Film-Tech

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SECTION 3

CABLE AND CONNECTOR DESCRIPTIONS

CONNECTOR, JM 4 (Processor Unit)

JM 4 (Pin #)	TO/FROM	FUNCTIONS AS
1	From JM3, pins 2 & 3	+24 V power
2	Blank	--
3	Blank	--
4	Blank	--
5	From JM2, pin 1	-15V power
6	Blank	--
7	To Cat. 150, pin 15	Cat. 150 Optical Surround logic line
8	To Cat. 150, pin 14	Cat. 150 Mono logic line
9	To JM3, pin 7	+15V power
10	Blank	--
11	From Cat. 150, pin E	Internal Cat. 150 control signal
12	From Cat. 150, pin F	Internal Cat. 150 control signal
13	To JM1, pins 6 & 9	Ground
14	Blank	--
15	From JM9, pin 17	Future 2 - control line #5
16	From Cat. 150, pin D	Internal Cat. 150 control signal
17	From JM8, pin 13	NR - control line #11
18	From Cat. 150, pin 4	Left optical output, 500 mV
19	From Cat. 150, pin 6	Right optical output, 500 mV
20	From JM9, pin 18	Future 1 - control line #7
21	To Cat. 150, pin 10	Left total input, 500 mV
22	To Cat. 150, pin L	Left total input, 300 mV
23	To Cat. 150, pin J	Right total input, 300 mV
24	To Cat. 150, pin 7	Right total input, 500 mV

CABLE/CONNECTOR DESCRIPTION

JM 5 (Processor Unit)	TO	JM 32 (Accessory Unit)
1	Dolby tone - control line #22	1
2	Re Dolby tone send	2
3	Le Dolby tone send	3
4	Le send	4
5	Re send	5
6	Projector 3/4 L opt. send	6
7	Projector 3/4 R opt. send	7
8	+24V (Non-switched)	8
9	+15V (Non-switched)	9
10	-15V (Non-switched)	10
11	NR (accessory) - control line #10	11
12	Mag stereo surround - control line #9	12
13	Fader "A" send	13
14	Le return	14
15	Re return	15
16	Surround send	16
17	Mag stereo surround Q send	17
18	Mag stereo surround P send	18
19	Blank	19
20	Blank	20

CABLE/CONNECTOR DESCRIPTION

JM 9 (Processor Unit)	TO	JM 22 (Control Unit)
1	Future 4 - control line #30	1
2	Blank	2
3	Future 5 - control line #8	3
4	Mag Stereo Surround - control line #9	4
5	Optical Split Surround - control line #3	5
6	Mag A - control line #6	6
7	Blank	7
8	Future 7 - control line #7	8
9	Future 6 - control line #27	9
10	Non-sync - control line #28	10
11	Spkr Reversal logic output (Cat. 213, pin 2, Acc. unit)	11
12	Future 3 - control line #25	12
13	Bass Extension - control line #1	13
14	Future 9 - control line #32	14
15	Future 8 - control line #31	15
16	Blank	16
17	Future 2 - control line #5	17
18	Future 1 - control line #7	18
19	Optical Surround - control line #13	19
20	Bypass output (Cat. 143, pin 2)	20

CONNECTOR, JM 10 (Processor Unit)

JM 10 (Pin #)	TO/FROM	FUNCTIONS AS
1	From Cat. 150, pin 6	Right Optical output, 500 mV
2	To Cat. 141 (SK16), pin B20	Right Optical input, 300 mV
3	To Cat. 141 (SK16), pin B1	Center Optical input, 300 mV
4	To Cat. 141 (SK18), pin B4	P Optical input (future), 300 mV
5	From Cat. 150, pin 4	Left Optical output, 500 mV
6	To Cat. 141 (SK16), pin A21	Left Optical input, 300 mV
7	From Cat. 150, pin 5	Center Optical output, 500 mV
8	From Cat. 150, pin 3	P Optical output (future)
9	From Special 1, pin 3	Re output, 300 mV
10	To Cat. 141 (SK16), pin A6	Re input, 300 mV
11	From JM9, pin 15	Future 8 - control line #31
12	From JM9, pin 14	Future 9 - control line #32
13	From Special 1, pin 2	Le output, 300 mV
14	To Cat. 141 (SK16), pin A2	Le input, 300 mV
15	From JM8, pin 20	Mono - control line #19
16	From JM9, pin 19	Optical Surround - control line #13
17	From Special 1, pin 4	Mag center output, 300 mV
18	To Cat. 141 (SK16), pin B2	Mag center input, 300 mV
19	From Special 1, pin 5	Mag Surround output, 300 mV
20	From Cat. 150, pin C	Q Optical output (future)
21	From Cat. 150, pin 1	Optical Surround output, 300 mV
22	To Cat. 141 (SK16), pin B5	Optical Surround input, 300 mV
23	To Cat. 141 (SK16), pin B6	Mag Surround input, 300 mV
24	To Cat. 141 (SK18), pin B8	Q Optical input (future), 300 mV

CABLE/CONNECTOR DESCRIPTION

JM 11 (Processor Unit)	TO	JM 21 (Control Unit)
1	Ground	1
2	Q	2
3	Blank	3
4	Blank	4
5	Blank	5
6	Blank	6
7	Blank	7
8	Blank	8
9	Blank	9
10	Blank	10
11	L	11
12	P	12
13	Re	13
14	R	14
15	Le	15
16	Blank	16
17	C	17
18	S	18
19	Blank	19
20	Blank	20

CONNECTOR, JM 23 (Control Unit)

JM 23 (Pin #)	
1	Ground
2	Blank
3	Blank
4	Future 7 - control line #4
5	+15V (Switched)
6	Blank
7	Blank
8	Future 2 - control line #5
9	Blank
10	Blank
11	Blank
12	Mag A - control line #6
13	Blank
14	Blank
15	Blank
16	Future 1 - control line #7
17	Future 10 - control line #12
18	Future 4 - control line #30
19	Valid buss - control line #26 (LED display flash)
20	Future 5 - control line #8
21	Future 11 - control line #29
22	Non-sync - control line #28
23	Future 6 - control line #27
24	Future 3 - control line #25

CABLE/CONNECTOR DESCRIPTION

JM 24 (Control Unit)	TO	JM 33 (Accessory Unit)
1	Ground	1
2	Q return (from Acc. unit or jumper)	2
3	P return (from Acc. unit or jumper)	3
4	Re return (from Acc. unit or jumper)	4
5	Le return (from Acc. unit or jumper)	5
6	S return (from Acc. unit or jumper)	6
7	Blank	7
8	Blank	8
9	Blank	9
10	Future 11 - control line #29	10
11	Optical Stereo Surround - control line #3	11
12	Future 9 - control line #32	12
13	Bass Extension - control line #1	13
14	Projector 4 control line	14
15	35mm Mag - control line #2	15
16	NR - control line #11	16
17	Speaker Reversal - control line #14	17
18	Blank	18
19	Q send (to Acc. unit or jumper)	19
20	P send (to Acc. unit or jumper)	20
21	Re send (to Acc. unit or jumper)	21
22	Le send (to Acc. unit or jumper)	22
23	S send (to Acc. unit or jumper)	23
24	Blank	24
25	Blank	25
26	Blank	26
27	Future 10 - control line #12	27
28	Optical Surround - control line #13	28
29	Future 8 - control line #31	29
30	Future 5 - control line #8	30
31	Projector 3 control line	31
32	Mag B - control line #23	32
33	Fader "A"	33
34	Speaker Reversal logic output (Cat. 213, pin 2, Acc. unit)	34

CONNECTOR, JM 25

JM 25 (Pin #)	
1	Blank
2	Blank
3	Future 8 - control line #31
4	Optical Surround-control line #13
5	35mm Mag - control line #2
6	Future 12 - control line #16
7	Future 9 - control line #32
8	Mono - control line #19
9	NR - control line #11
10	Blank
11	Bass Extension - control line #1
12	Non-sync Mic - control line #18
13	Speaker Reverse - control line #14
14	Optical Stereo Surround - control line #3
15	Future 13 - control line #15
16	Non-sync 3 - control line #20
17	Mag Stereo Surround - control line #9
18	Filter bus - control line #17
19	Dolby tone - control line #22
20	Blank
21	NR (Accessory) - control line #10
22	Input Switch - control line #24
23	Mag B - control line #23
24	Non-sync 2 - control line #21

CABLE/CONNECTOR DESCRIPTION

JM 27 (Control Unit)	TO	JM 13 (Leverswitch Board)
1	Ground	1
2	+15V (Switched)	2
3	+15V (Non-switched)	3
4	Blank	4
5	Flasher	5
6	Valid bus - control line #26 (LED display flash)	6
7	Blank	7
8	Ext. lever switch input: 1's A	8
9	Ext. lever switch input: 1's B	9
10	Ext. lever switch input: 1's C	10
11	Ext. lever switch input: 1's D	11
12	To Format A lever switches	12
13	To Format C lever switches	13
14	Lever switch board output: 1's B	14
15	Lever switch board output: 1's D	15
16	Lever switch board output: 1's C	16
17	Lever switch board output: 10's B	17
18	Ground	18
19	+15V (Switched)	19
20	+15V (Non-switched)	20
21	Go bus	21
22	Blank	22
23	Blank	23
24	Blank	24
25	Ext. lever switch input: 10's A	25
26	Ext. lever switch input: 10's B	26
27	Ext. lever switch input: 10's C	27
28	Ext. lever switch input: 10's D	28
29	To Format B lever switches	29
30	To Format D lever switches	30
31	Lever switch board output: 1's A	31
32	Lever switch board output: 10's A	32
33	Lever switch board output: 10's D	33
34	Lever switch board output: 10's C	34

CABLE/CONNECTOR DESCRIPTION

JM 28 (Control Unit)	TO	JM 14 (Front Panel Board)
1	Ground	1
2	+15V (Switched)	2
3	+15V (Non-switched)	3
4	Blank	4
5	Blank	5
6	Blank	6
7	Blank	7
8	Blank	8
9	Special B (system status LED) logic input	9
10	Special A (system status LED) logic input	10
11	Optical Surround - control line #13	11
12	Non-sync - control line #28	12
13	Future 1 - control line #7	13
14	Mag A - control line #6	14
15	Bass Extension - control line #1	15
16	35mm Mag - control line #2	16
17	Optical Stereo Surround - control line #3	17
18	Ground	18
19	+15V (Switched)	19
20	+15V (Non-switched)	20
21	Blank	21
22	Blank	22
23	Blank	23
24	Blank	24
25	Blank	25
26	Non-sync Mic - control line #18	26
27	Mono - control line #19	27
28	Non-sync 3 - control line #20	28
29	Non-sync 2 - control line #21	29
30	Dolby tone - control line #22	30
31	Mag B - control line #23	31
32	Mag Stereo Surround - control line #9	32
33	NR - control line #11	33
34	Future 10/External - control line #12	34

CABLE/CONNECTOR DESCRIPTION

JM 29 (Control Unit)	TO	JM 15 (Front Panel Board)
1	Ground	1
2	+15V (Switched)	2
3	Format D pre-select switch	3
4	Format B pre-select switch	4
5	Blank	5
6	Output relay (RL21-22) control line	6
7	Projector 2 control line	7
8	+15V (pulsed) for projector relays (RL23-26)	8
9	Blank	9
10	Local fader	10
11	"Activate this fader" switch	11
12	"Local mute" switch	12
13	Projector 1 pre-select switch LED	13
14	Projector 2 pre-select switch LED	14
15	Projector 3 pre-select switch LED	15
16	Projector 4 pre-select switch LED	16
17	"System operation" switch	17
18	Ground	18
19	+15V (Switched)	19
20	Format C pre-select switch	20
21	Format A pre-select switch	21
22	Format A pre-select switch LED	22
23	Format B pre-select switch LED	23
24	Format C pre-select switch LED	24
25	Format D pre-select switch LED	25
26	Projector 4 pre-select switch	26
27	Projector 3 pre-select switch	27
28	Projector 2 pre-select switch	28
29	Projector 1 pre-select switch	29
30	Go bus	30
31	Fader common	31
32	"Local mute" switch LED	32
33	"Activate this fader" switch LED	33
34	Blank	34

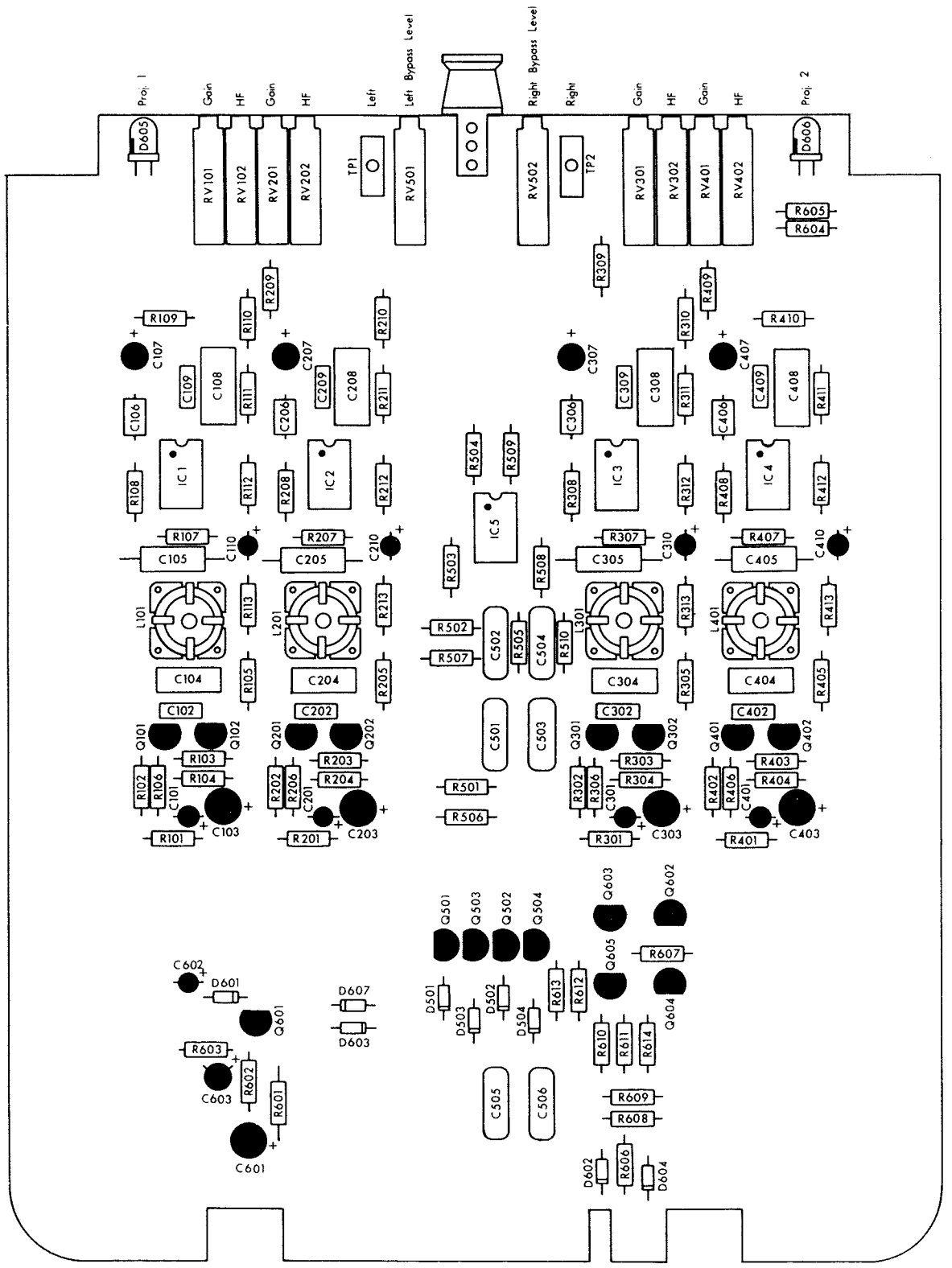
CABLE/CONNECTOR DESCRIPTION

JM 30 (Processor Unit)	TO	JM 8 (Control Unit)
1	Fader "A" send	1
2	Relay RL1 control line	2
3	Blank	3
4	Blank	4
5	Filter bus - control line #17	5
6	Projector 3 control line	6
7	Projector 4 control line	7
8	Projector 2 control line	8
9	Non-sync Mic - control line #18	9
10	35mm Mag - control line #2	10
11	Mag Stereo Surround - control line #9	11
12	NR (accessory) - control line #10	12
13	NR - control line #11	13
14	Input Switch - control line #24	14
15	Mag B - control line #23	15
16	Dolby tone - control line #22	16
17	Non-sync 2 - control line #21	17
18	+15V (Non-switched)	18
19	Non-sync 3 - control line #20	19
20	Mono - control line #19	20

