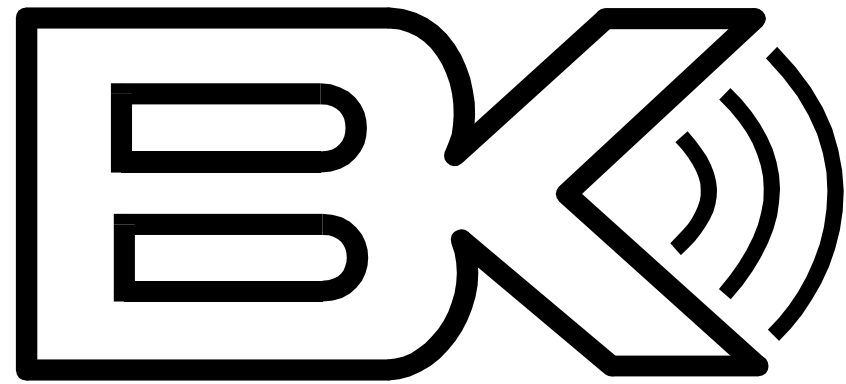


**AVP1000 & AVP1000**

**Dolby Pro Logic**

**SERVICE MANUAL**

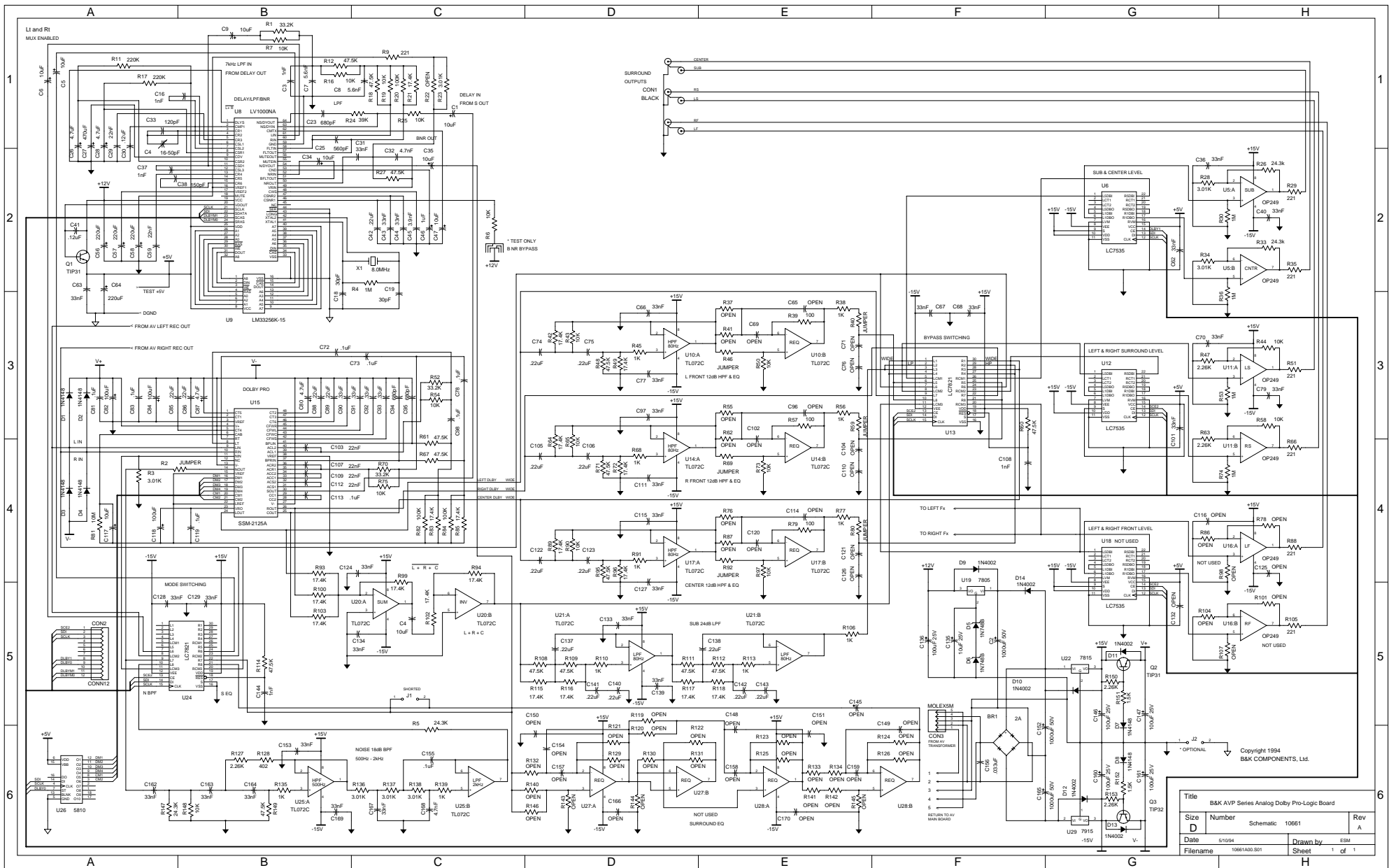
B&K COMPONENTS, LTD.  
2100 Old Union Road  
Buffalo, New York 14227-2725  
U.S.A.



