

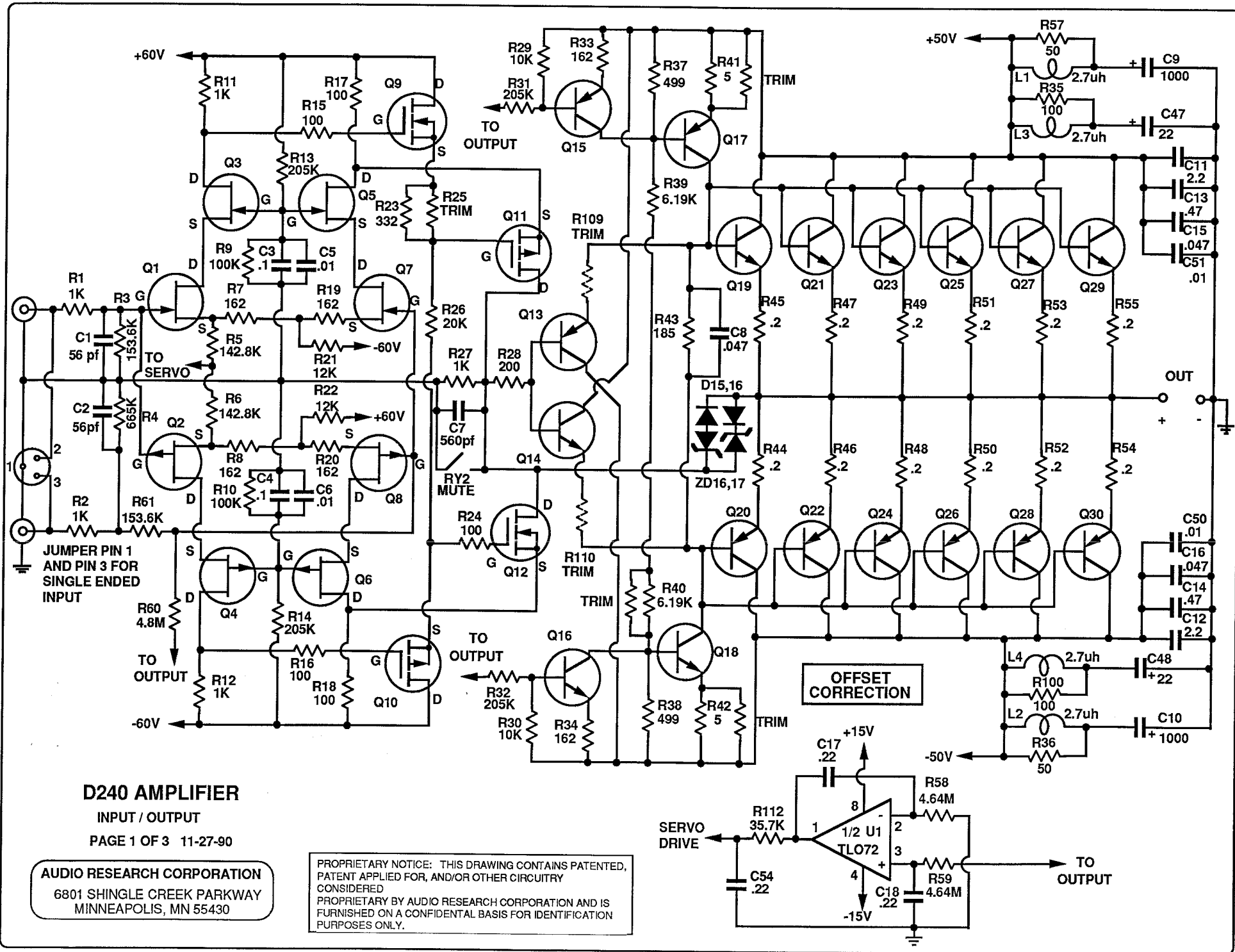


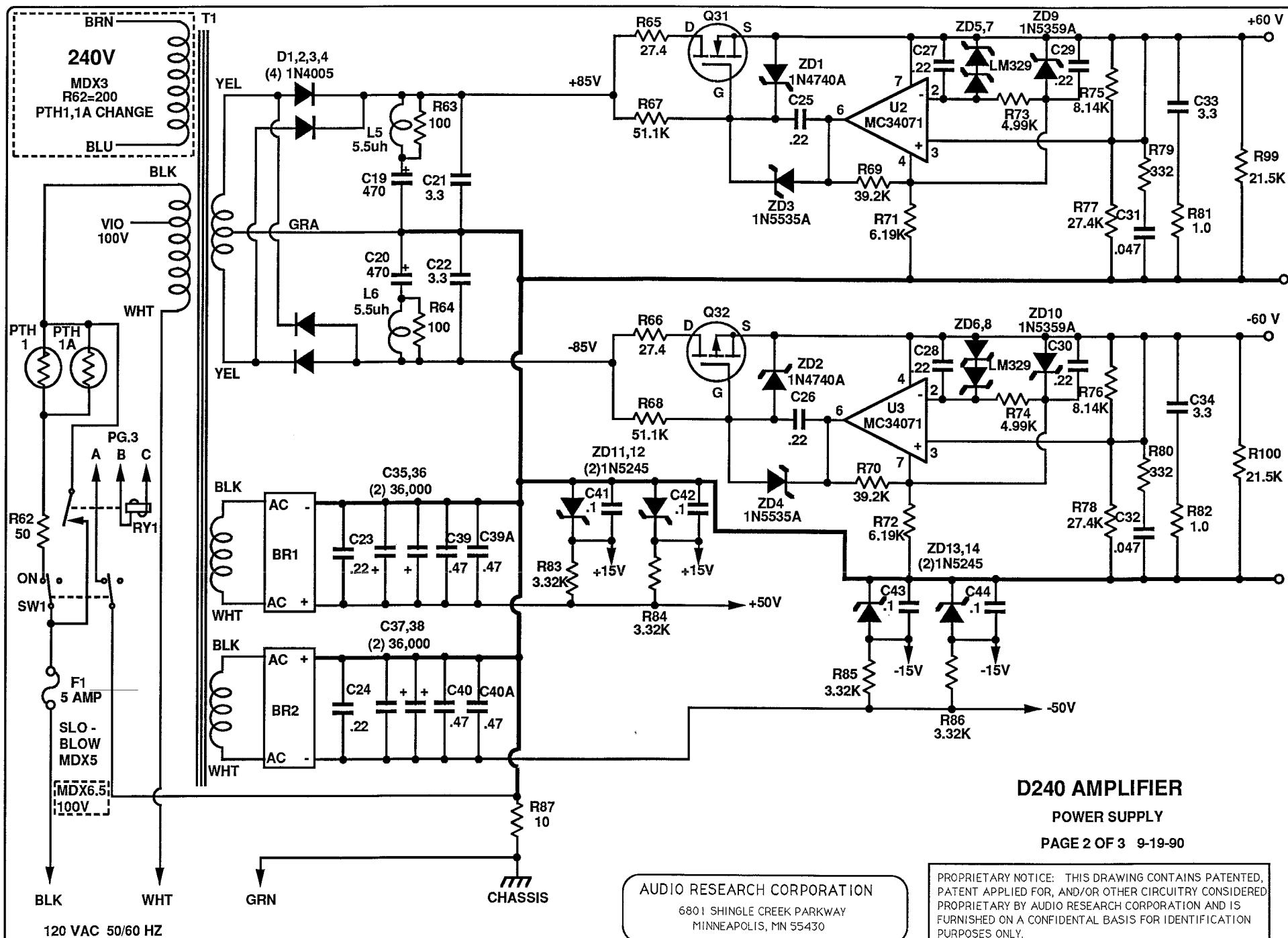
5740 GREEN CIRCLE DRIVE / MINNETONKA, MINNESOTA 55343-4424 / PHONE 612/939-0600 FAX 612/939-0604