SECTION 4

CIRCUIT DIAGRAMS

CIRCUIT DIAGRAMS



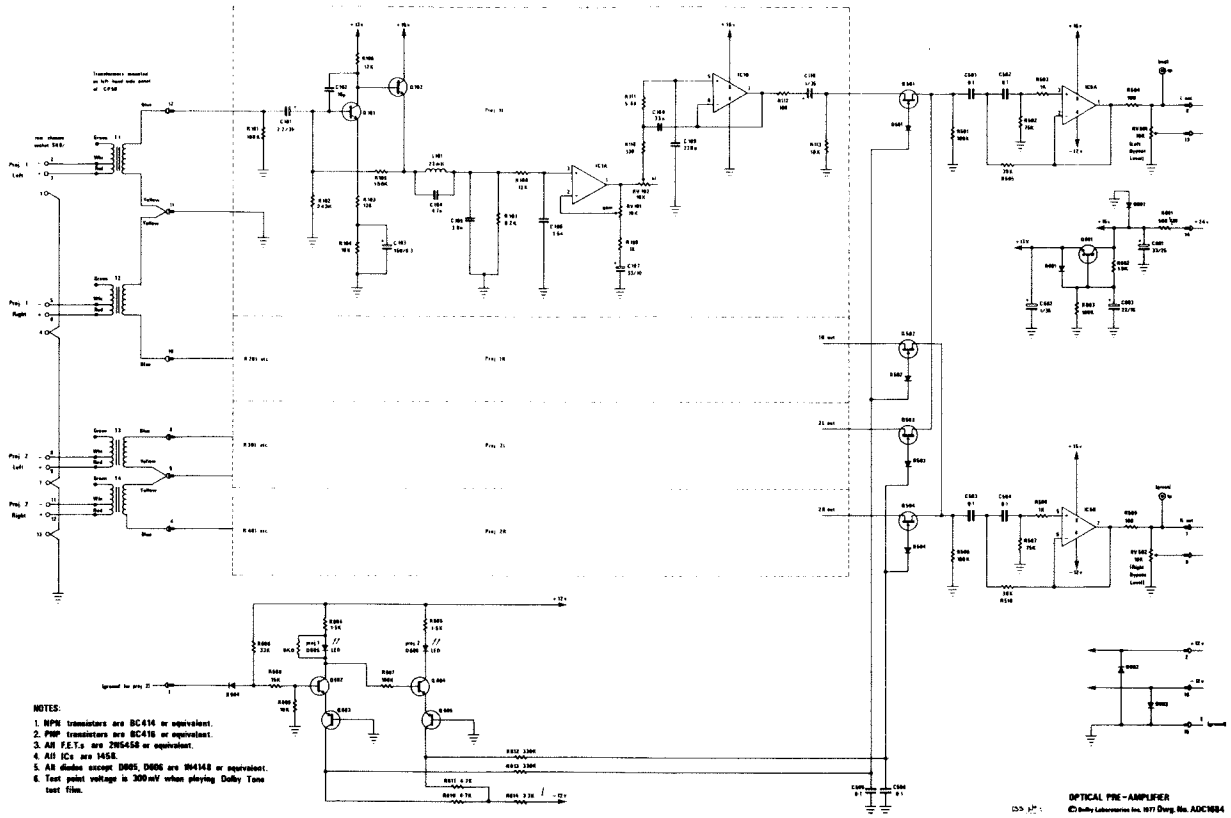
TOPSIDE CONTACTS T

BOTTOMSIDE CONTACTS 16

A

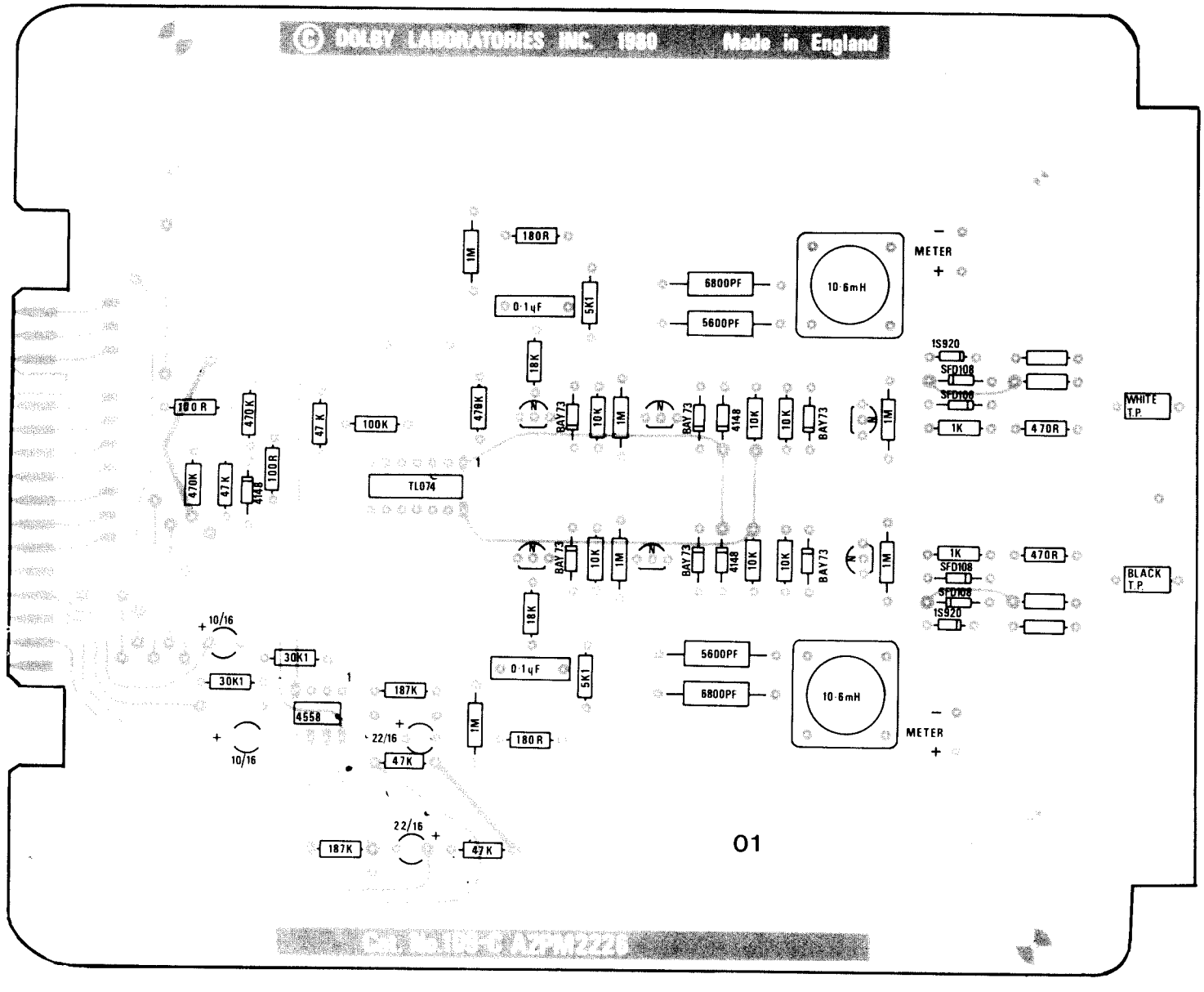
1

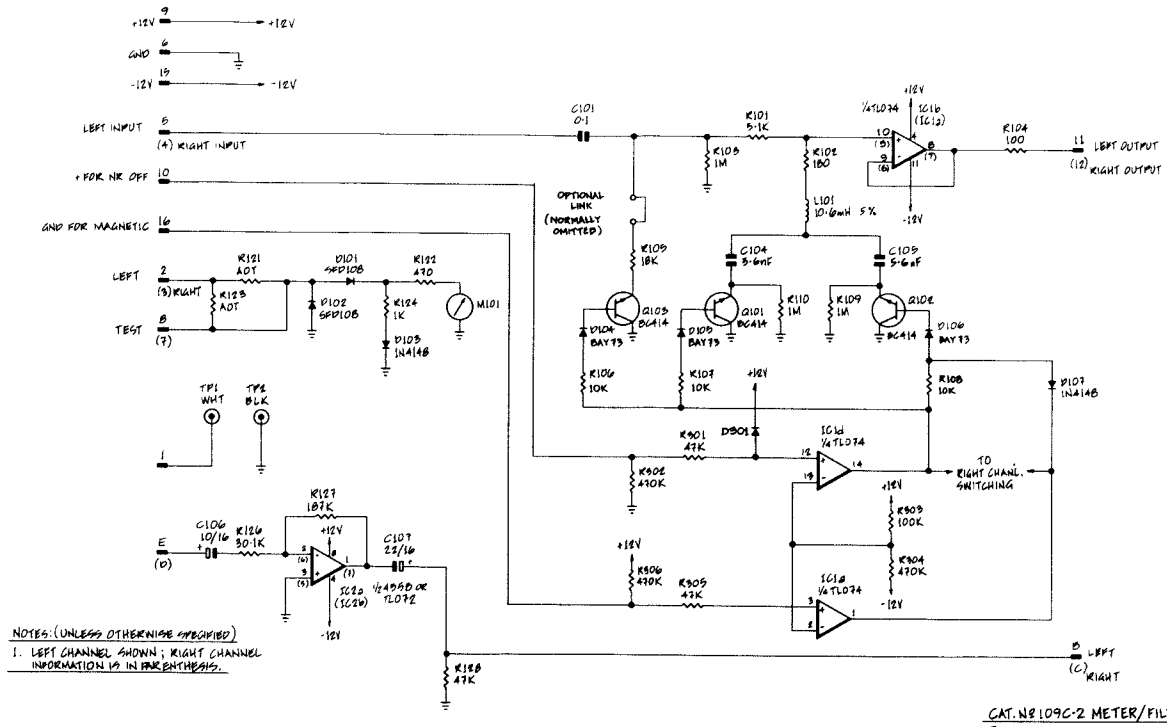
A2PA1695 Issue 1



S83/228/5127

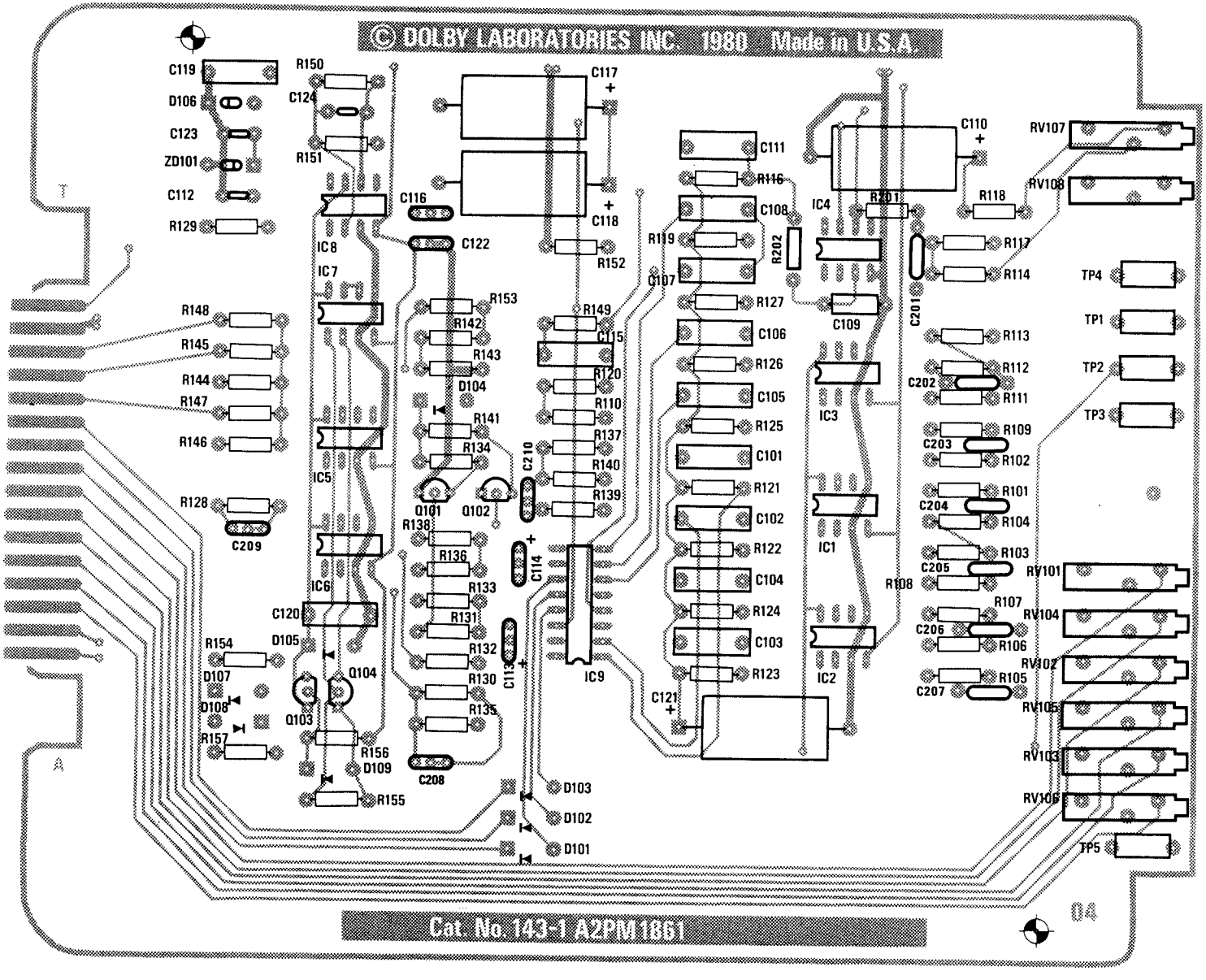
Figure 4.1 Cat. No. 108 Optical Preamplifier Card

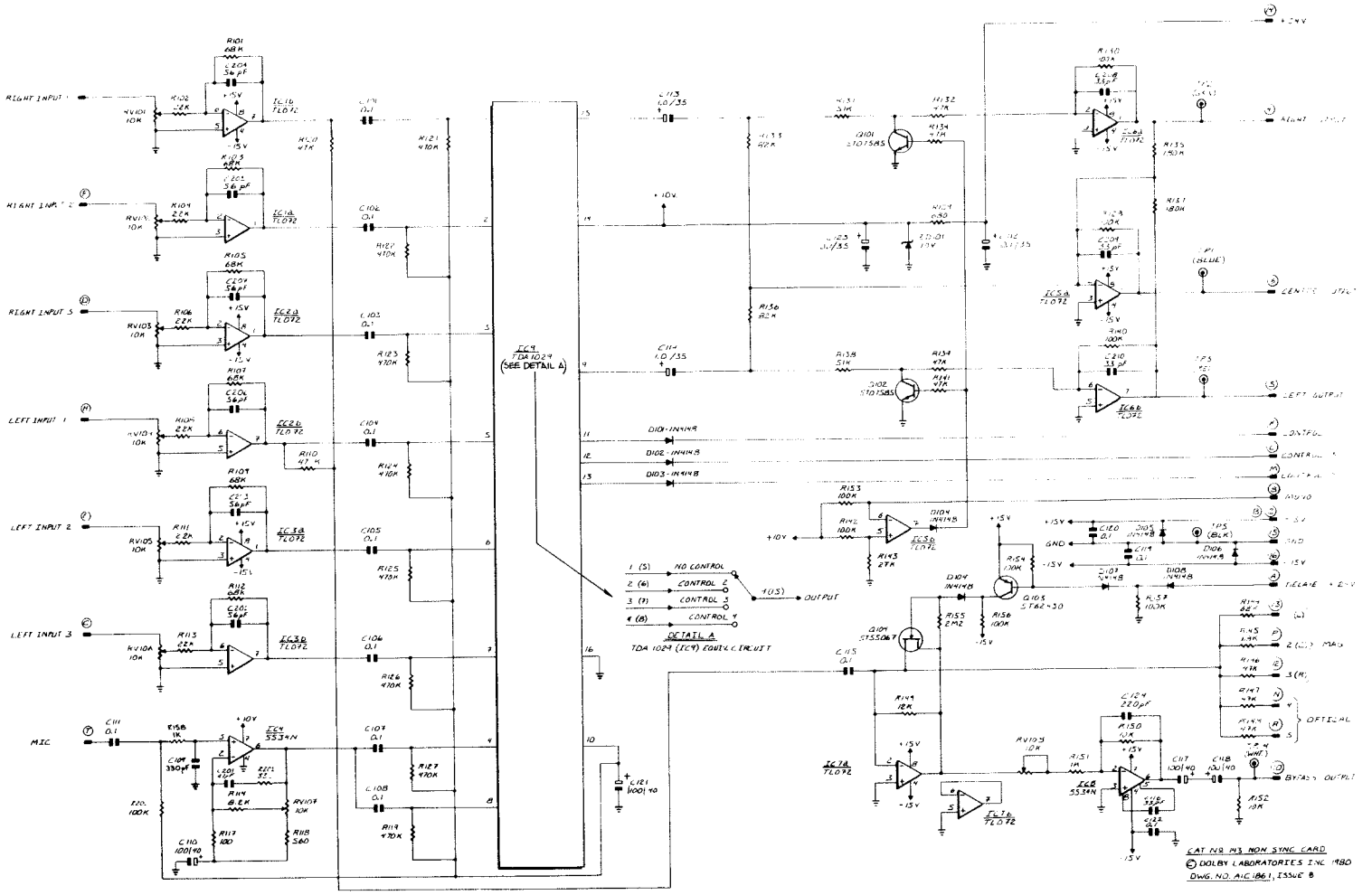

© DOLBY LABORATORIES INC. 1980 Made in England
180R
1M
0·1μF
5K1
6800PF
5600PF
10·6mH
METER
18K
470K
47K
100K
100R
4148
BAY73
10K
1M
1S920
SFD108
1K
470R
WHITE T.P.
BLACK T.P.
TL074
30K1
10/16
22/16
187K
47K
4558
01



S83/3481/5129

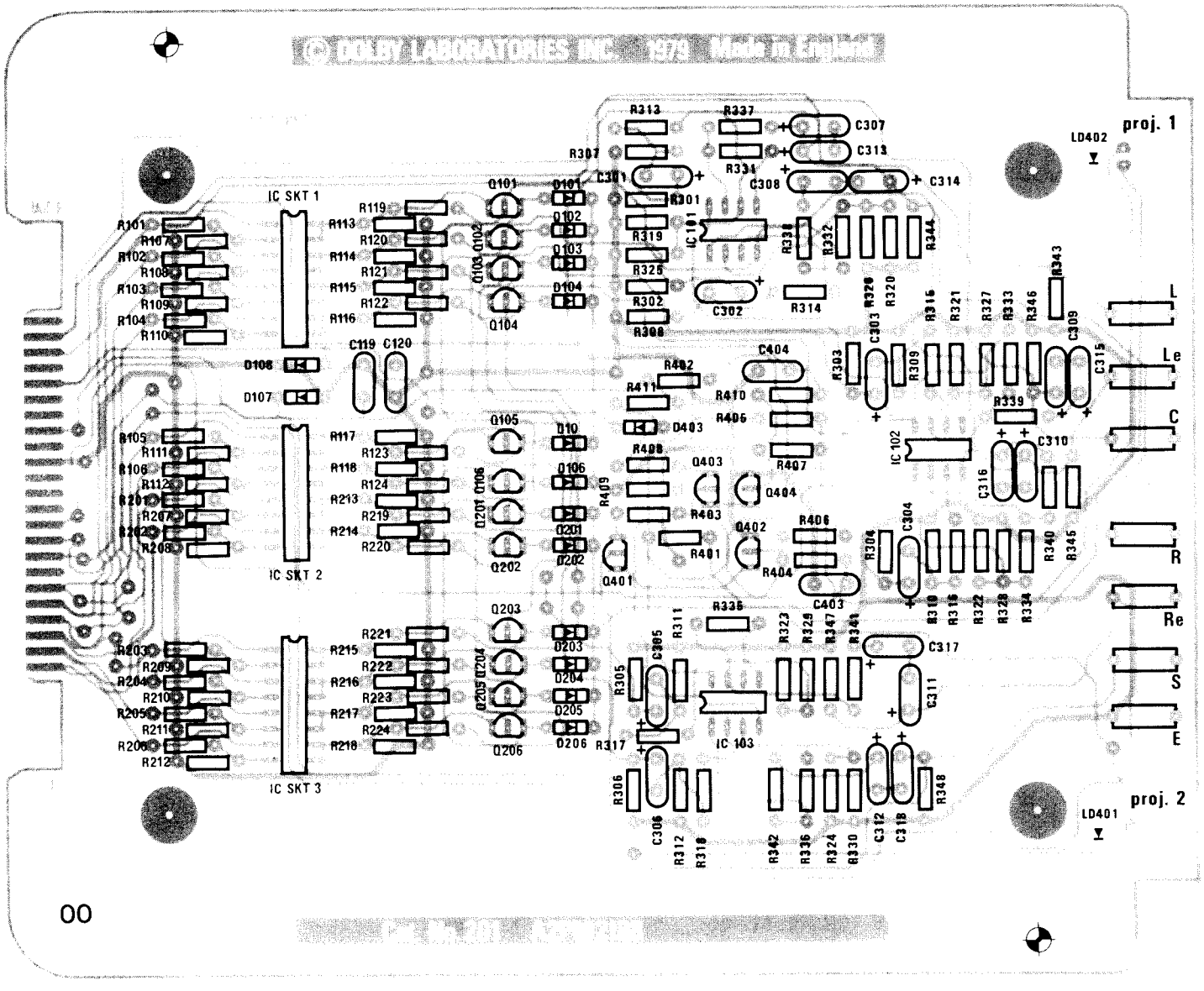
Figure 4.3 Cat. No. 109C Meter/Filter Card

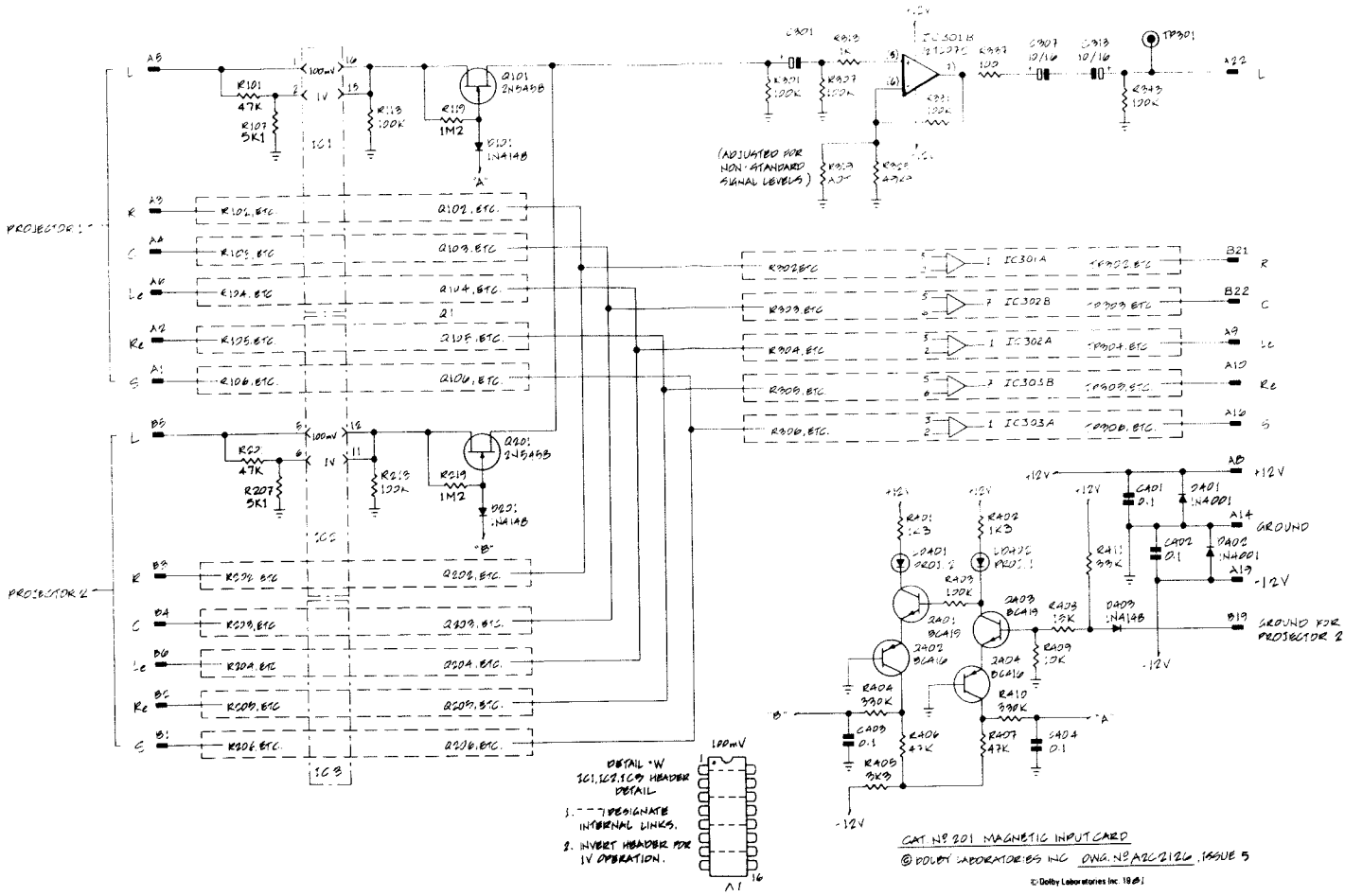

© DOLBY LABORATORIES INC. 1980 Made in U.S.A.
Cat. No. 143-1 A2PM1861
04
C119
D106
C123
ZD101
C112
R129
R150
C124
R151
C116
C122
IC8
IC7
IC5
IC6
C120
C209
C208
C117
C118
R152
R153
R142
R143
D104
R141
R134
Q101
Q102
C210
R138
R136
R133
R131
R132
R130
R135
C113
C114
R149
C115
R120
R110
R137
R140
R139
IC9
D103
D102
D101
R148
R145
R144
R147
R146
R128
R154
D107
D108
R157
D105
Q104
Q103
R156
D109
R155
C111
R116
C108
R119
C107
R127
C106
R126
C105
R125
C101
R121
C102
R122
C104
R124
C103
R123
C121
R202
C110
R201
IC4
C109
IC3
IC1
IC2
R108
R118
R117
R114
C201
C202
R113
R112
R111
C203
R109
R102
C204
R101
R104
C205
R103
C206
R107
R106
C207
R105
RV107
RV108
TP4
TP1
TP2
TP3
RV101
RV104
RV102
RV105
RV103
RV106
TP5



S83/3482/5130

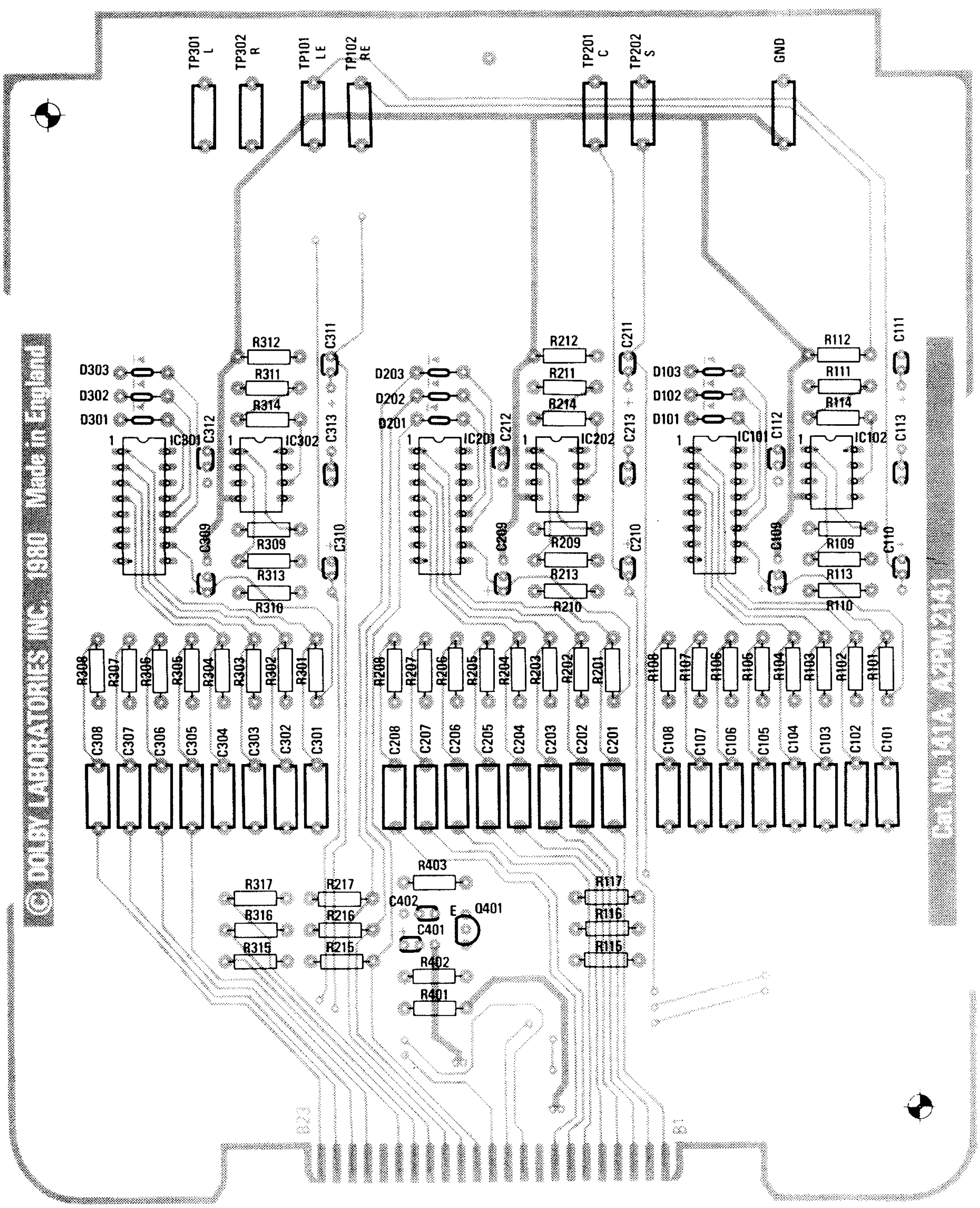
Figure 4.4 Cat. No. 143 Non-sync Card


© DOLBY LABORATORIES INC. 1974 MADE IN ENGLAND
proj. 1
proj. 2
LD402
LD401
IC SKT 1
IC SKT 2
IC SKT 3
IC 101
IC 102
IC 103
L
Le
C
R
Re
S
E
00



S83/3483/5131

Figure 4.5 Cat. No. 201 Magnetic Input Card

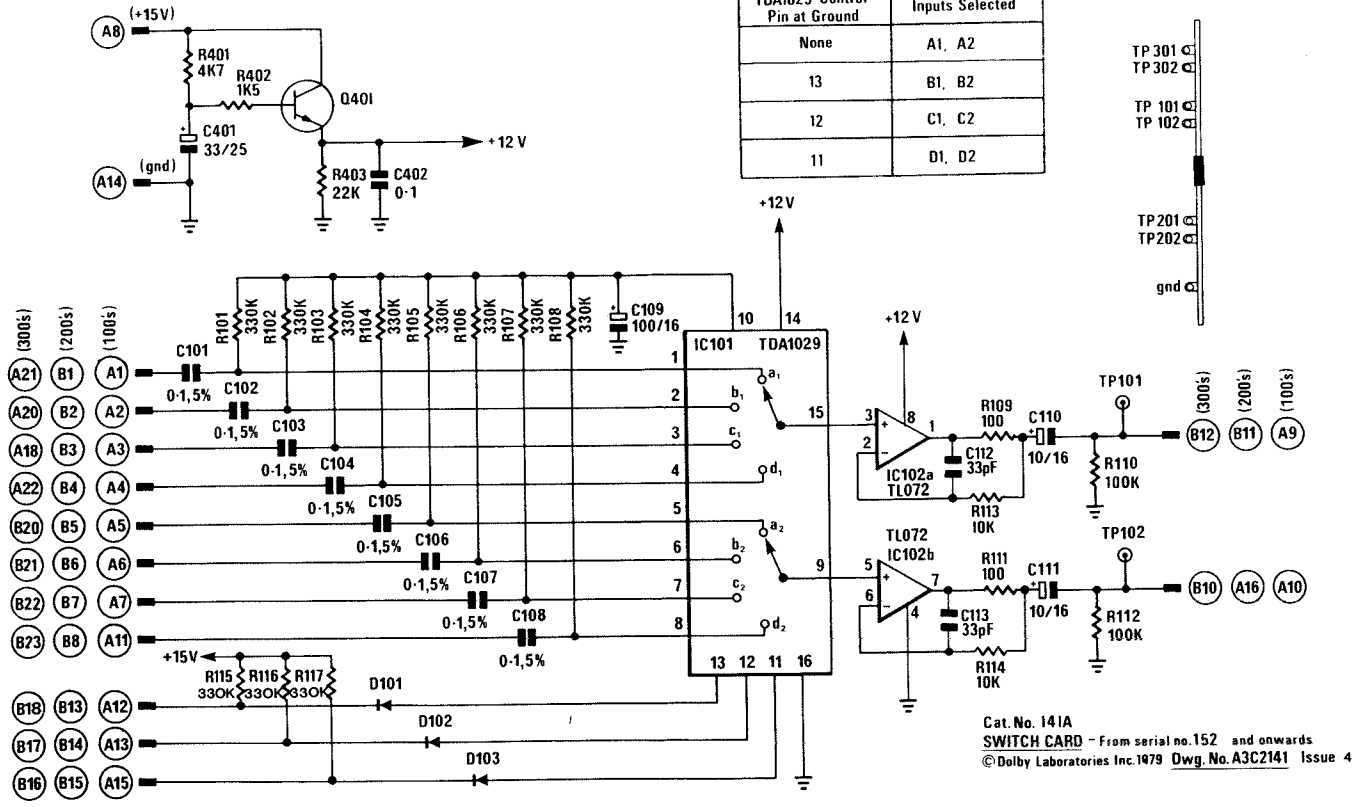


© DOLBY LABORATORIES INC. 1980 Made in England
Cat. No. 141A A2PM2141
TP301 L
TP302 R
TP101 L E
TP102 R E
TP201 C
TP202 S
GND
IC101
IC102
IC201
IC202
IC301
IC302
Q401
B1
B23

NOTE: Each Switch Card has six channels, only two of which are shown below. Other four channels comprise IC 201, 202, 301, 302.

