TFR 10	SEC. 3-4	3.4	4.2	4.2	0.48	TFR 21	SEC. 1-2	110	0.73	6.6	0.48
TFR 11	SEC. 3-4	3.4	4.2	4.2	0.48	TFR 22	SEC. 1-2	110	0.73	6.6	0.48
TFR 12	SEC. 3-4	3.4	4.2	4.2	0.48	TFR 23	SEC. 1-2	110	0.73	6.6	0.48
TFR 13	SEC. 3-4	3.4	4.2	4.2	0.48	TFR 24	SEC. 1-2	110	0.73	6.6	0.48
TFR 14	SEC. 3-4	3.4	4.2	4.2	0.48	TFR 25	SEC. 1-2	110	0.73	6.6	0.48

TDZ Transmitter, Overall Schematic Diagram (Figures 2-38, 2-41, 3-14, 7-144)