MODEL D240 POWER AMPLIFIER

SCHEMATIC AND PARTS LIST

10-5-90





D240 AMPLIFIER

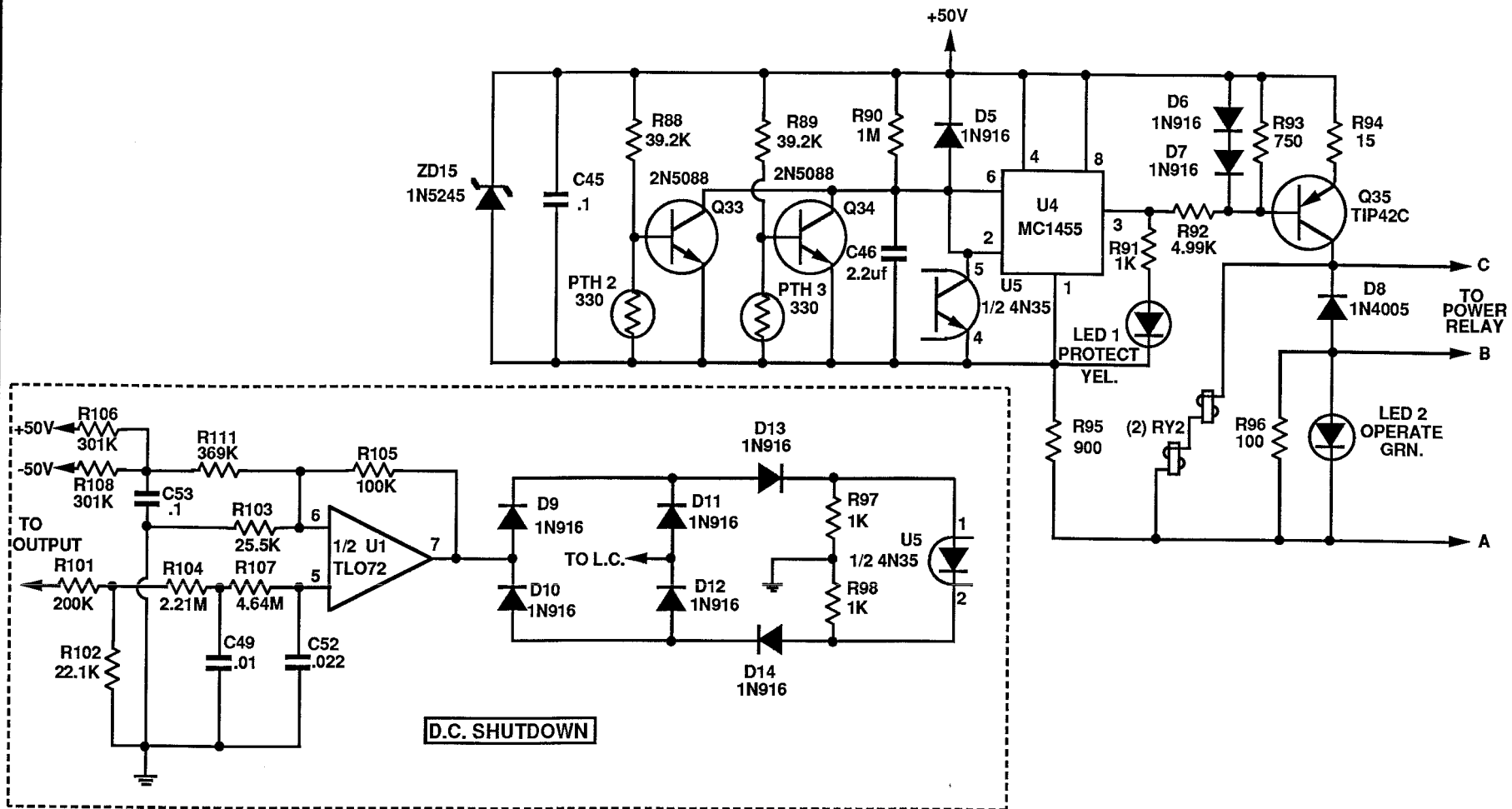
POWER SUPPLY

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AUDIO RESEARCH CORPORATION

6801 SHINGLE CREEK PARKWAY
MINNEAPOLIS, MN 55430

PROPRIETARY NOTICE: THIS DRAWING CONTAINS PATENTED, PATENT APPLIED FOR, AND/OR OTHER CIRCUITRY CONSIDERED PROPRIETARY BY AUDIO RESEARCH CORPORATION AND IS FURNISHED ON A CONFIDENTIAL BASIS FOR IDENTIFICATION PURPOSES ONLY.