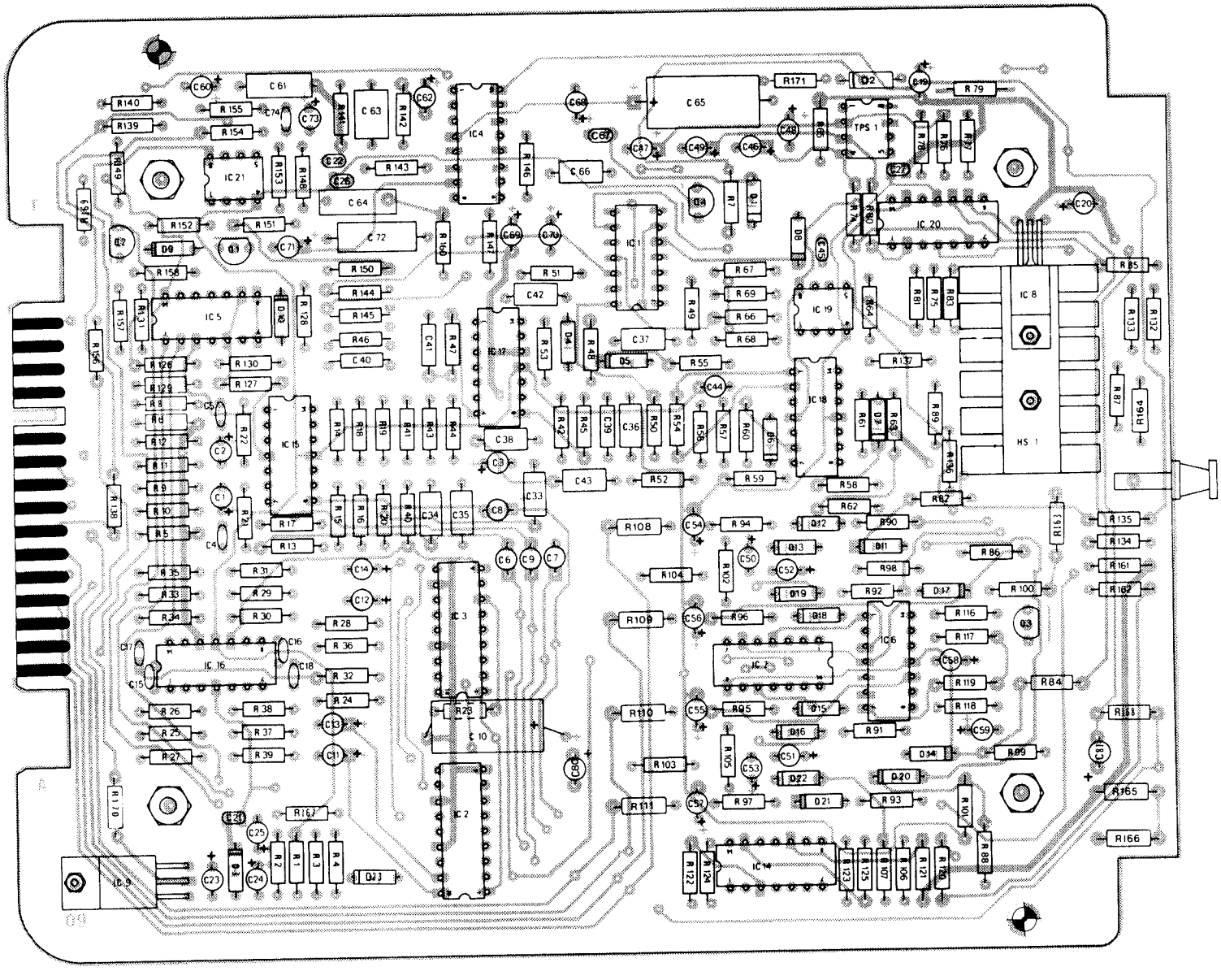
TDA1029 Switching Logic

TDA1029 Control Pin at Ground	Inputs Selected
None	A1, A2
13	B1, B2
12	C1, C2
11	D1, D2



S83/3484/5132

Figure 4.6 Cat. No. 141A Electronic Switch Card


IC 1
IC 2
IC 3
IC 4
IC 5
IC 6
IC 7
IC 8
IC 9
IC 10
IC 14
IC 15
IC 16
IC 17
IC 18
IC 19
IC 20
IC 21
TPS 1
HS 1
C 61
C 63
C 64
C 65
C 66
C 72
R 79
R 85
R 87
R 88
R 89
R 90
R 91
R 92
R 93
R 94
R 95
R 96
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R 166
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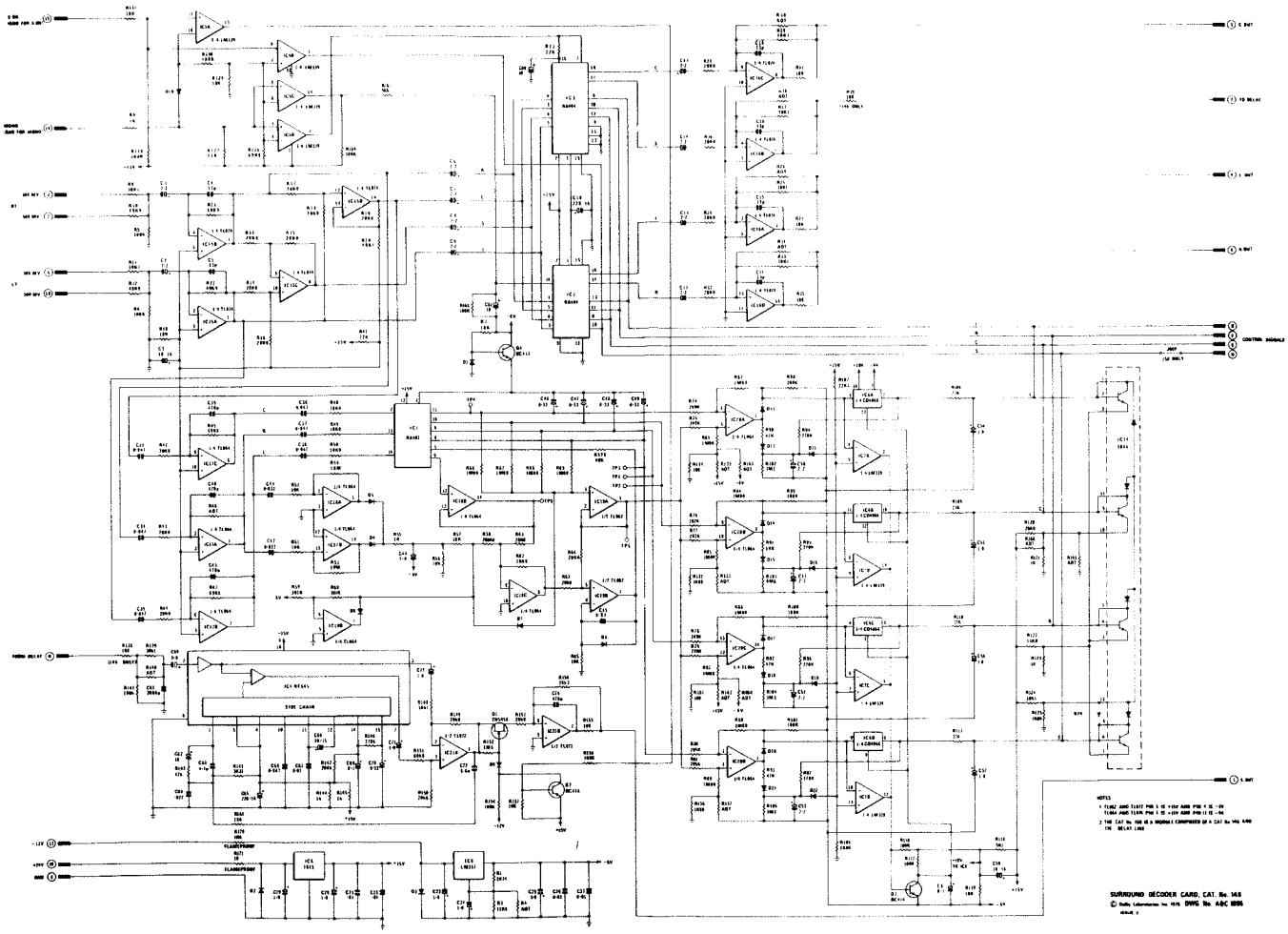
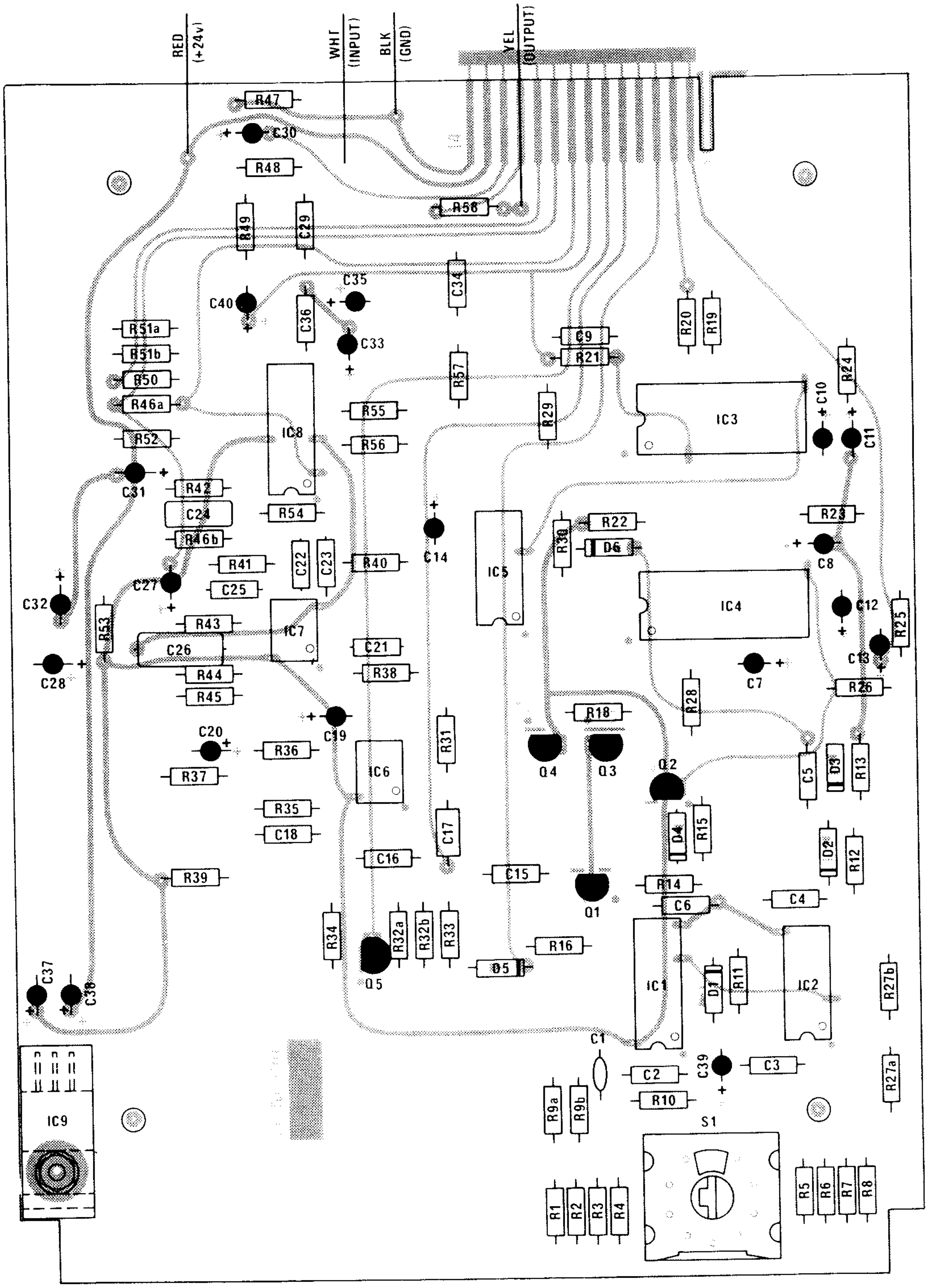
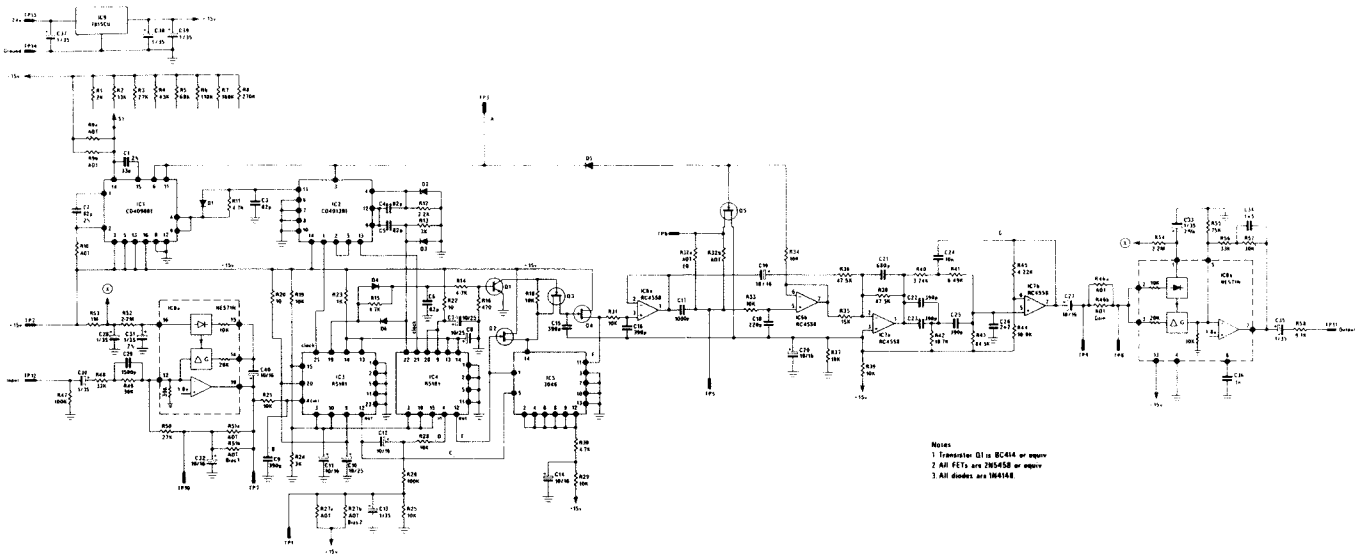


S83/3485/5133

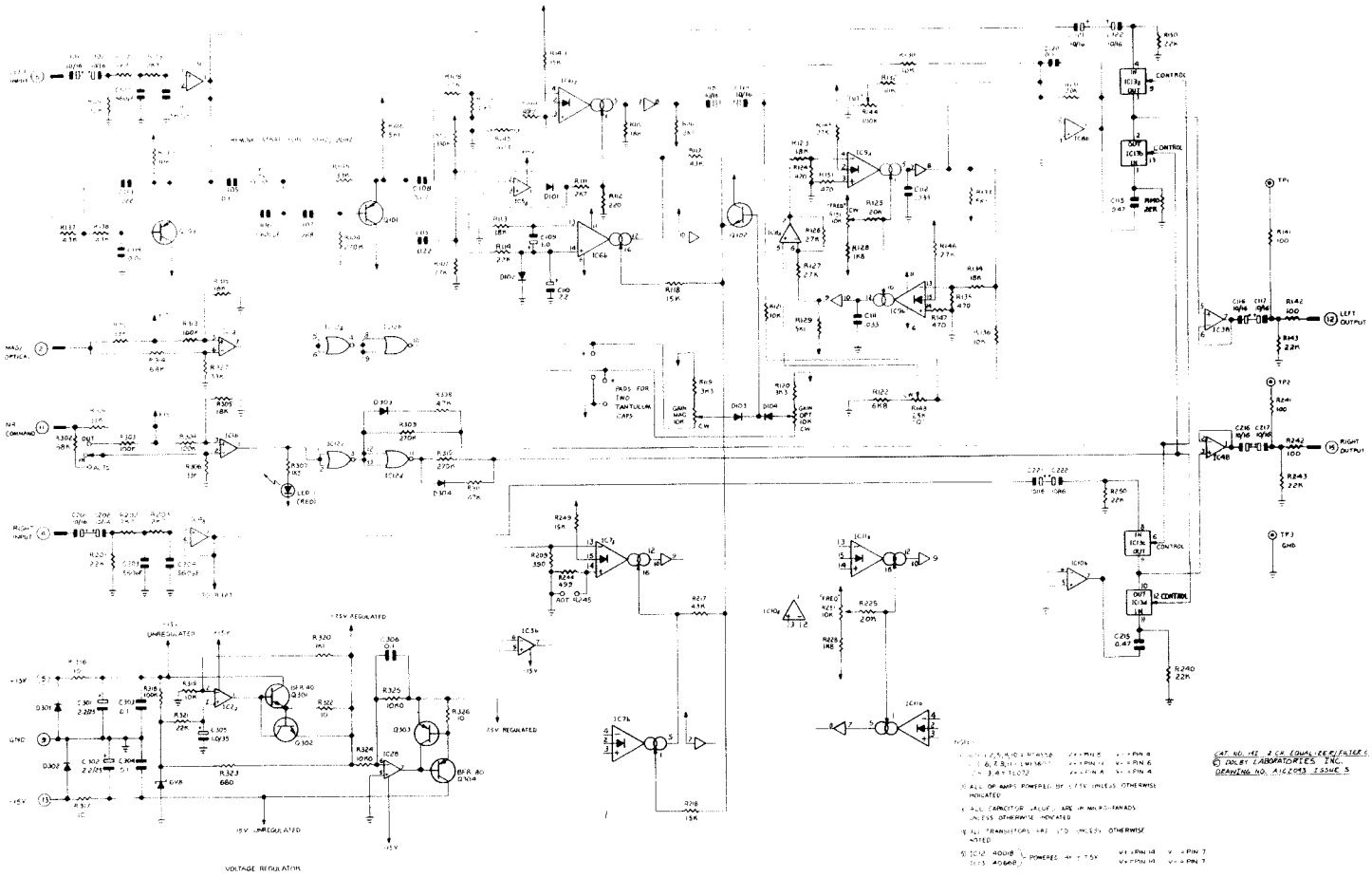
Figure 4.7 Cat. No. 146 Decoder Section of Cat. No. 150


RED
(+24v)
WHT
(INPUT)
BLK
(GND)
YEL
(OUTPUT)
R47
C30
R48
R58
R49
C29
C34
C35
C40
C36
C33
R51a
R51b
R50
R46a
R52
IC8
R55
R56
R57
C9
R21
R20
R19
R24
R29
IC3
C10
C11
C31
R42
C24
R46b
R54
C14
IC5
R30
R22
D6
R23
C8
R41
C22
C23
R40
C27
C25
IC4
C12
R25
C32
R53
R43
IC7
C26
C21
C28
R44
R38
R45
C7
C13
R26
R28
R18
C20
C19
R36
R31
R37
IC6
Q4
Q3
Q2
C5
D3
R13
R35
C18
R15
D4
D2
R12
C17
C16
R39
C15
R14
Q1
C6
C4
R34
R32a
R32b
R33
Q5
R16
D5
IC1
D1
R11
IC2
R27b
C37
C38
C1
C2
C39
C3
R27a
R10
R9a
R9b
IC9
S1
R1
R2
R3
R4
R5
R6
R7
R8



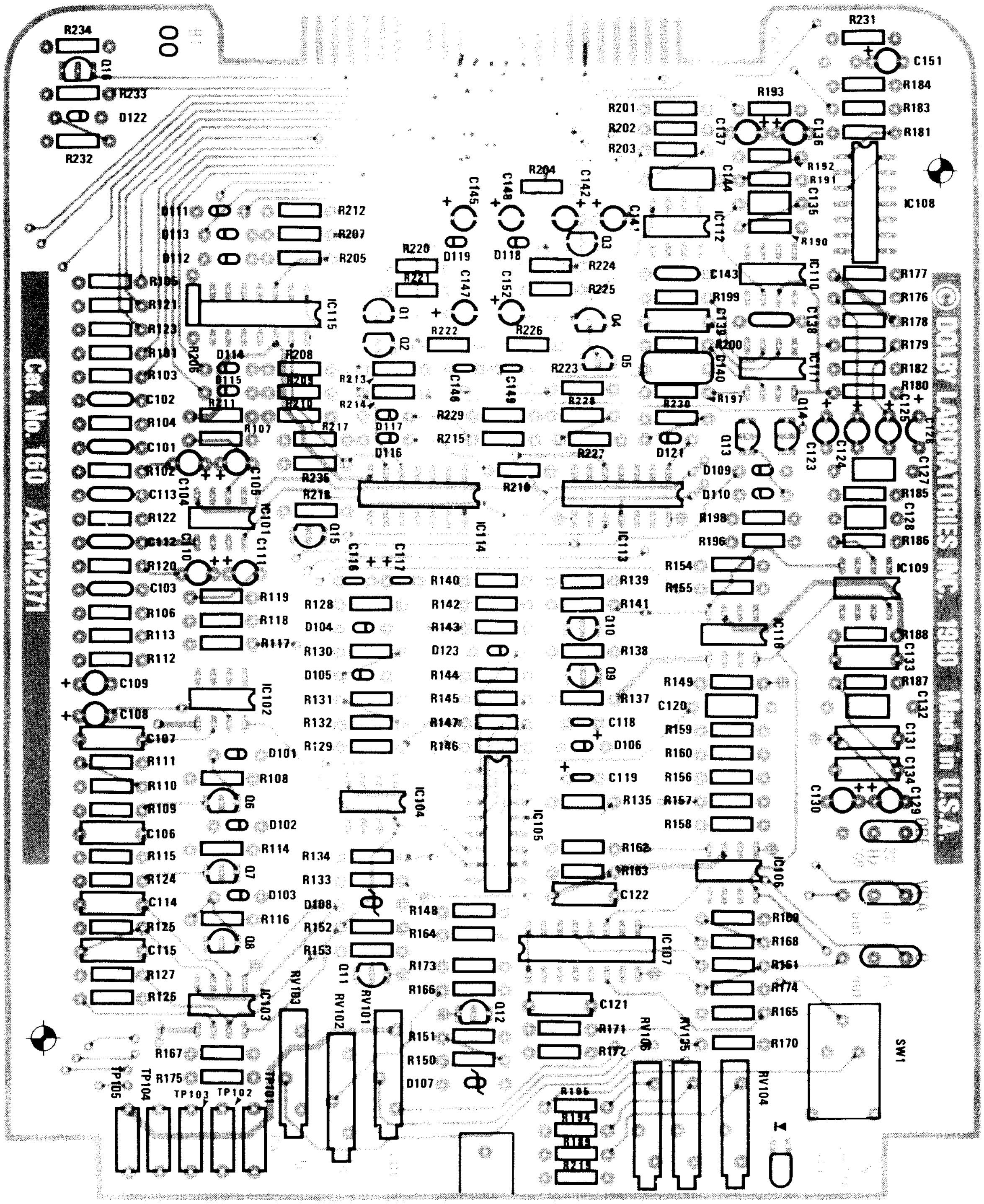
DELAY LINE CARD © Datel Laboratories Inc 1977 Dwg No ADC1718
Issue 1

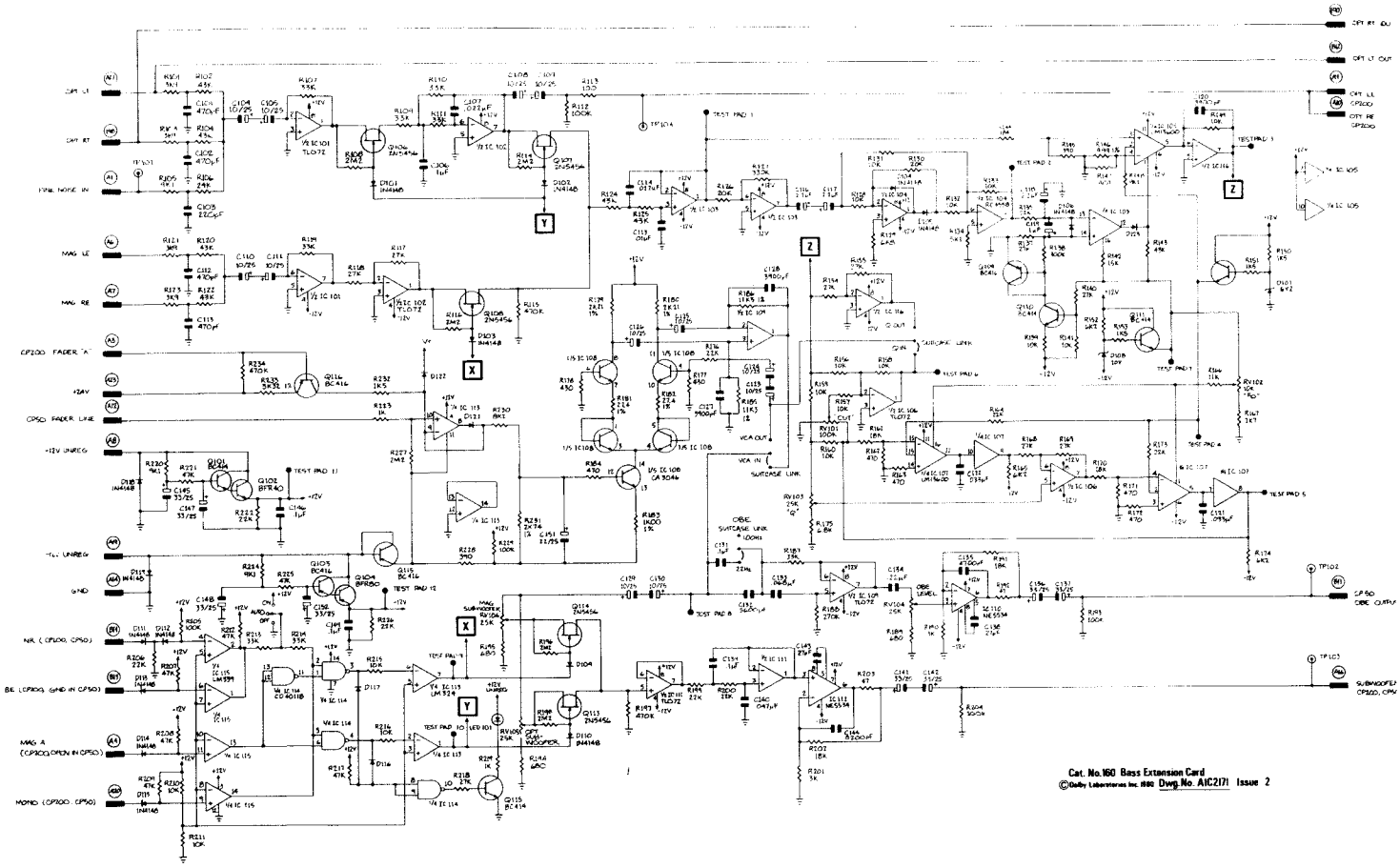
S83/3486/5134 Figure 4.8 Cat. No. 116B Delay Line Section of Cat. No. 150



S83/3487/5135

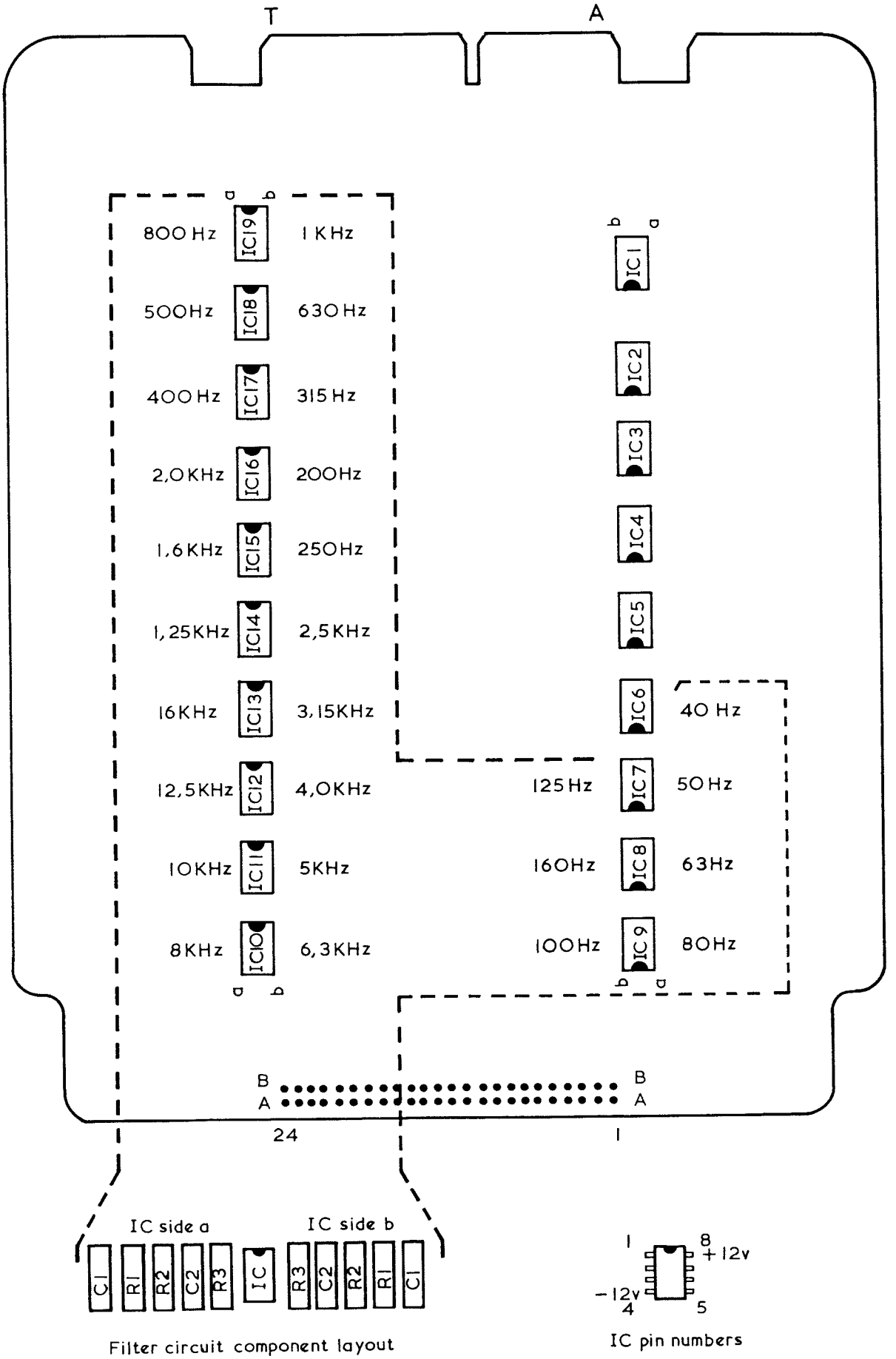
Figure 4.9 Cat. No. 142 Equalizer/Filter Card


Cat. No. 160 A2PM2171
© DOLBY LABORATORIES INC. 1980 Made in U.S.A.



S83/3488/5136

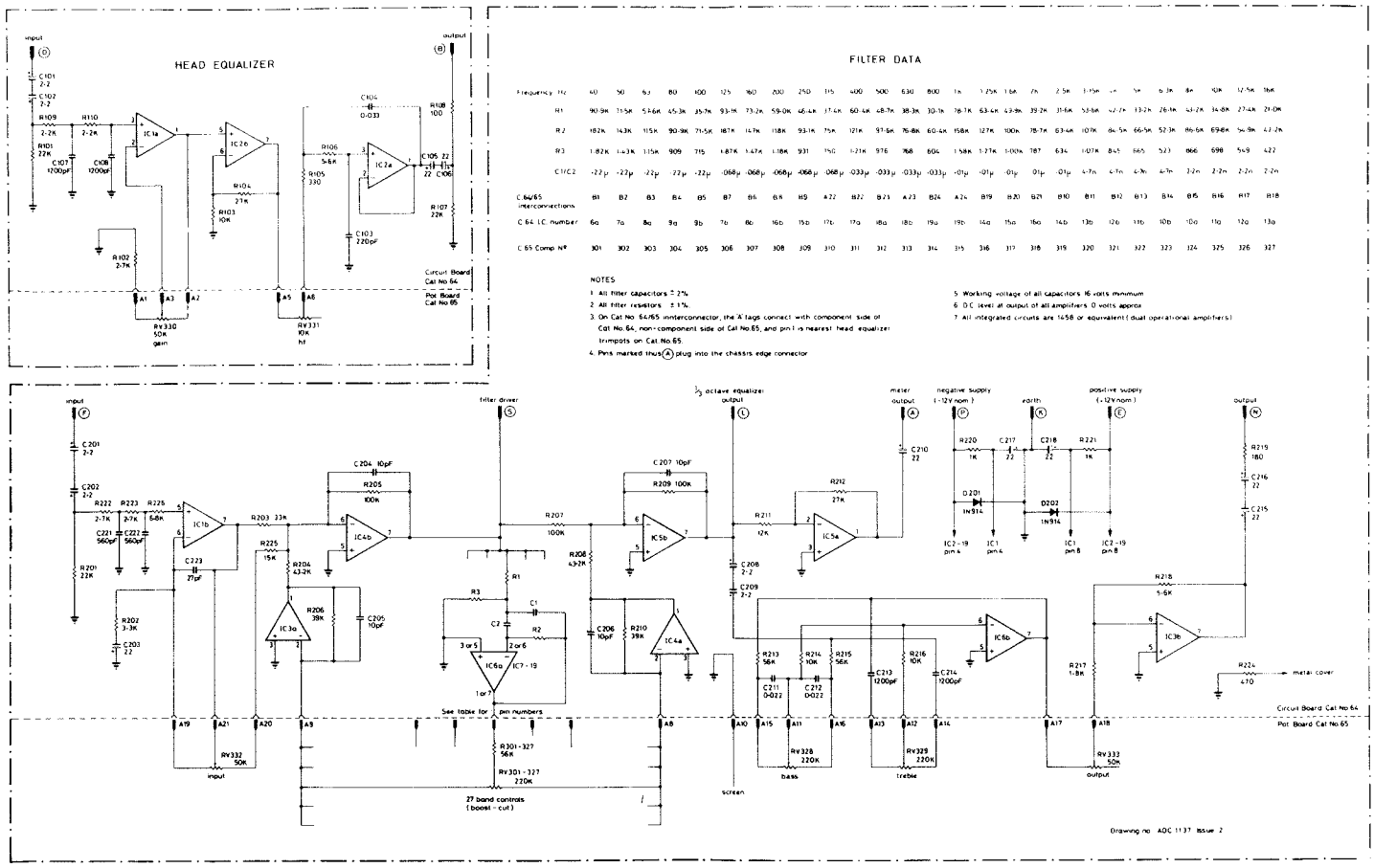
Figure 4.10 Cat. No. 160 Bass Extension Card

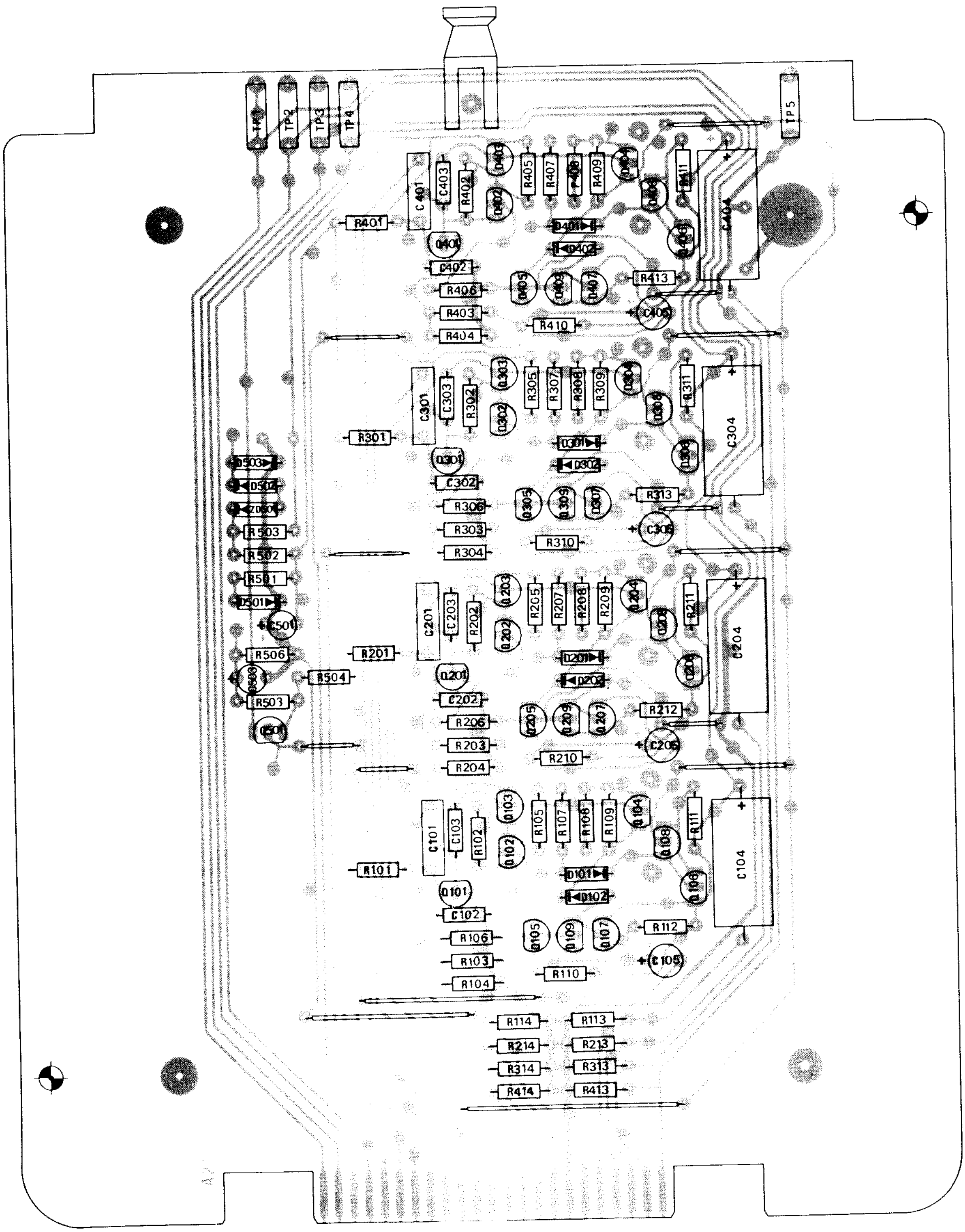


Filter circuit component layout

IC pin numbers

Cat.No.64 Simplified component layout


HEAD EQUALIZER
input
output
Circuit Board Cat No 64
Pot Board Cat No 65
FILTER DATA
NOTES
1 All filter capacitors ± 2%
2 All filter resistors ± 1%
3 On Cat No 64/65 interconnector, the 'A' tags connect with component side of Cat No.64, non-component side of Cat No.65, and pin 1 is nearest head equalizer trimpots on Cat No.65.
4 Pins marked thus (A) plug into the chassis edge connector
5 Working voltage of all capacitors 16 volts minimum
6 D.C. level at output of all amplifiers 0 volts approx
7 All integrated circuits are 1458 or equivalent (dual operational amplifiers)
filter driver
⅓ octave equalizer output
meter output
negative supply (-12V nom.)
earth
positive supply (+12V nom.)
27 band controls (boost - cut)
See table for pin numbers
input
screen
bass
treble
output
metal cover
Drawing no AOC 1137 issue 2



TP1
TP2
TP3
TP4
TP5
C401
C403
R402
Q403
Q402
R405
R407
R408
R409
Q404
Q408
R411
C404
Q406
R401
Q401
D401
D402
C402
R406
R403
R404
Q405
Q409
Q407
R413
C405
R410
C301
C303
R302
Q303
Q302
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Q304
Q308
R311
C304
Q306
R301
Q301
D301
D302
C302
R306
R303
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Q305
Q309
Q307
R313
C305
R310
D503
D502
ZD501
R503
R502
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D501
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R506
Q502
R504
R503
Q501
C201
C203
R202
Q203
Q202
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C204
Q206
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R210
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Q104
Q108
R111
C104
Q106
R101
Q101
D101
D102
C102
R106
R103
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R112
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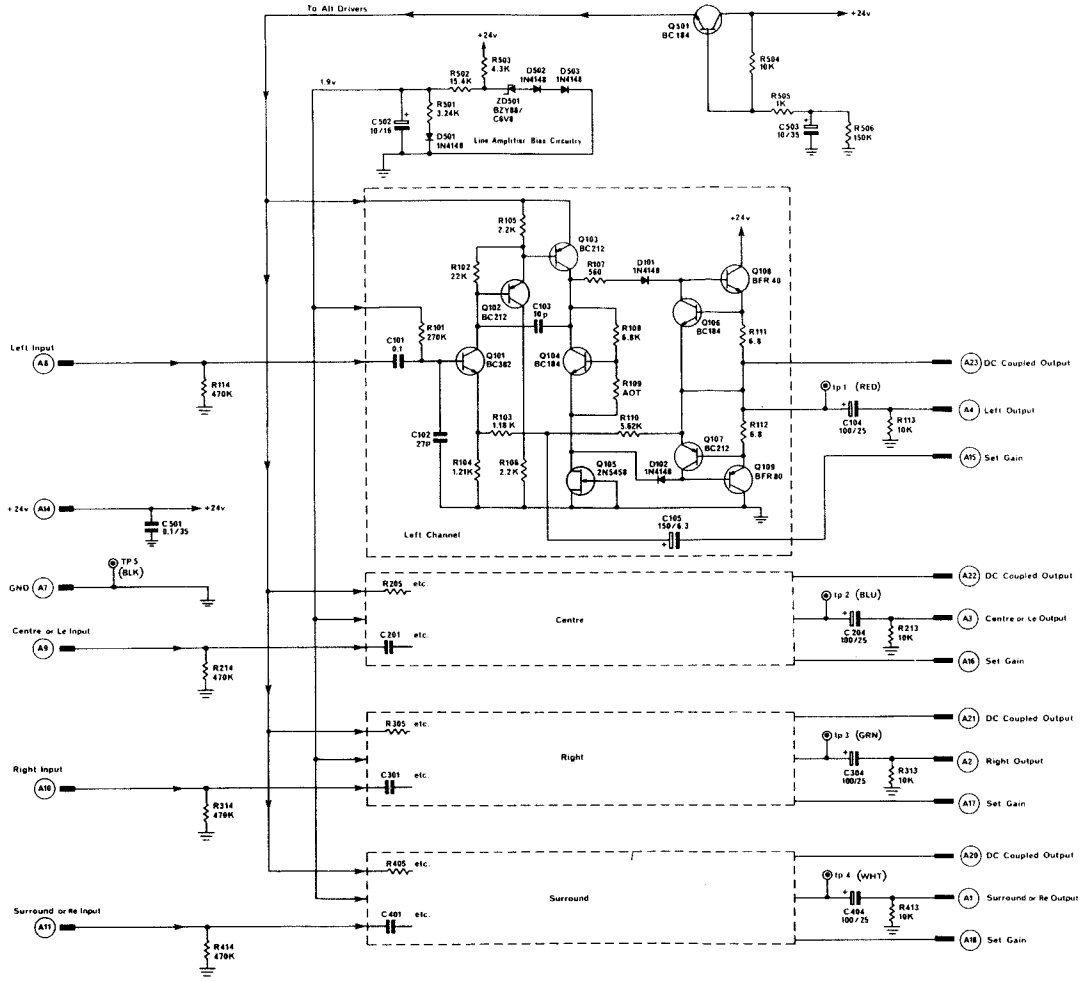


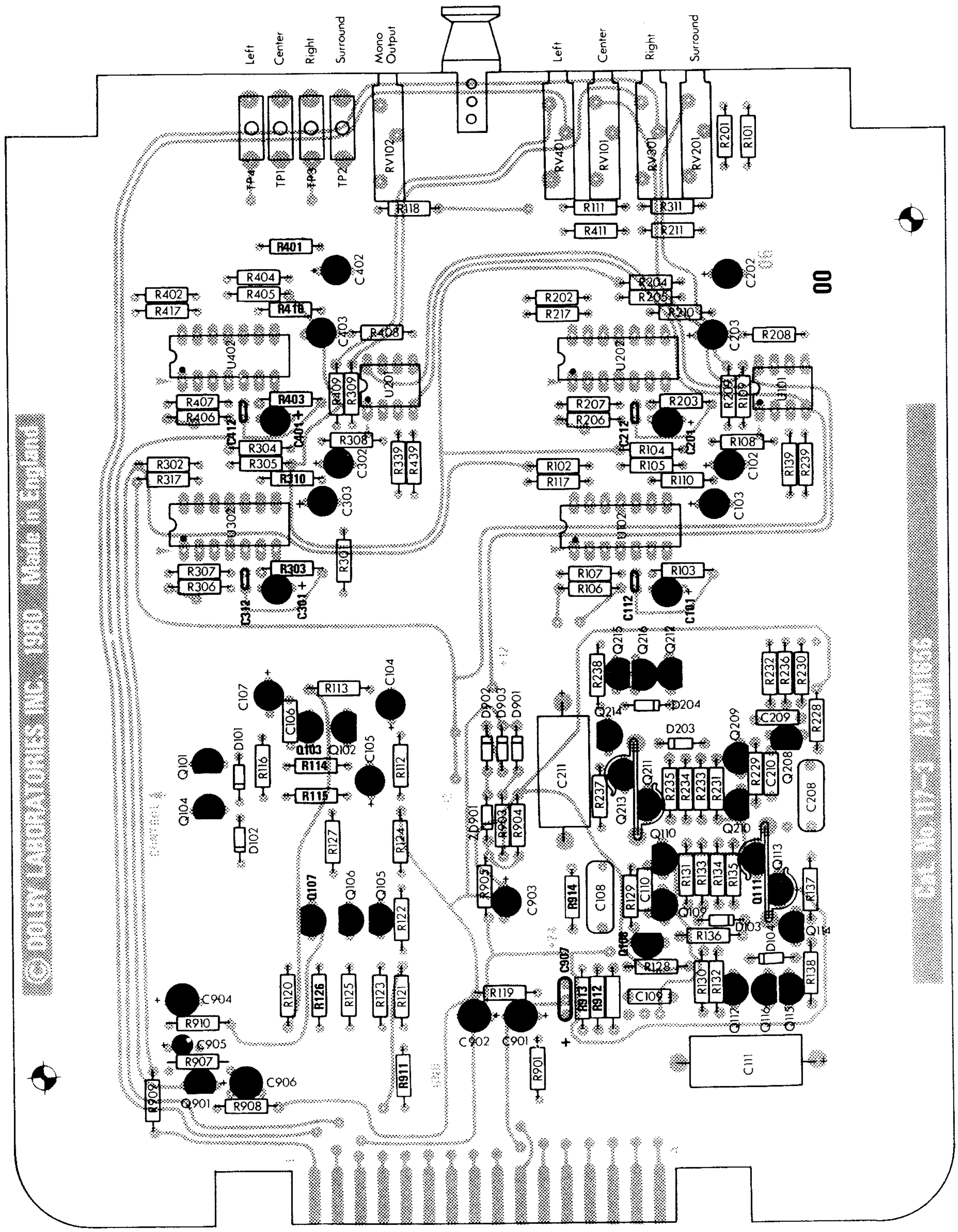
Notes (Unless otherwise specified)
1. All resistors are in ohms, 1/4W ±5
2. All capacitors are in microfarads.