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D240 AMPLIFIER

TIMER / PROTECT

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PARTS LIST

As of NOV 27 90

PRODUCT: D240

NOTES:

Schematic Symbol	Quantity	ARC Part #	Description
PTH POSISTERS			
PTH 1,1A	2	47000600	POSISTER 15 OHM PTH
PTH 2,3	2	47000500	POSISTOR 330 OHM PTH
Q TRANSISTORS			
Q 1,3,5,7	8	30006526	FET, WHITE RED BLUE
Q 2,4,6,8	8	30006470	2SJ74V
Q 9	2	30007900	FET, VNO116N5 SUPERTEX
Q 10	2	30008000	FET, VPO116N5 SUPERTEX
Q 11	2	30008400	VP1116N5
Q 12	2	30008500	VN0216N5
Q 13,17	4	30008600	SANKEN 2SA1186
Q 14,18	4	30008700	SANKEN 2SC 2837
Q 15	2	30002900	TRANSISTOR,2N4403
Q 16	2	30002800	TRANSISTOR,2N4401
Q 19,21,23,25,27,29	12	30008300	SANKEN 2SC2921
Q 20,22,24,26,28,30	12	30008200	SANKEN 2SA1215
Q 31	1	30006805	FET, YELLOW GREEN
Q 32	1	30007029	FET, GRAY WHITE
Q 33,34	2	30003100	TRANSIST.,2N5088,2N5209,2N5210
Q 35	1	30005101	TIP42C
R RESISTORS			
R 1,2,27	6	42100314	RES. 1K 1% MK-5 50PPM
R 3,3A,61,61A	8	42768403	RES. 76.8K 1% MK-3 50PPM
R 4	2	42665503	RES. 665K 1% MK-3 50 PPM
R 5,5A,5B,5C,6,6A,6B,6C,112	18	42357403	RES. 35.7K 1% MK-3 50PPM
R 7,8,19,20,33,34	12	42162203	RES. 162 OHM 1% MK-3 50PPM
R 9,10,101,101A,105	10	42100503	RES. 100K+/-1% MK-3 50PPM
R 11,12,91,97,98	7	42100303	RES. 1K 1% MK-3 50PPM
R 13,14,31,32,111	10	42205503	RES. 205K 1% MK-3 50PPM
R 15-18,24,35,36,36A,57,57A,63,64,96	25	42100203	RES. 100 OHM 1% MK-3 50PPM
R 100			
R 21,22,75,76	6	42150403	RES. 15K 1% MK-3 50PPM
R 21A,22A	4	42590403	RES. 59K 1% MK-3 50PPM
R 23,79,80	4	42332203	RES. 332 OHM 1% MK-3 50PPM
R 26	2	42200414	RES. 20K 1% MK-5 50PPM
R 28,43	4	42200205	RES. 200 OHM+/-1% MK8 50PPM
R 29,30	4	42100403	RES. 10K+/-1% MK-3 50PPM
R 37,38	4	42499203	RES. 499 OHM 1% MK-3 50PPM
R 39,40,71,72	6	42619314	RES. 6.19K 1% MK-5 50PPM
R 41,41A,42,42A,42B,87	9	42100103	RES. 10 OHM 1% MK-3 50PPM
R 43A,43B	4	42121303	RES. 1.21K 1% MK-3 50PPM
R 44-55	24	43200003	RES.0.2 OHM 5% 2W PRC SM186-19
R 58,59,107	6	42464603	RES. 4.64 MEG. 1% MK-3 50PPM
R 60,60A	4	42240613	RES. 2.4 MEG. MK-4
R 62	1	43500101	RES. 50 OHM +/-10% 20W
R 65,66	2	42274103	RES. 27.4 OHM1% MK-3 50PPM
R 67,68	2	42511403	RES. 51.1K 1% MK-3 50PPM
R 69,70,88,89	4	42392403	RES. 39.2K 1% MK-3 50PPM
R 73,74,92	3	42499303	RES. 4.99K 1% MK-3 50PPM
R 75A,76A	2	42178403	RES. 17.8K 1% MK-3 50PPM

PARTS LIST

As of NOV 27 90

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NOTES:

Schematic Symbol	Quantity	ARC Part #	Description
BR BRIDGE RECTIFIER			
BR 1,2	2	30501920	BRIDGE RECTIFIER 35AMP 100V
C CAPACITORS			
C 1,2	4	53560103	CAP. 56 PF+/-2% 630V DPN
C 3,4,53	6	53100506	CAP. 0.1 UF 160V
C 5,6,49	6	53100408	CAP. .01 UF 10% 63V PPN
C 7	2	53560201	CAP. 560 PF+/-2.5% 630V
C 8,15,16,31,32	10	53470402	CAP. 0.047 UF 160V 10% MKP10
C 9,10	4	50100908	CAP. 1000 UF 63V
C 13,14,39,39A,40,40A	8	53470513	CAP. 0.47 UF 160V 10% MKP10
C 17,18,23-30,54	14	53220507	CAP. .22 UF 10% 160V
C 19,20	2	50470802	CAP. 470 UF 100V "LYTIC"
C 21,22,33,34	4	53330602	CAP. 3.3 UF 160V +/-10%
C 35,36,37,38	4	50361001	CAP. 36000 UF 60V
C 41-45	5	53100505	CAP. .1 UF 10% 63V MPCN
C 46	1	51220601	CAP. 2.2 UF+/-10% 25V
C 46	4	53220601	CAP. 2.2 UF 160V 10% MKP10
C 47,48	4	50220701	CAP. 22 UF 100V
C 50,51	4	53100410	CAP. .01 UF 400V MKP10
C 52	2	53220402	CAP. .022 UF 63V FKP2
D DIODES			
D 1,2,3,4,8	5	30500400	IN4005 GENERAL INSTRUMENT
D 5,6,7,9,10,11,12,13,14	9	30500910	FAIRCHILD IN916B
D 15,16	4	30504800	PAD-5 DIODE,FE
F FUSES			
F1	1	34500505	FUSE, MDX5/MDL5
J CONNECTORS			
J 1	2	23201509	CHASSIS JACK,RED
J 2	2	23201510	CHASSIS JACK,WHITE
J 3	2	23201900	XLR CONNECTOR,D240
J 4,5	4	10036610	D200 BINDING POST
L INDUCTORS			
L 1-4	8	61000190	Choke , 2.7UH +/- 10%
L 5,6	2	61000170	CHOKE, 5.5 UH
LE PANEL INDICATOR			
LE 1	1	34300400	L.E.D. YELLOW,D240
LE 2	1	34300300	L.E.D. GREEN,D240

PARTS LIST

As of NOV 27 90

PRODUCT: D240

NOTES:

Schematic Symbol	Quantity	ARC Part #	Description
R 77,78	2	42274403	RES. 27.4K 1% MK-3 50PPM
R 81,82	2	43100002	RES. 1 OHM 2W 5% W.W.
R 83,83A,84,84A,85,85A,86,86A	8	42665303	RES. 6.65K 1% MK-3 50PPM
R 90	1	42100603	RES. 1 MEG 1% MK-3 50PPM
R 93	1	42750203	RES. 750 OHM 1% MK-3 50PPM
R 94	1	42150103	RES. 15 OHM 1% MK-3 50PPM
R 95	1	43890200	RES. 900 OHM 2W 1%
R 99,100	2	42215414	RES. 21.5K 1% MK-5 50PPM
R 102	2	42221403	RES. 22.1K 1% MK-3 50PPM
R 103	2	42255403	RES. 25.5K 1% MK-3 50PPM
R 104	2	42221603	RES. 2.21 MEG 1% MK-3 50PPM
R 106,108	4	42301503	RES. 301K 1% MK-3 50PPM
R 111A	2	42154503	RES. 154K 1% MK-3 50PPM
RY RELAYS			
RY 1	1	64101200	RELAY, 24V T90 POWER ON
RY 2	2	64101000	RELAY, 12V REED 51P 1200 OHM
SW SWITCHES			
SW 1	1	24200700	SWITCH,PUSH BUTTON,D240
T TRANSFORMERS			
T 1	1	60009110	XFR. D240 POWER 120V
U INTEGRATED CIRCUITS			
U 1	2	31001910	TLO72CP
U 2,3	2	31002200	MC34071P MOTOROLA
U 4	1	31000801	TIMER MC1455P1
U 5	1	34400401	4N35 PHOTO COUPLER TESTED
ZD ZENER DIODES			
ZD 1,2	2	30500300	IN4740A
ZD 3,4	2	30504200	IN5535A
ZD 5,6,7,8	4	31000705	LM329DZ GREEN
ZD 9,10	2	30503500	IN5359 B
ZD 11,12,13,14,15	5	30501800	IN5245B
ZD 16,17	4	30502100	1N5234B