4x OUTPUT AMPLIFIER CARD

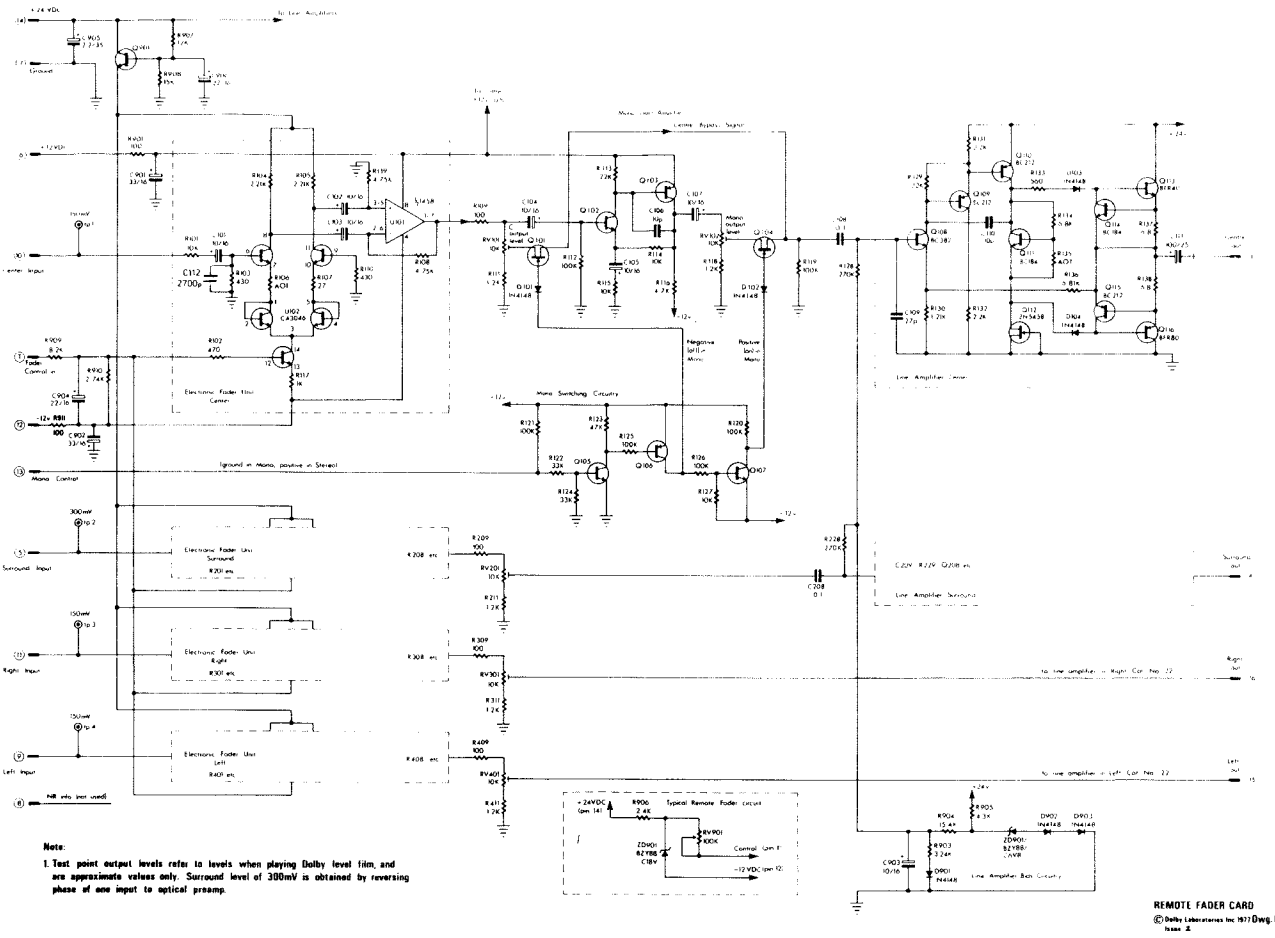
 Dwg. No. A1C1835 issue 3

S83/3489/5138

Figure 4.12 Cat. No. 137 Output Amplifier Card



Left
Center
Right
Surround
Mono Output
Left
Center
Right
Surround
© DOLBY LABORATORIES INC. 1980 Made in England



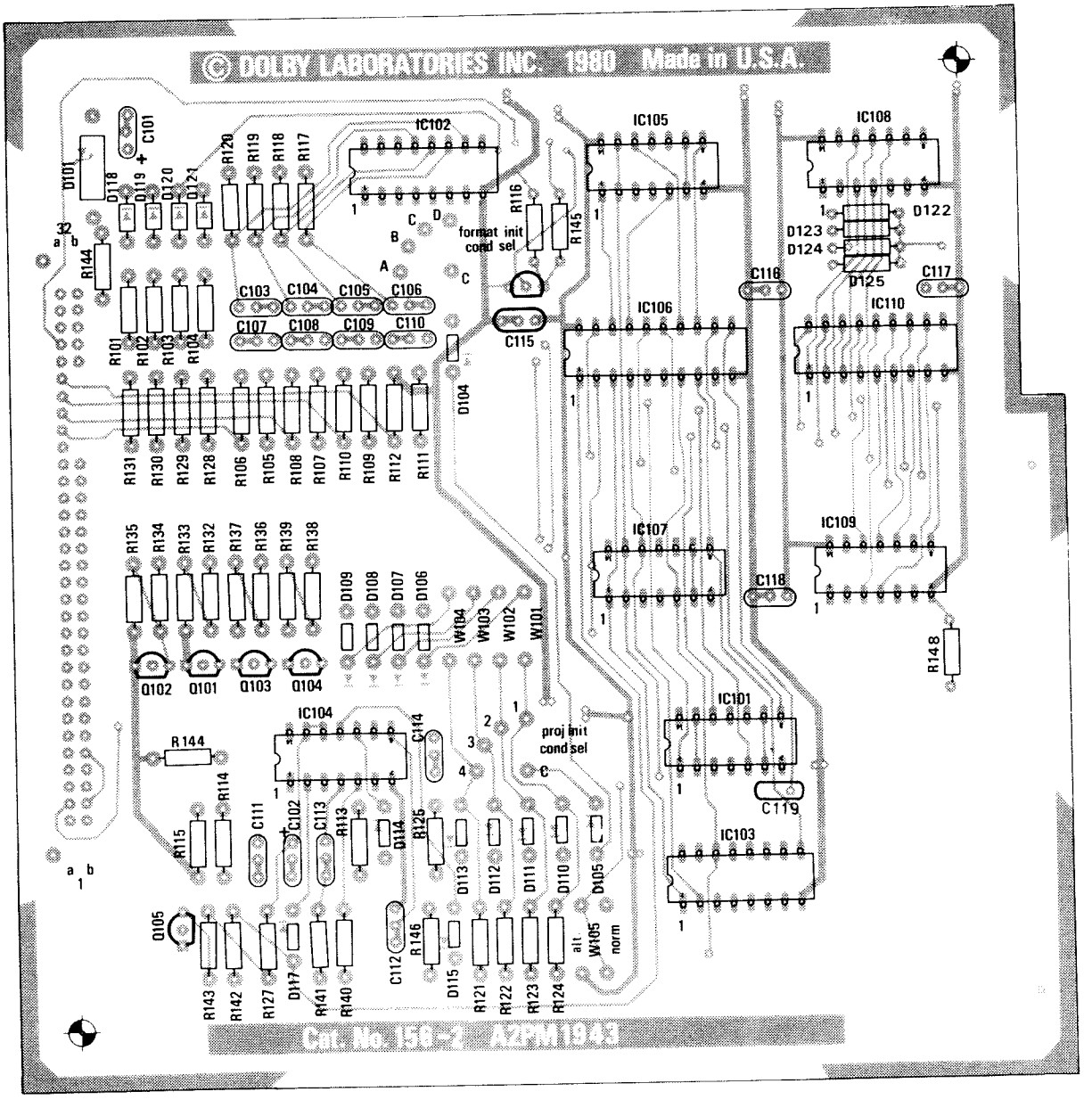
Note:

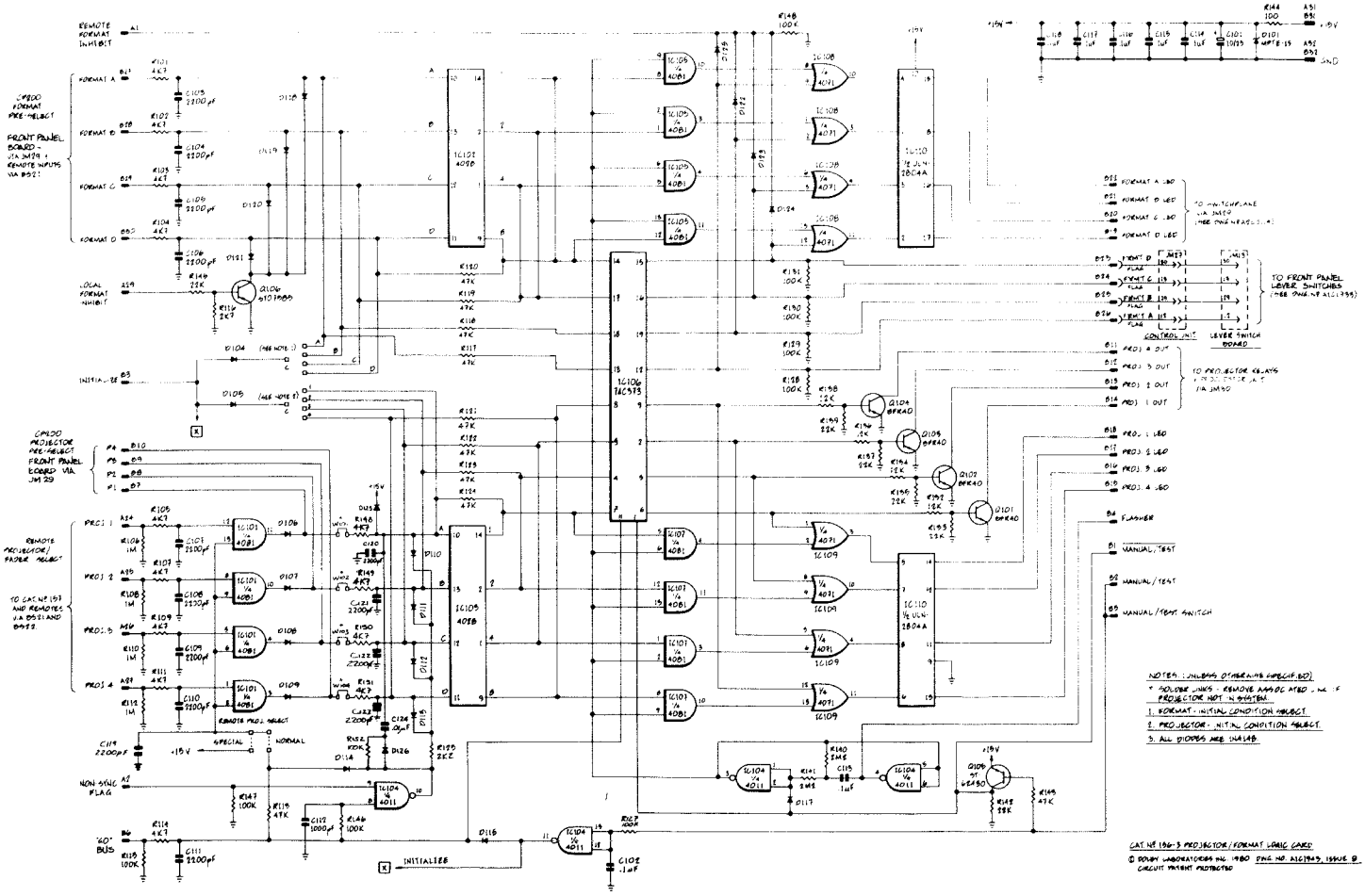
1. **Test point output levels refer to levels when playing Dolby level film, and are approximate values only. Surround level of 300mV is obtained by reversing phase of one input to optical preamp.**

REMOTE FADER CARD

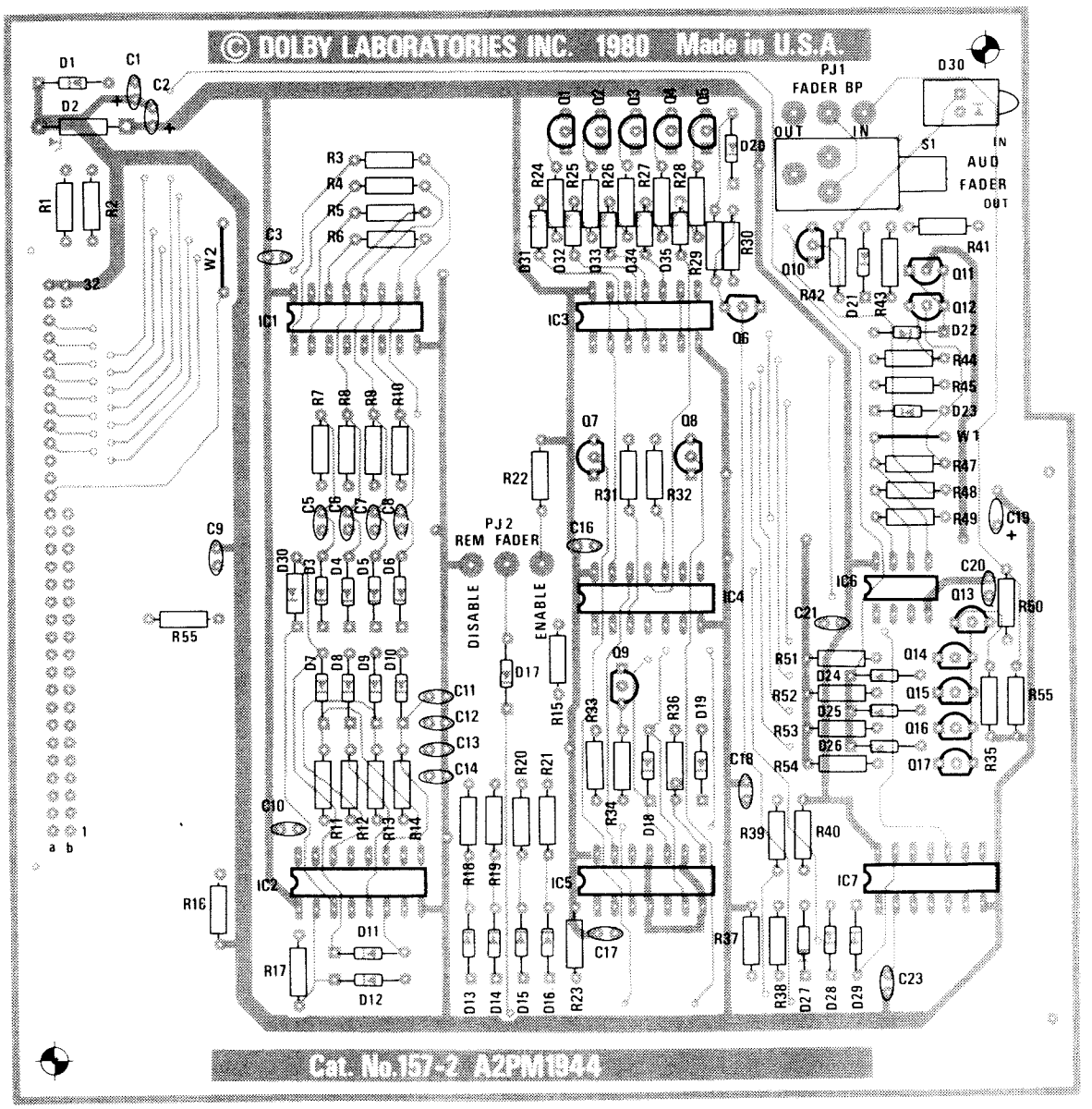
 Dwg. No. A0C1690
Issue 2

Figure 4.13 Cat. No. 117 Remote Fader Card


© DOLBY LABORATORIES INC. 1980 Made in U.S.A.
IC102
IC105
IC108
C101
D101
D118
D119
D120
D121
R120
R119
R118
R117
R116
R145
format init cond sel
D122
D123
D124
D125
C116
C117
IC106
IC110
C115
C103
C104
C105
C106
C107
C108
C109
C110
R144
R101
R102
R103
R104
D104
R131
R130
R129
R128
R106
R105
R108
R107
R110
R109
R112
R111
IC107
IC109
C118
R135
R134
R133
R132
R137
R136
R139
R138
D109
D108
D107
D106
W104
W103
W102
W101
R148
Q102
Q101
Q103
Q104
IC104
IC101
C114
proj init cond sel
C119
R114
C111
C102
C113
R113
D114
R125
IC103
R115
D113
D112
D111
D110
D105
Q105
R146
alt
norm
W105
R143
R142
R127
D117
R141
R140
C112
D115
R121
R122
R123
R124
Cat. No. 1582 Assm 1943



S83/3491/5140 Figure 4.14 Cat. No. 156 Projector/Format Logic Card


© DOLBY LABORATORIES INC. 1980 Made in U.S.A.
Cat. No.157-2 A2PM1944
PJ1
FADER BP
OUT
IN
S1
IN
AUD
FADER
OUT
PJ2
REM FADER
DISABLE
ENABLE
D1
C1
C2
D2
R1
R2
W2
32
R3
R4
R5
R6
C3
IC1
IC3
Q1
Q2
Q3
Q4
Q5
D20
R24
R25
R26
R27
R28
R29
R30
D31
D32
D33
D34
D35
Q6
Q10
R41
Q11
R42
D21
R43
Q12
D22
R44
R45
D23
W1
R47
R48
R49
C19
R7
R8
R9
R10
C5
C6
C7
C8
R22
Q7
Q8
R31
R32
C9
C16
IC4
IC6
C20
Q13
R50
C21
R55
D30
D3
D4
D5
D6
D7
D8
D9
D10
C11
C12
C13
C14
D17
R15
Q9
R33
R36
D19
R51
Q14
D24
R52
Q15
D25
R53
Q16
D26
R54
Q17
R35
C18
R11
R12
R13
R14
R20
R21
R34
D18
R39
R40
C10
IC2
IC5
IC7
R16
R18
R19
R37
D11
R17
D12
C17
D13
D14
D15
D16
R23
R38
D27
D28
D29
C23
a b 1

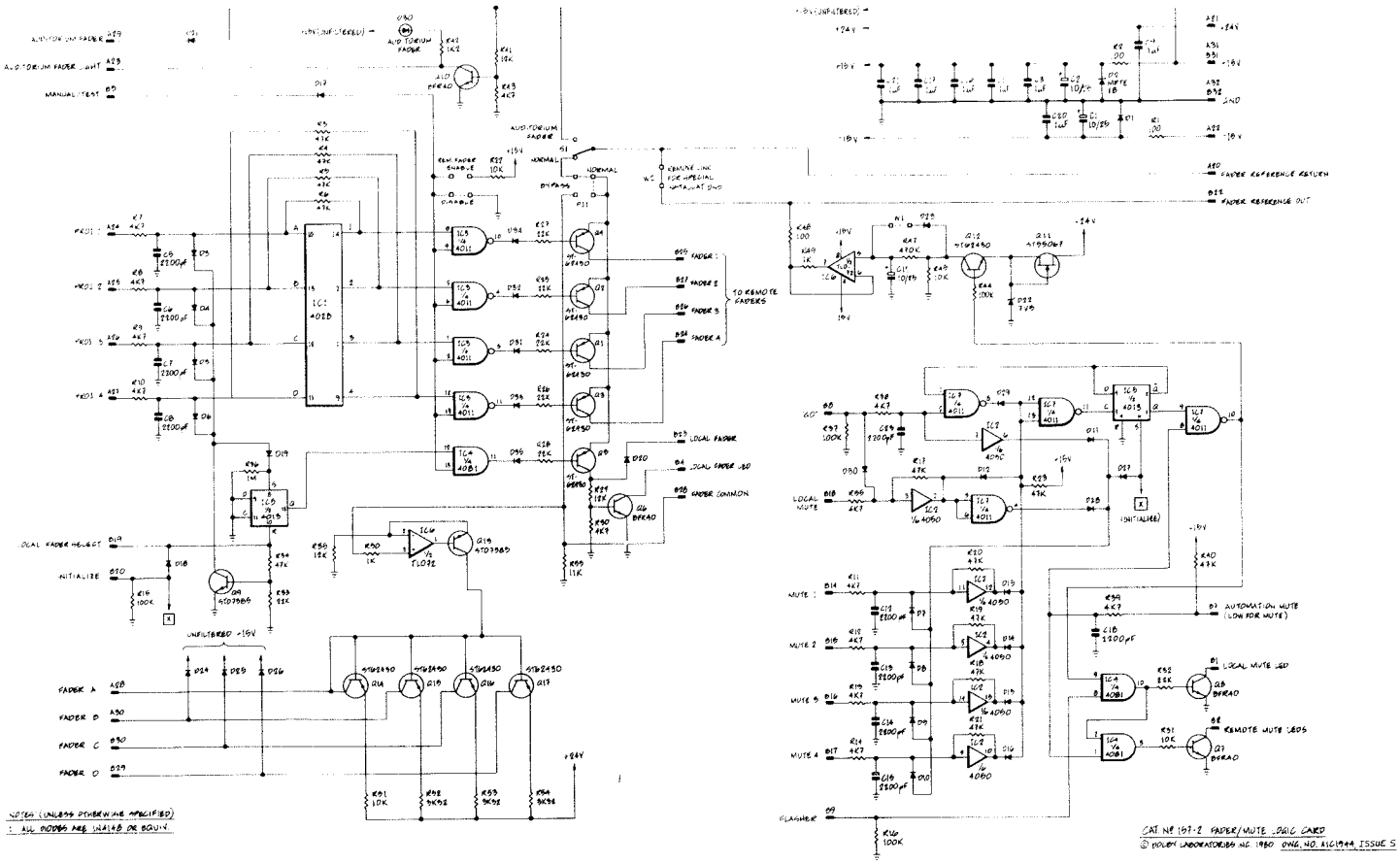
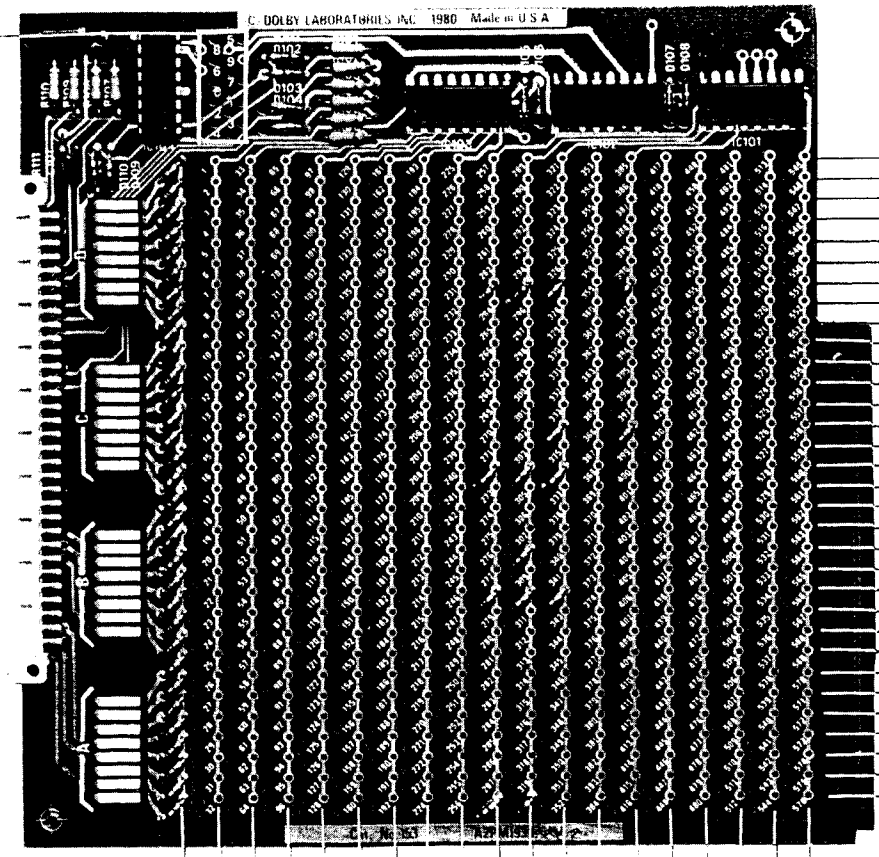


Figure 4.15 Cat. No. 157 Fader/Mute Logic Card

FORMAT LINKS	
OPTICAL	0 & 1
35mm MAG	2 & 3
70mm MAG	4 & 5
NON-SYNC	6 & 7

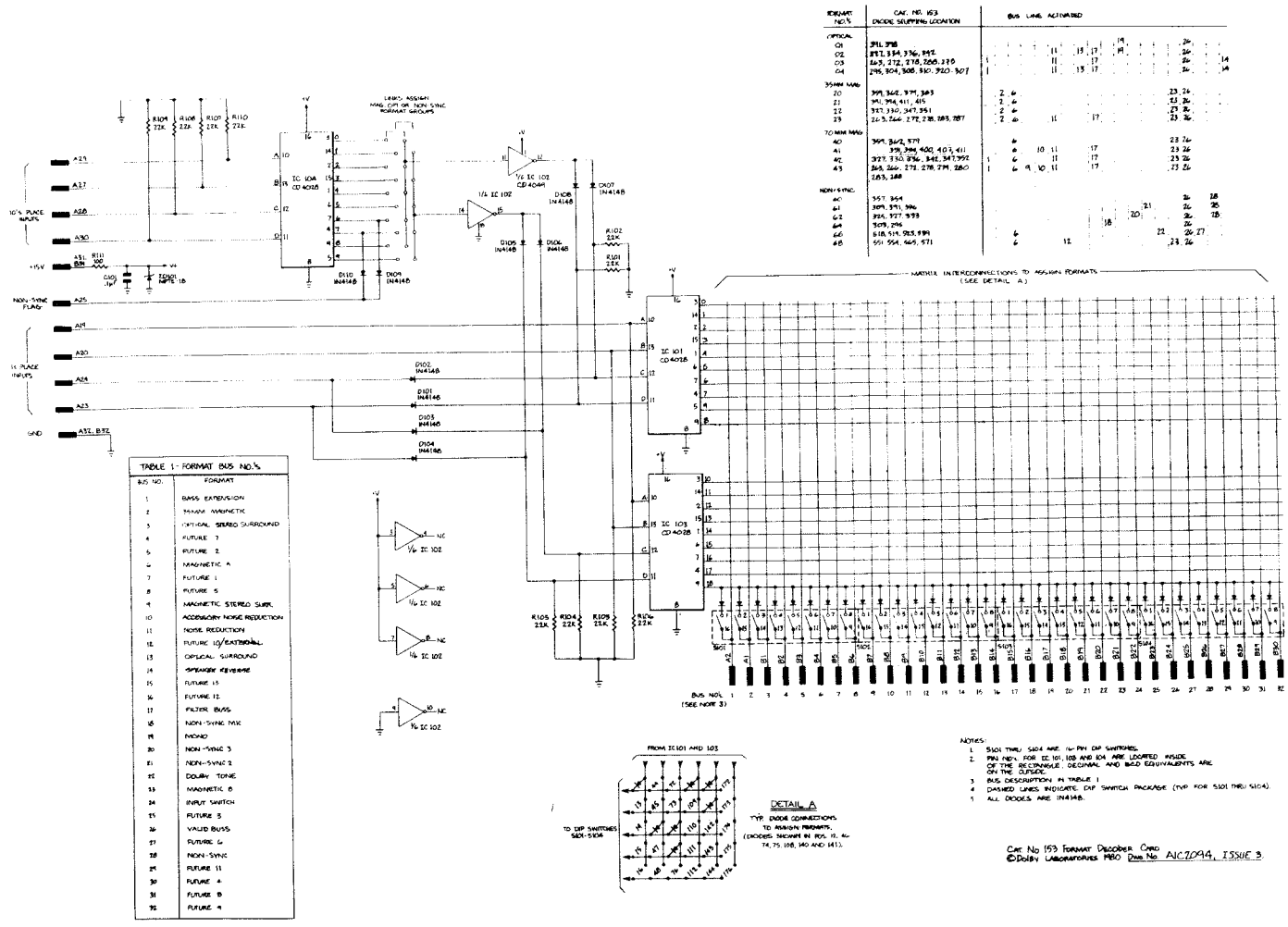
Cat. No. 153 Buss Programming



OPTICAL	**18**	13	14	12	10	17	15	16	11	**03**	**04**	**02**	00	**01**	07	09	05	06	08
35mm MAG	**38**	33	34	32	30	37	35	36	31	**23**	24	**22**	**20**	**21**	27	29	25	26	28
70mm MAG	**58**	53	54	52	50	57	55	56	51	**43**	44	**42**	**40**	**41**	47	49	45	46	48
NON-SYNC	**78**	73	74	72	70	77	75	76	71	63	**64**	**62**	**60**	**61**	67	69	65	**66**	**68**

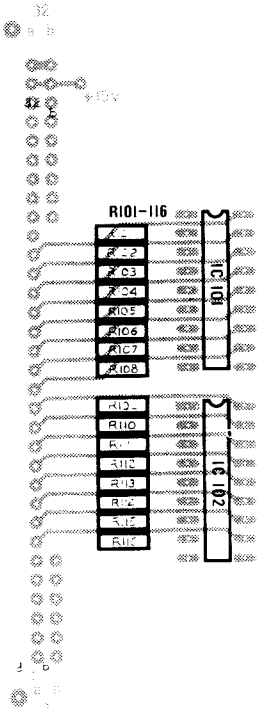
Future 9	32
Future 8	31
Future 4	30
Future 11	29
Non-sync	28
Future 6	27
Valid buss	26
Future 3	25
Input switch	24
Mag. B	23
Dolby tone	22
Non-sync 2	21
Non-sync 3	20
Mono	19
Non-sync mic	18
Filter	17
Future 12	16
Future 13	15
Spkr. reverse	14
Optical surround	13
Future 10	12
NR in	11
Accessory NR in	10
Mag. stereo surround	9
Future 5	8
Future 1	7
Mag. A	6
Future 2	5
Future 7	4
Optical stereo surround	3
35mm mag.	2
Bass extension	1

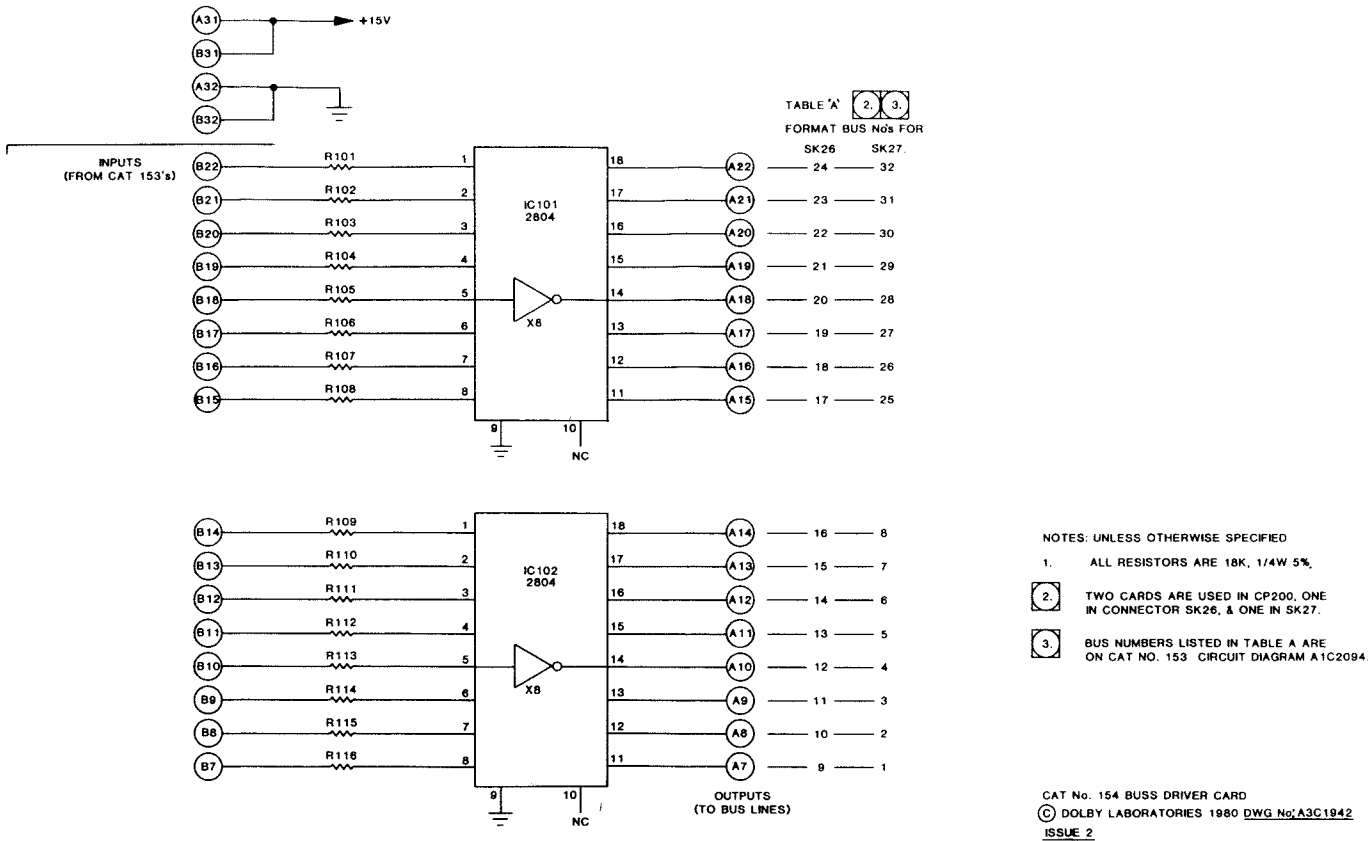
BOLDFACE are currently assigned format numbers



S83/3153/5142

Figure 4.16 Cat. No. 153 Format Decoder Logic Card





NOTES: UNLESS OTHERWISE SPECIFIED

1. ALL RESISTORS ARE 18K, 1/4W 5%.

2. TWO CARDS ARE USED IN CP200, ONE IN CONNECTOR SK26, & ONE IN SK27.

3. BUS NUMBERS LISTED IN TABLE A ARE ON CAT NO. 153 CIRCUIT DIAGRAM A1C2094.

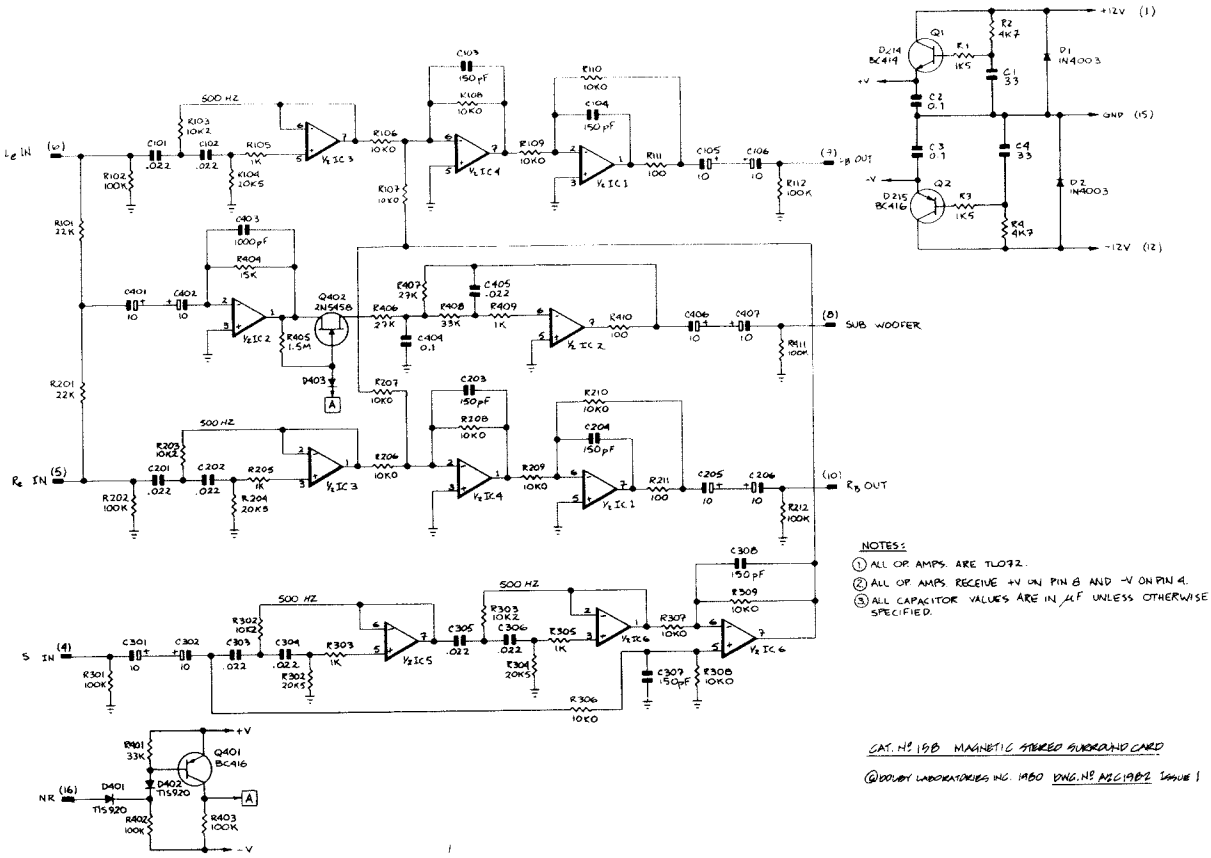
CAT No. 154 BUSS DRIVER CARD

 DWG No: A3C1942

ISSUE 2

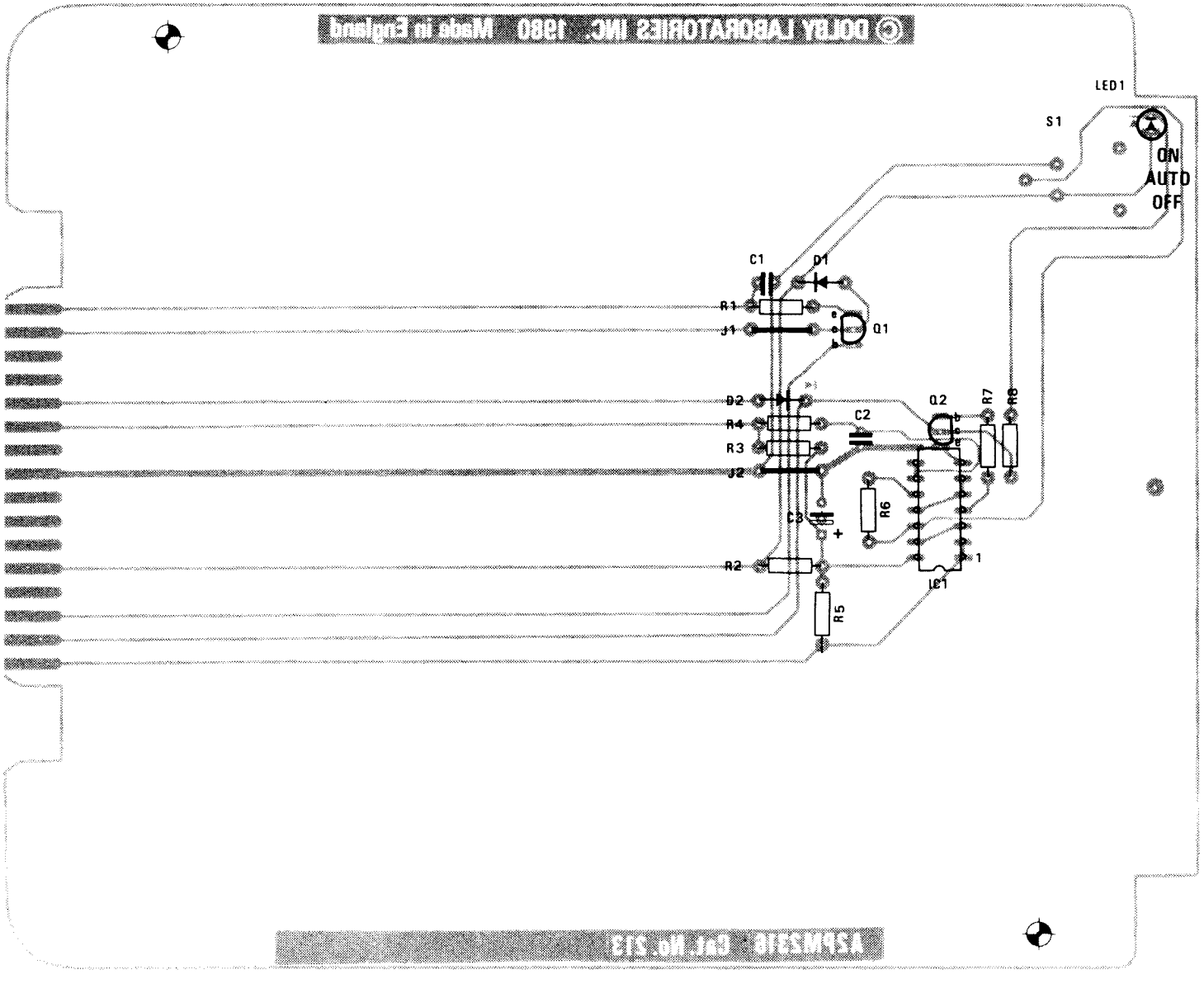
S83/3493/5143

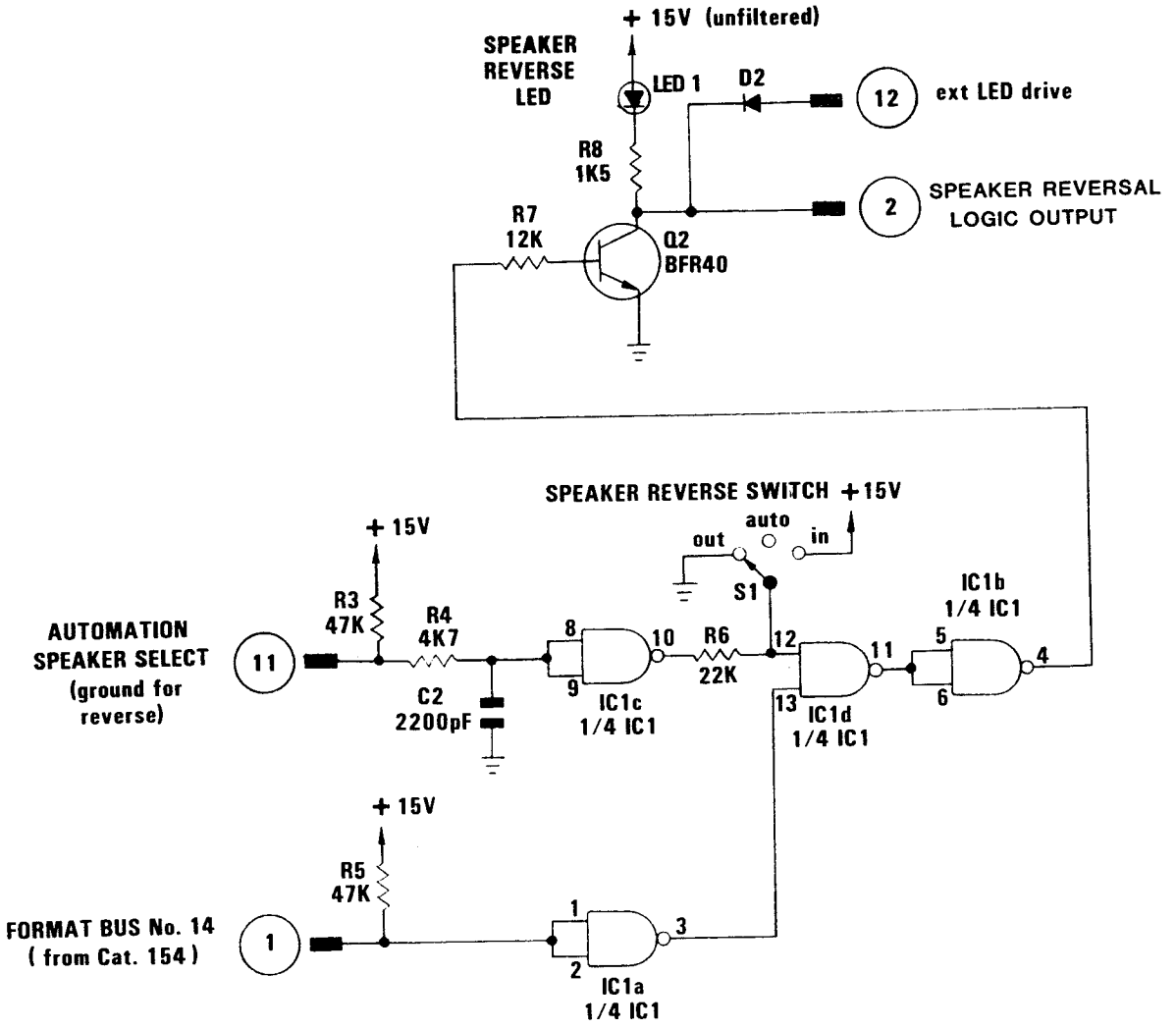
Figure 4.17 Cat. No. 154 Bus Driver Logic Card

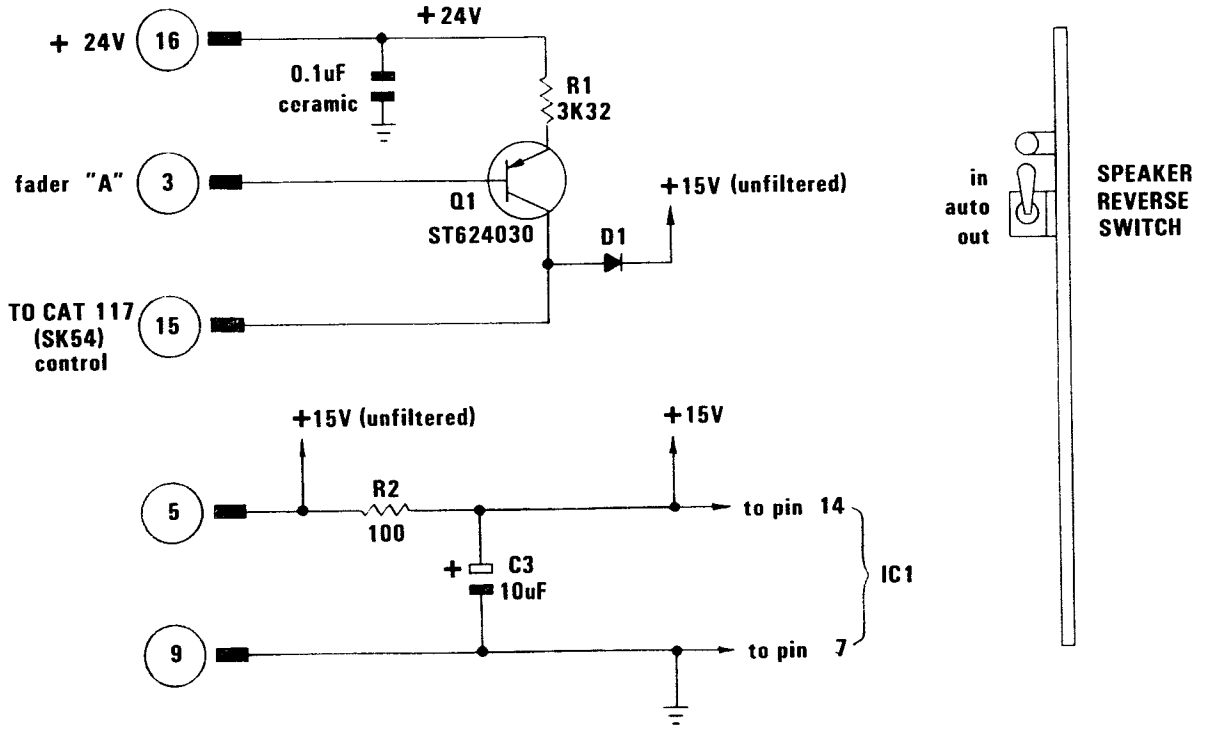


S83/3497/5144

Figure 4.18 Cat. No. 158 Magnetic Stereo Surround Card


LED1
S1
ON
AUTO
OFF
C1
D1
R1
J1
Q1
D2
R4
R3
J2
C2
Q2
R7
R8
R6
C3
R2
R5
IC1


+ 15V (unfiltered)
SPEAKER REVERSE LED
LED 1
D2
12
ext LED drive
R8 1K5
2
SPEAKER REVERSAL LOGIC OUTPUT
R7 12K
Q2 BFR40
SPEAKER REVERSE SWITCH
+15V
auto
out
in
S1
+ 15V
R3 47K
R4 4K7
IC1b 1/4 IC1
AUTOMATION SPEAKER SELECT (ground for reverse)
11
8
10
R6 22K
12
11
5
4
C2 2200pF
9
IC1c 1/4 IC1
13
IC1d 1/4 IC1
6
+ 15V
R5 47K
FORMAT BUS No. 14 (from Cat. 154)
1
1
3
2
IC1a 1/4 IC1

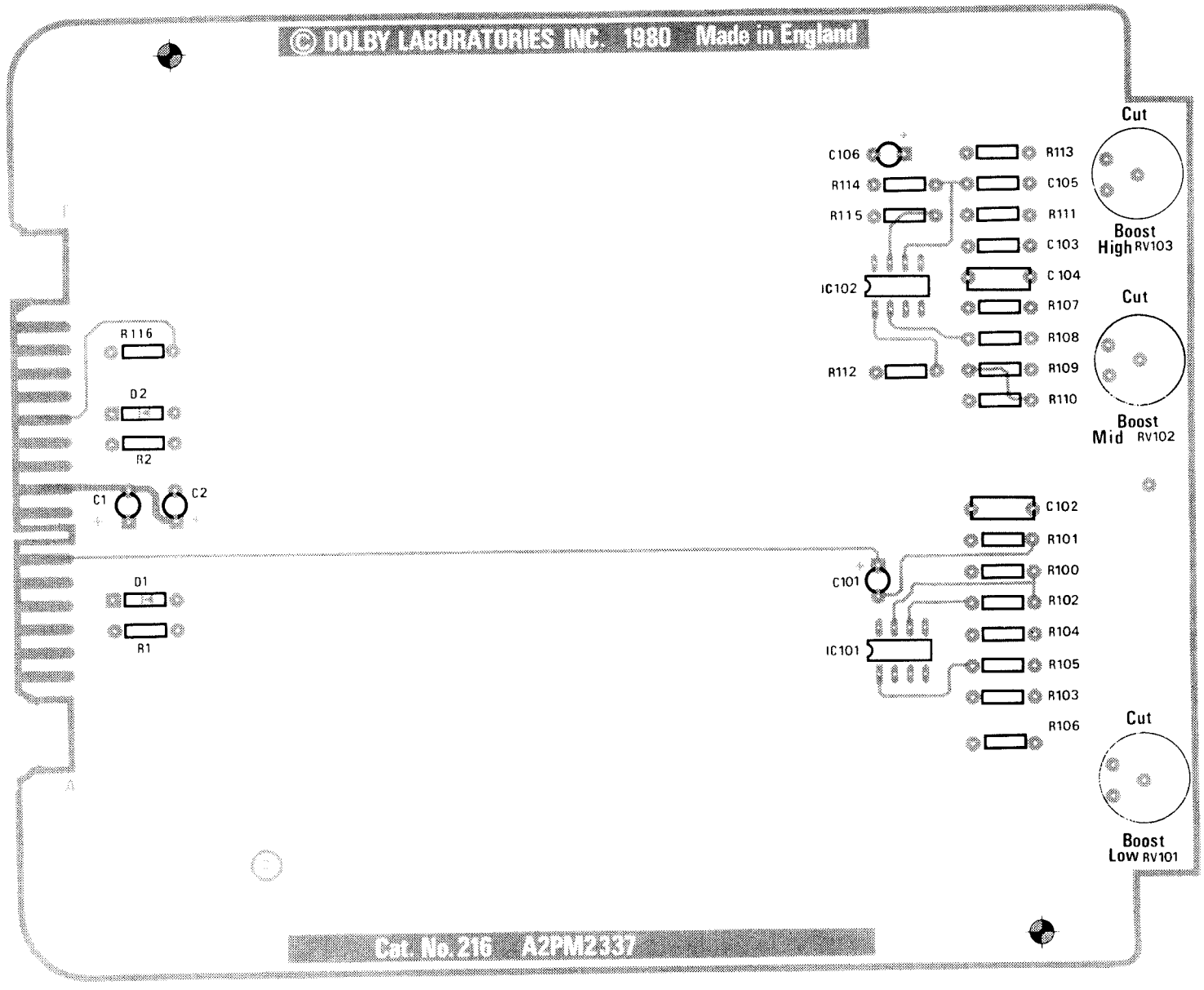


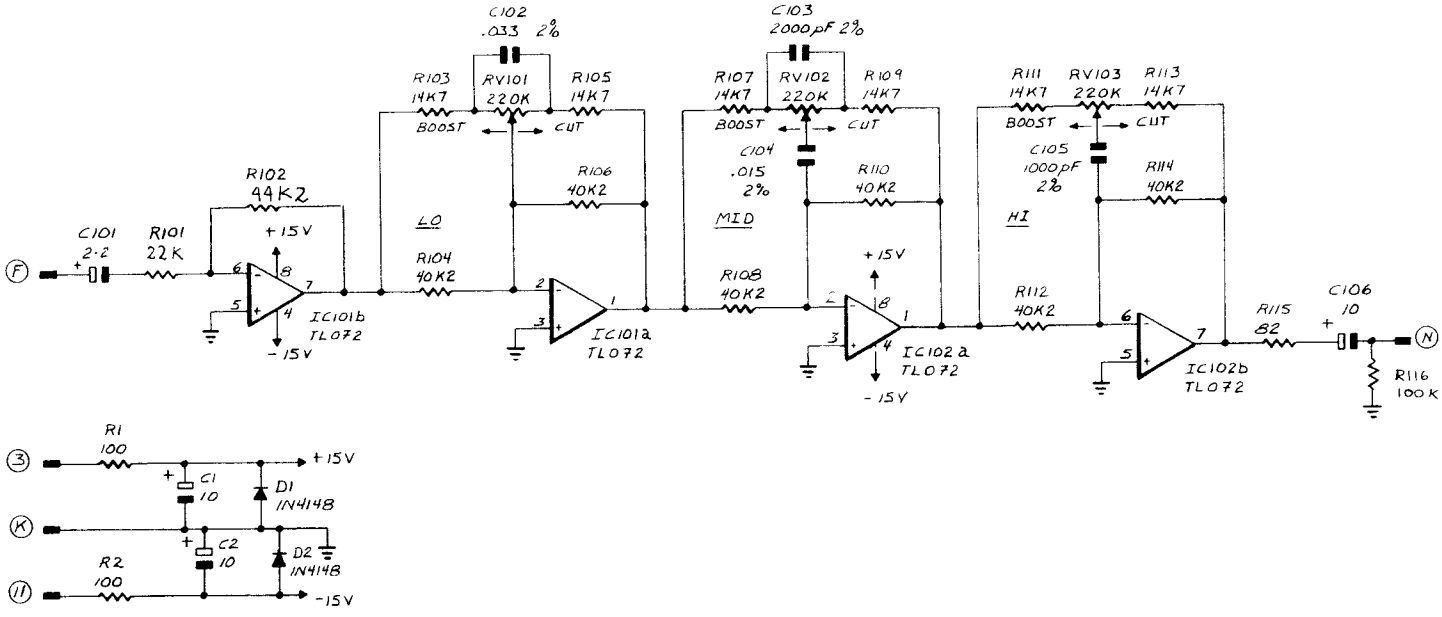
Notes:

1. IC1:CD40118
2. All Diodes IN4148

Cat. No. 213 Switch Card

Dwg. No. A3C231C, Issue 6


© DOLBY LABORATORIES INC. 1980 Made in England
Cut
Boost High RV103
Cut
Boost Mid RV102
Cut
Boost Low RV101
C106
R114
R115
IC102
R112
R113
C105
R111
C103
C104
R107
R108
R109
R110
R116
D2
R2
C1
C2
D1
R1
C102
R101
C101
R100
R102
R104
IC101
R105
R103
R106
Cat. No. 216 A2PM2337

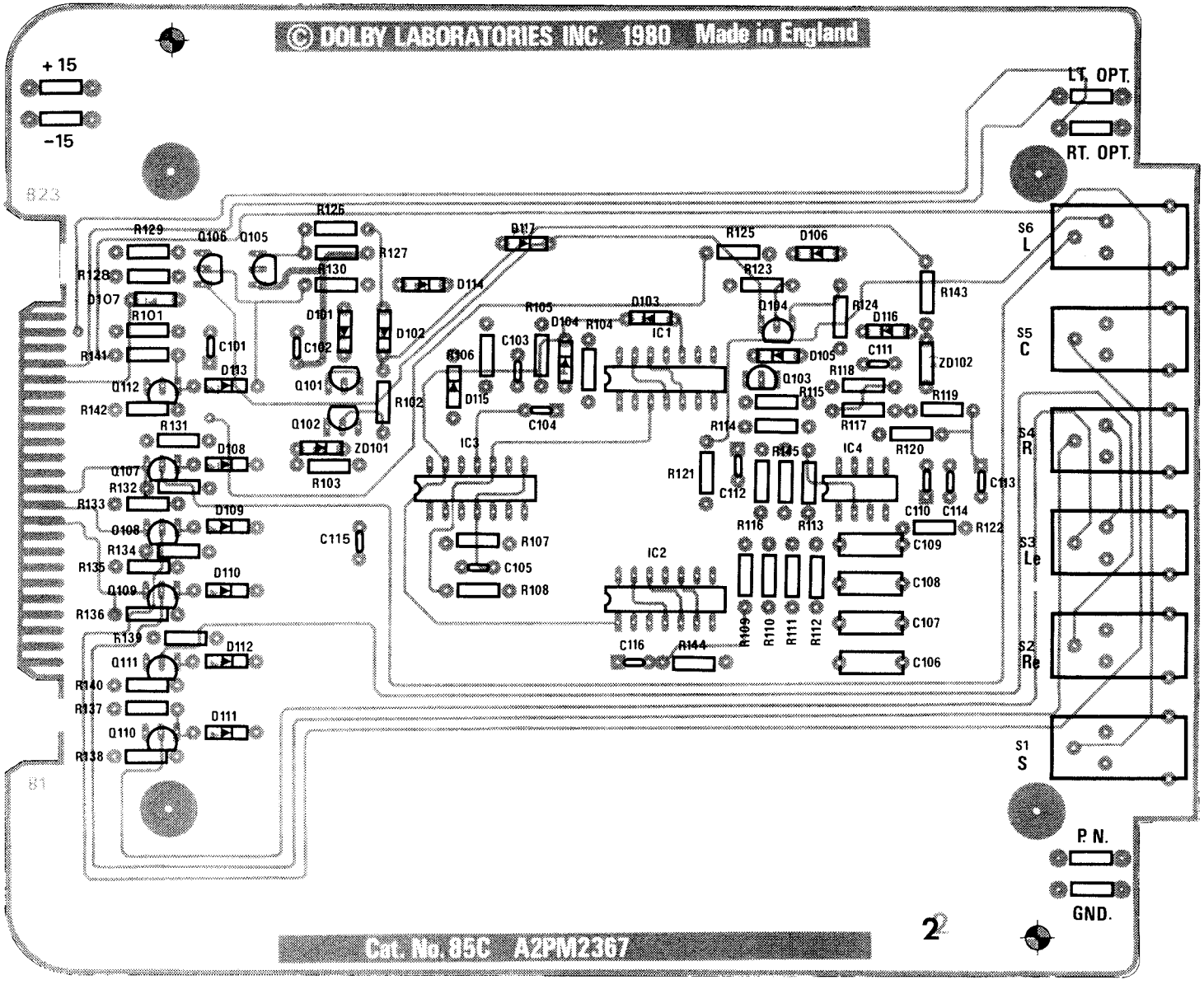


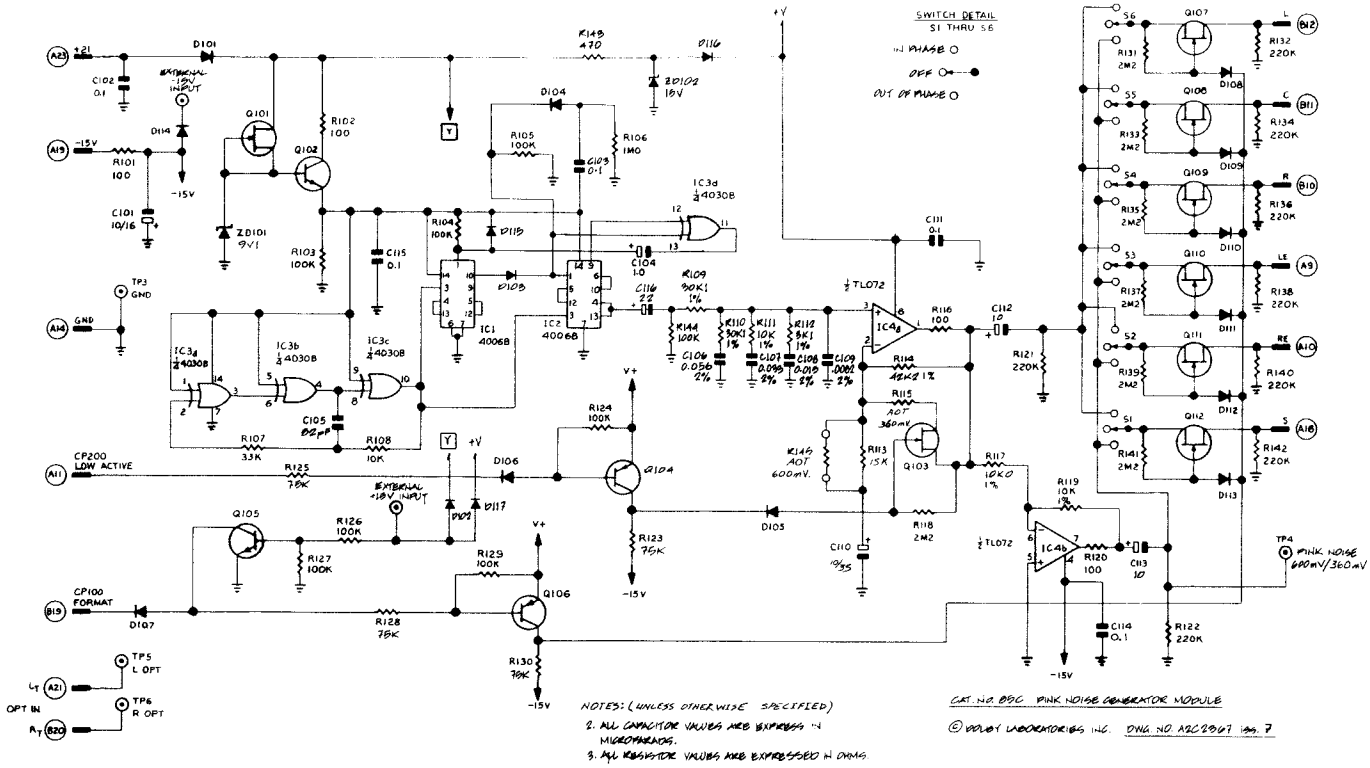
CAT. Nº 216 3-BAND EQUALIZER CARD

DWG. Nº AC3 2337 ISSUE 3

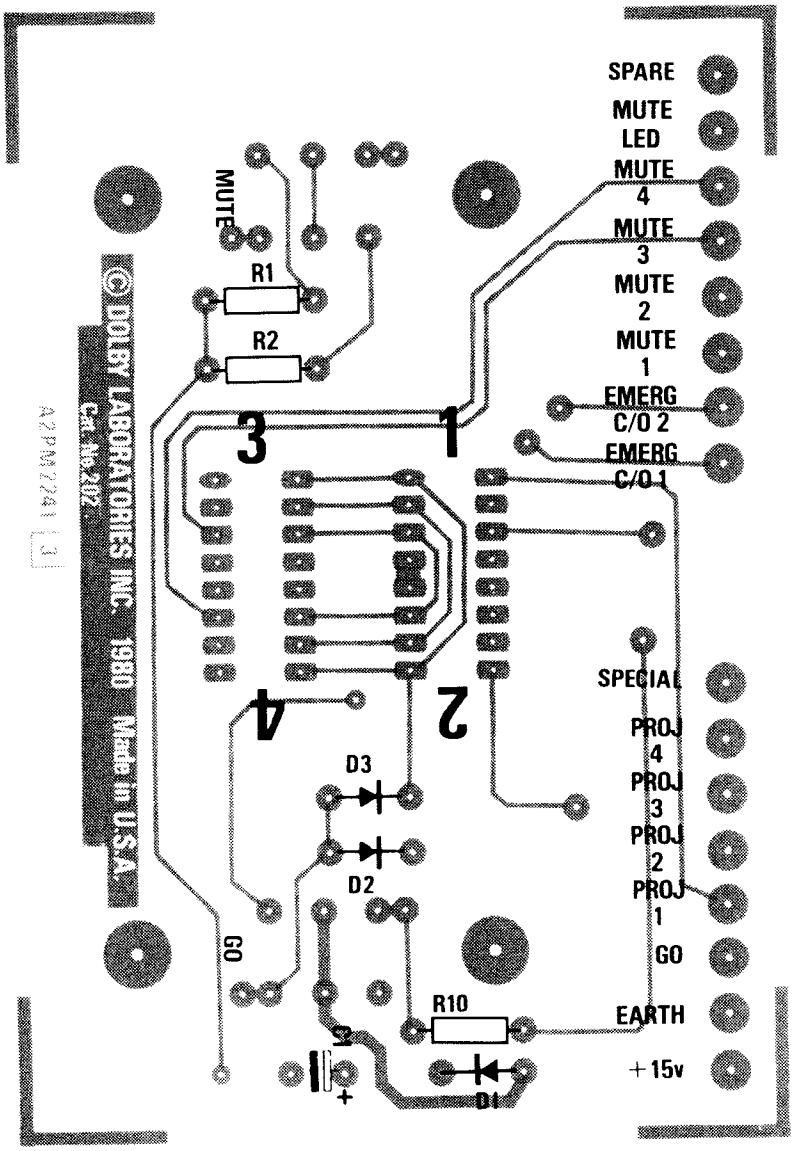
S83/3499/5146

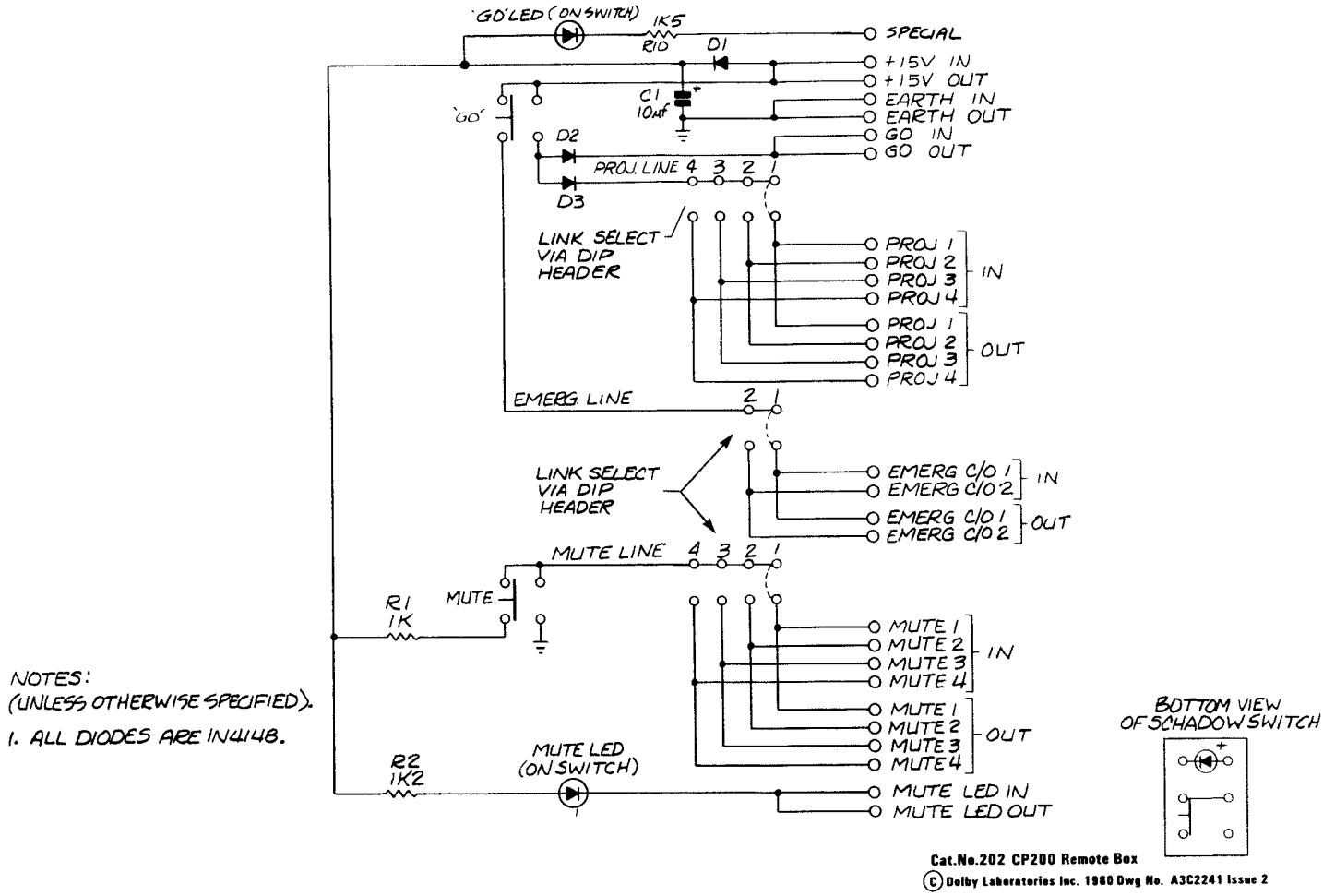
Figure 4.20 Cat. No. 216 3-Band Surround Equalizer Card


© DOLBY LABORATORIES INC. 1980 Made in England
+15
-15
LT. OPT.
RT. OPT.
S6
L
S5
C
S4
R
S3
Le
S2
Re
S1
S
P.N.
GND.
R123
R125
R126
R127
R128
R129
R130
R131
R132
R133
R134
R135
R136
R139
R140
R141
R142
R143
R144
R101
R102
R103
R104
R105
R106
R107
R108
R109
R110
R111
R112
R113
R114
R115
R116
R117
R118
R119
R120
R121
R122
C101
C102
C103
C104
C105
C106
C107
C108
C109
C110
C111
C112
C113
C114
C115
C116
D101
D102
D103
D104
D105
D106
D107
D108
D109
D110
D111
D112
D113
D114
D115
D116
D117
Q101
Q102
Q103
Q105
Q106
Q107
Q108
Q109
Q110
Q111
Q112
ZD101
ZD102
IC1
IC2
IC3
IC4
B23
B1
Cat. No. 85C A2PM2367
2



S83/3500/5147 Figure 4.21 Cat. No. 85C Pink Noise Generator Card

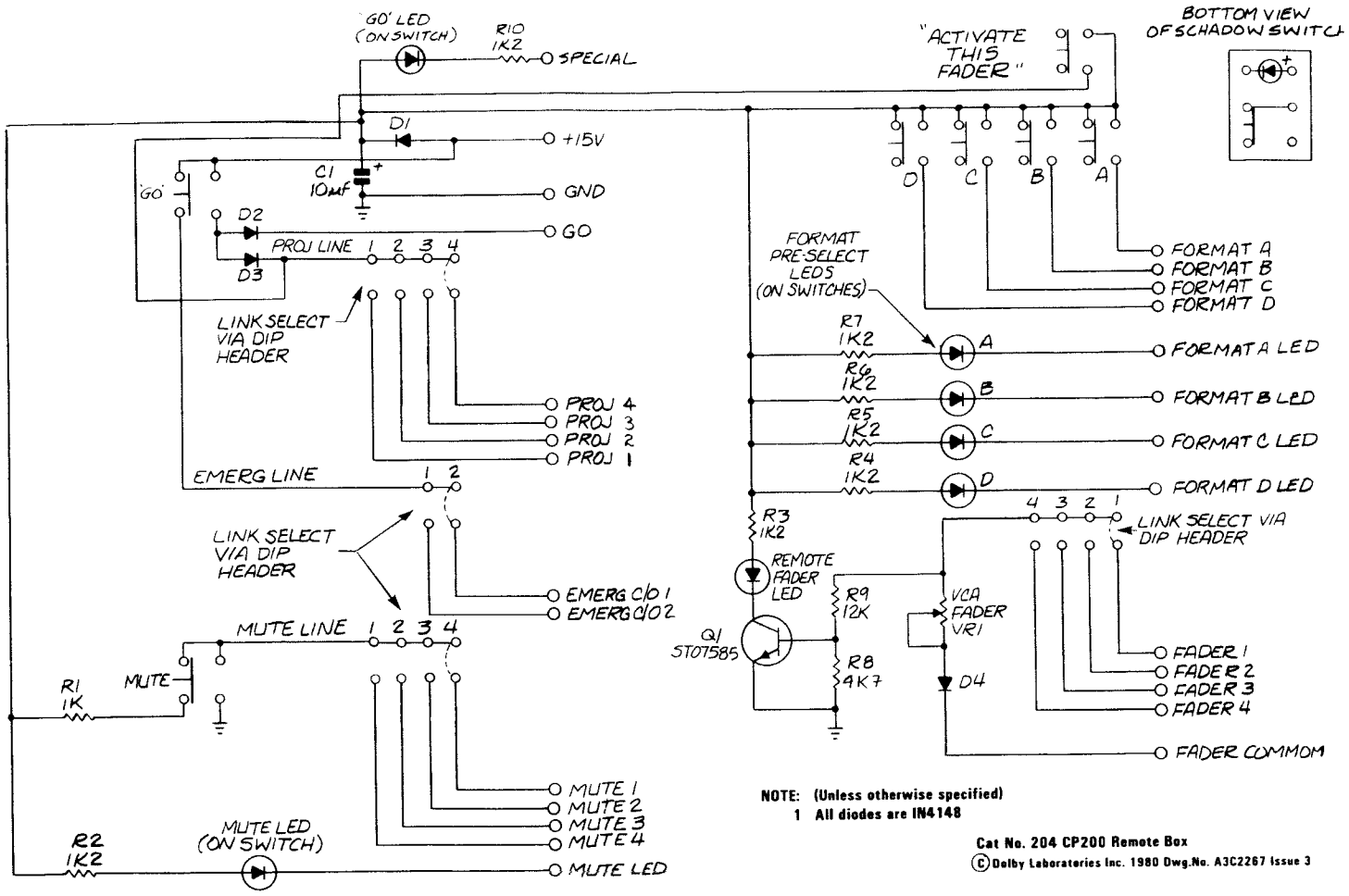

SPARE
MUTE LED
MUTE 4
MUTE 3
MUTE 2
MUTE 1
EMERG C/O 2
EMERG C/O 1
SPECIAL
PROJ 4
PROJ 3
PROJ 2
PROJ 1
GO
EARTH
+15v
MUTE
R1
R2
D3
D2
R10
D1
GO
3
1
4
2
© DOLBY LABORATORIES INC. 1980 Made in U.S.A.



NOTES:
(UNLESS OTHERWISE SPECIFIED).

1. ALL DIODES ARE IN4148.

S83/3501/5148 Figure 4.22 Cat. No. 202 Remote Control Unit

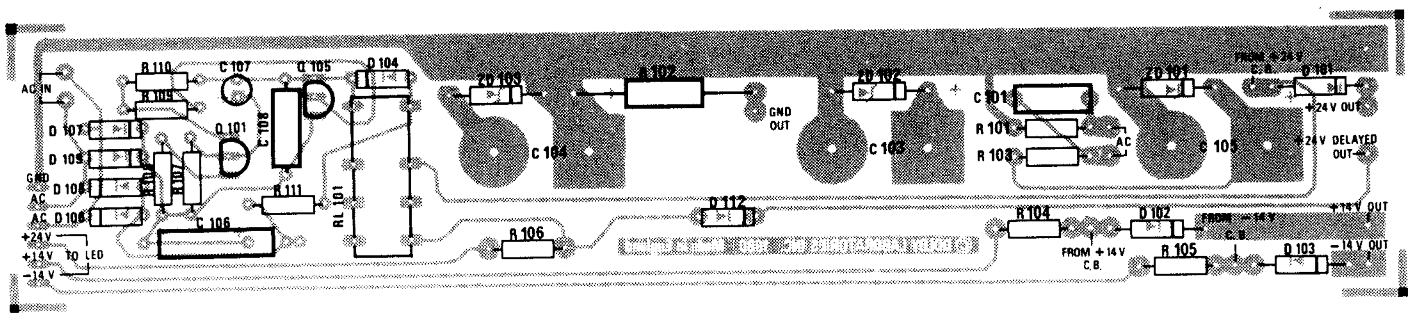


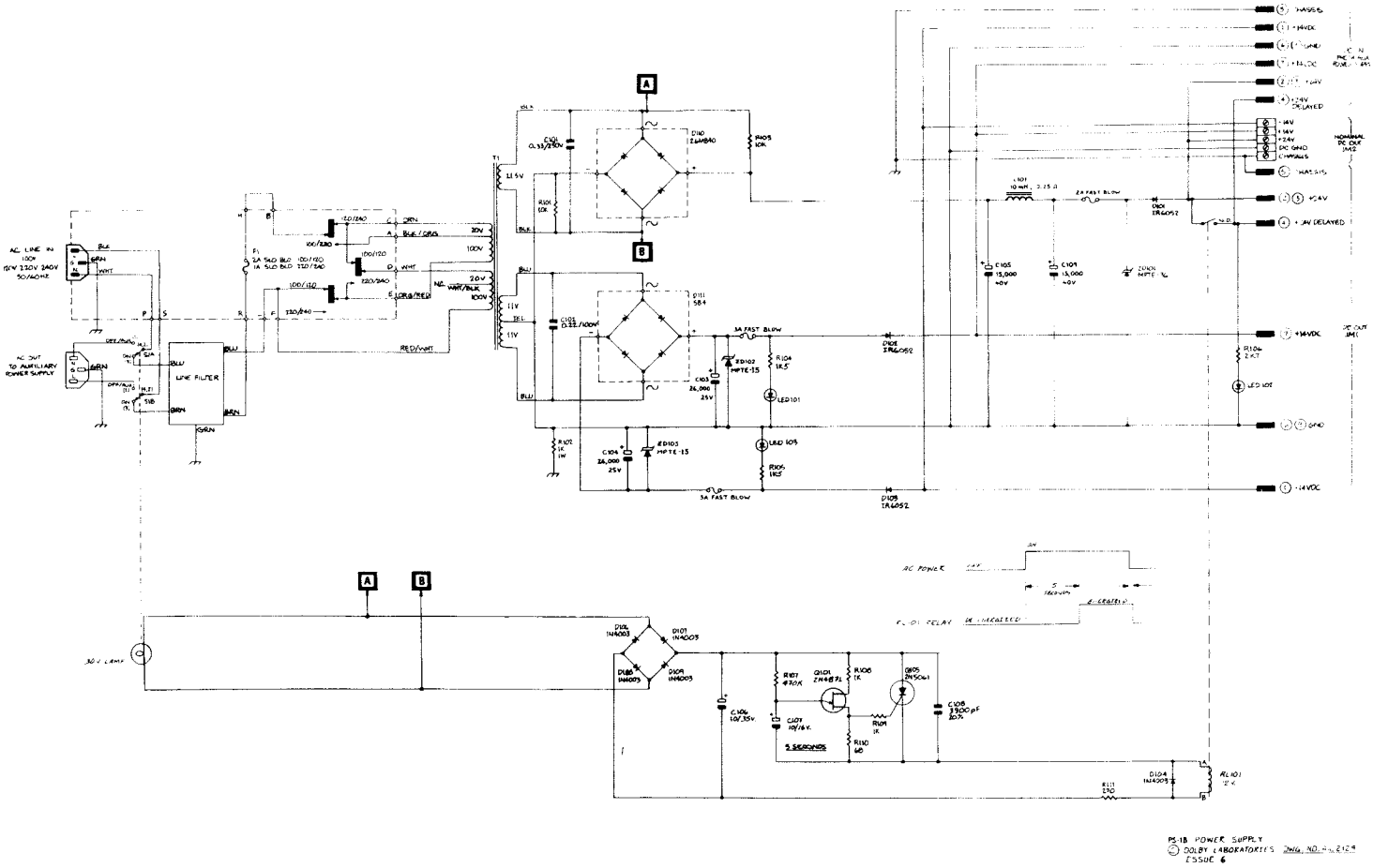
NOTE: (Unless otherwise specified)
1 All diodes are IN4148

Cat No. 204 CP200 Remote Box

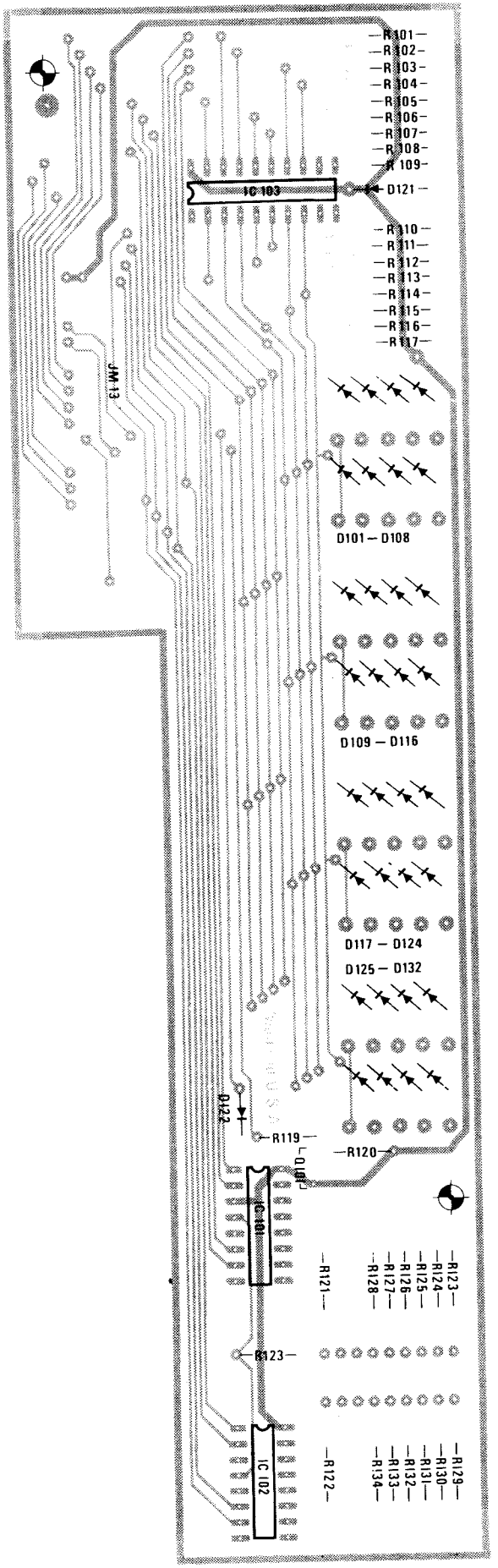
S83/3502/5149

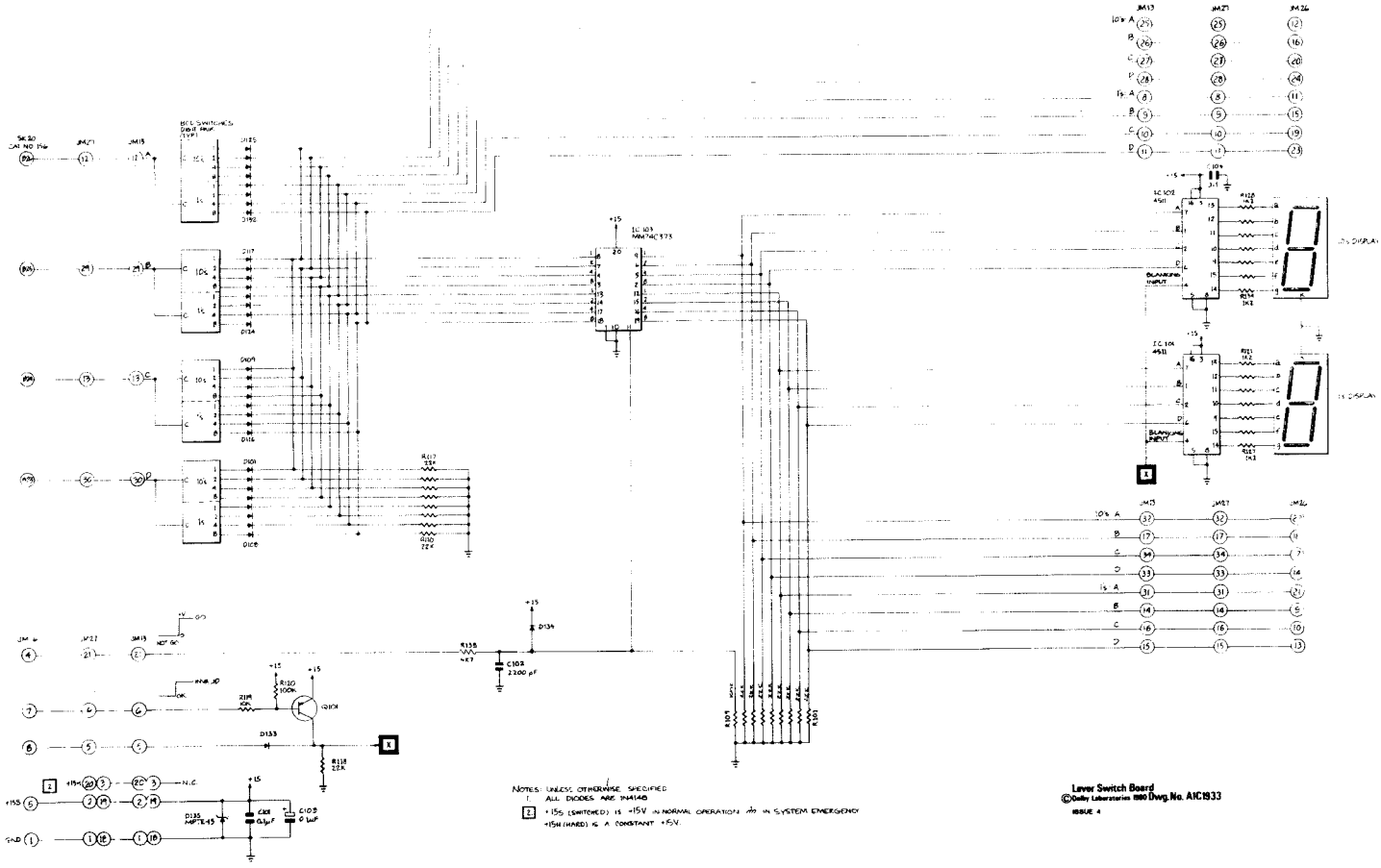
Figure 4.23 Cat. No. 204 Remote Control Unit with Format


AC IN
R 110
R 109
C 107
Q 105
D 104
D 107
D 105
D 106
D 108
Q 101
C 108
R 107
GND
AC
+24 V
+14 V
TO LED
-14 V
C 106
R 111
RL 101
ZD 103
C 104
R 102
GND OUT
D 112
R 106
ZD 102
C 103
C 101
R 101
R 103
AC
ZD 101
C 105
FROM +24 V C.B.
D 101
+24 V OUT
+24 V DELAYED OUT
+14 V OUT
R 104
D 102
FROM -14 V C.B.
FROM +14 V C.B.
R 105
D 103
-14 V OUT



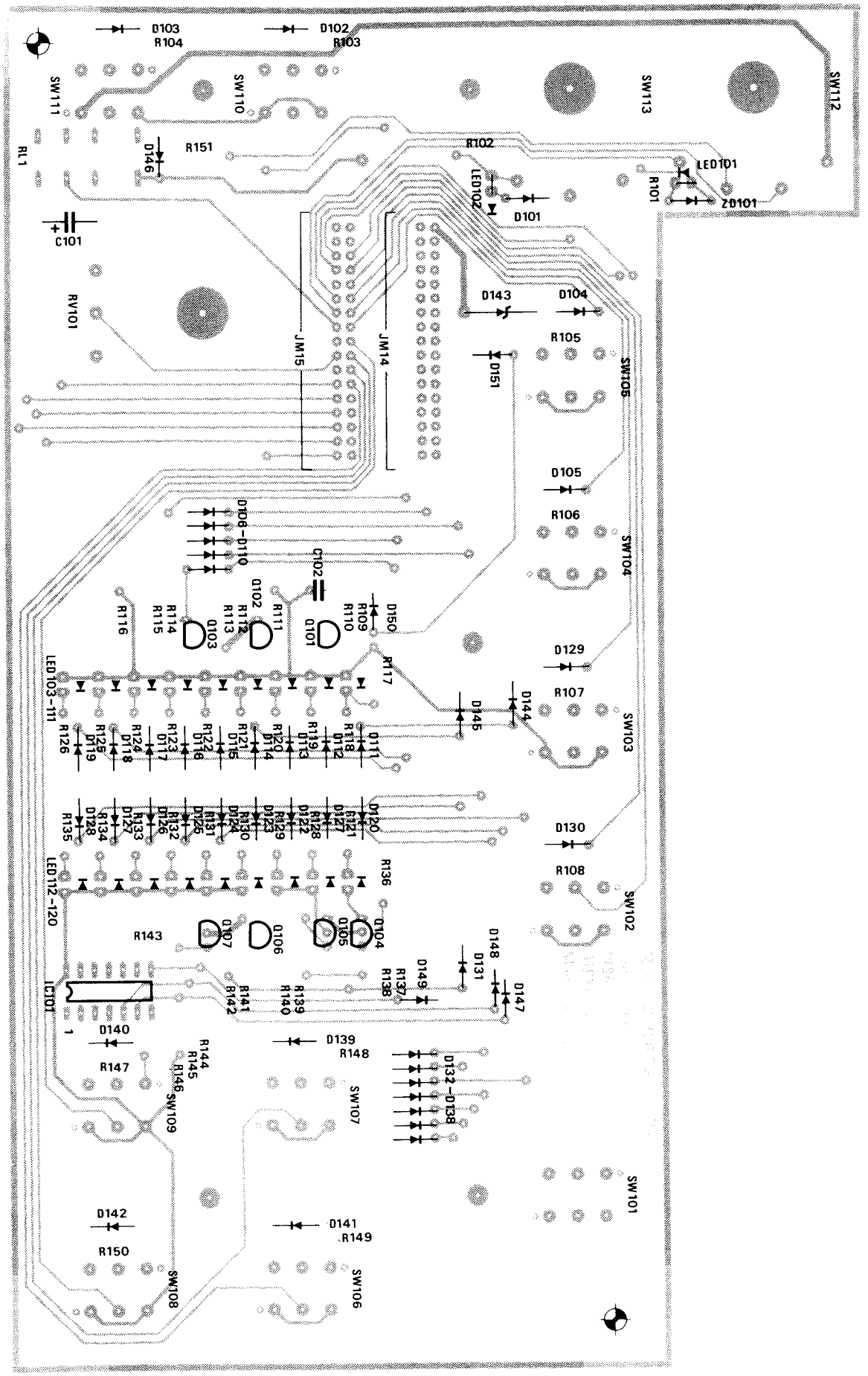
S83/3496/5150 Figure 4.24 PS1B Power Supply

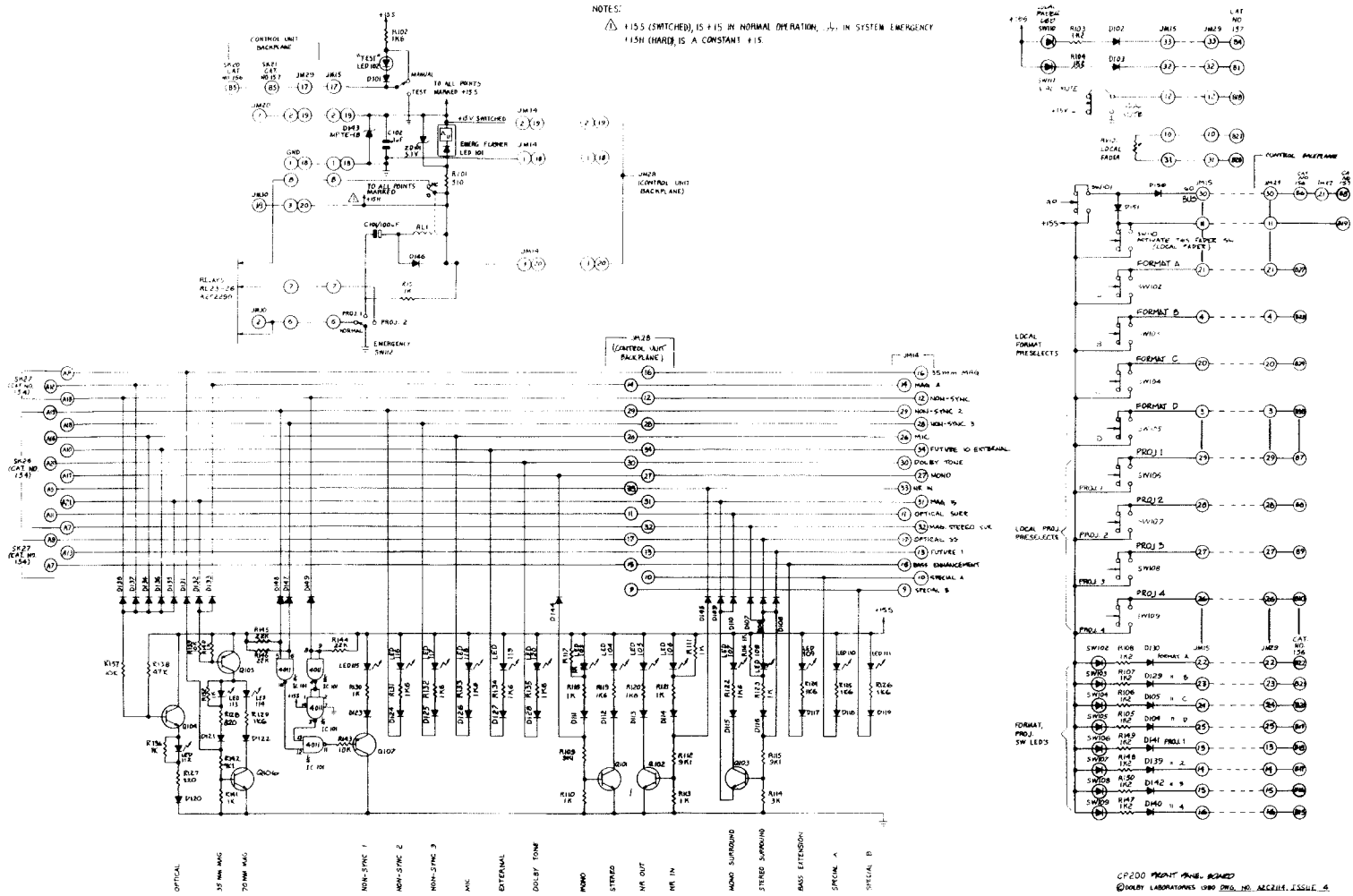

R101
R102
R103
R104
R105
R106
R107
R108
R109
IC 103
D121
R110
R111
R112
R113
R114
R115
R116
R117
JM 13
D101 – D108
D109 – D116
D117 – D124
D125 – D132
D122
R119
R120
D110
IC 101
R121
R123
IC 102
R122
R128
R127
R126
R125
R124
R123
R129
R130
R131
R132
R133
R134



S83/3494/5151

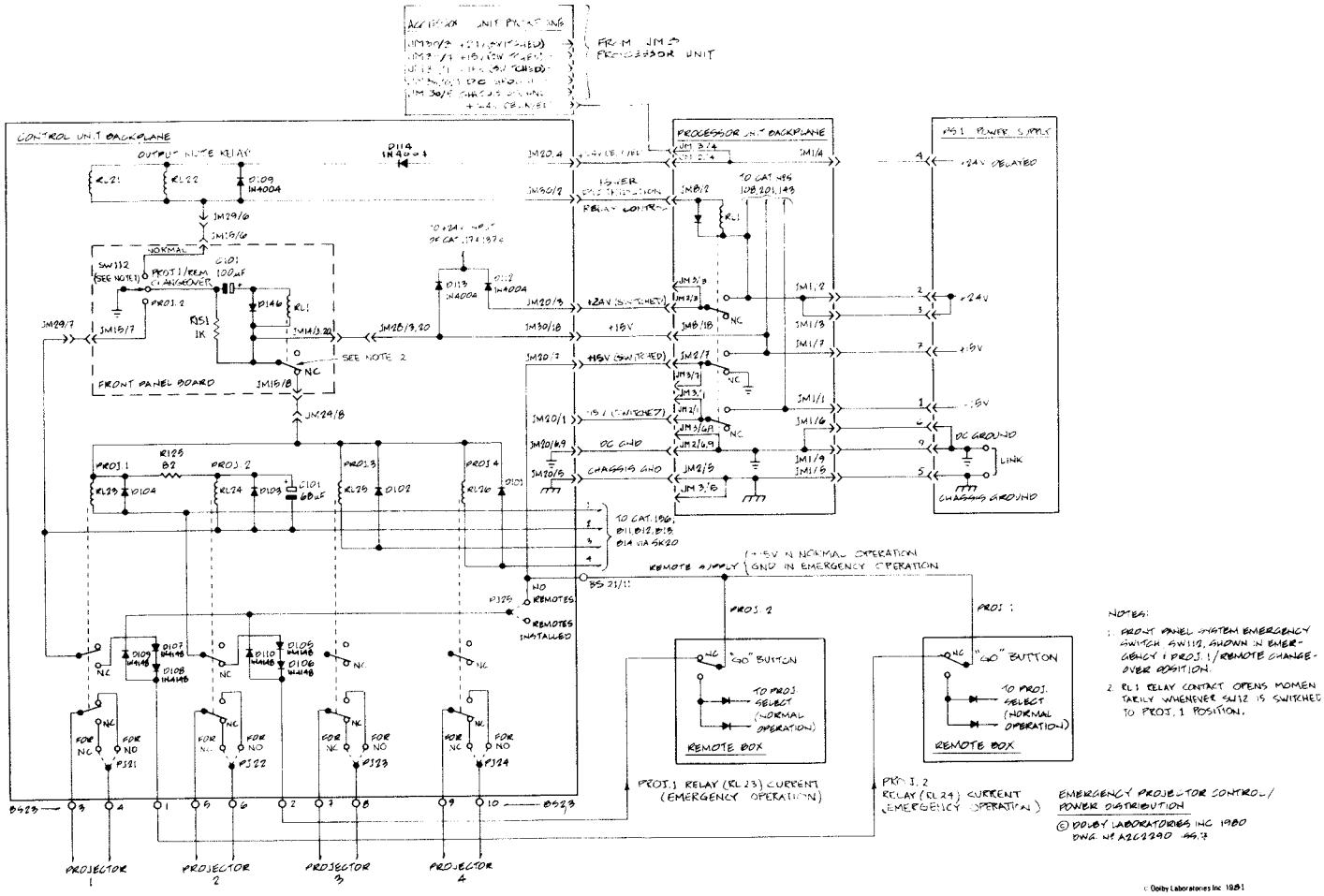
Figure 4.25 Lever Switch Board


D103
R104
D102
R103
SW111
SW110
SW113
SW112
RL1
D146
R151
R102
LED101
LED102
R101
ZD101
D101
C101
RV101
D143
D104
JM15
JM14
R105
D151
SW105
D105
D106–D110
R106
C102
SW104
Q102
Q103
Q101
R116
R114
R115
R113
R112
R111
R110
R109
D150
R117
LED103–111
D129
R107
D145
D144
SW103
R126
R125
R124
R123
R122
R121
R120
R119
R118
D119
D118
D117
D116
D115
D114
D113
D112
D111
D120
R135
R134
R133
R132
R131
R130
R129
R128
R127
D128
D127
D126
D125
D124
D123
D122
D121
D130
R136
R108
LED112–120
SW102
R143
Q107
Q106
Q105
Q104
D148
D131
D149
R137
R138
D147
IC101
R141
R142
R139
R140
1
D140
D139
R148
R144
R145
R147
R146
SW109
SW107
D132–D138
SW101
D142
D141
R149
R150
SW108
SW106



S83/3495/5152

Figure 4.26 Front Panel Board



S83/3503/5153

Figure 4.27 Emergency Projector Control/Power Distribution