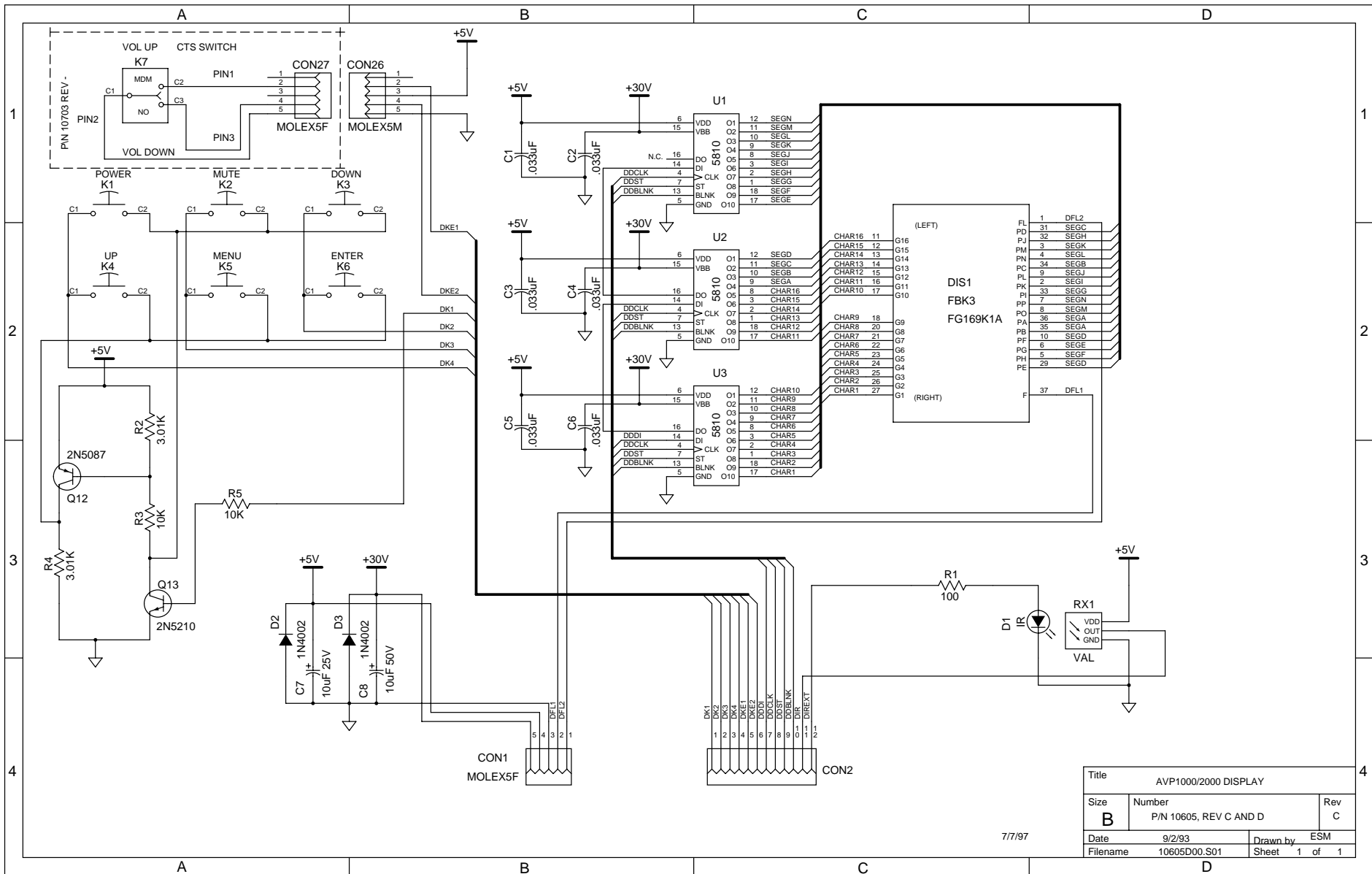
# Schematics

B&K COMPONENTS, LTD.  
2100 Old Union Road  
Buffalo, New York 14227-2725  
U.S.A.





Title B&K AVP Series Analog Dolby Pro-Logic Board			
Size D	Number Schematic 10661	Rev A	
Date 5/10/94	Drawn by ESM		
Filename 10661A03.001	Sheet 1 of 1		



Title			AVP1000/2000 DISPLAY		
Size	Number	Rev			
<b>B</b>	P/N 10605, REV C AND D				<b>C</b>
Date	9/2/93	Drawn by	ESM		
Filename	10605D00.S01	Sheet	1 of 1		

7/7/97

SPECIFICATIONS:

PRIMARY:

WHITE-YELLOW 120 V 60 Hz  
 WHITE-ORANGE 220 V 50 Hz  
 WHITE-RED 240 V 50 Hz

SECONDARY:

BLUE-BLUE 48 V 150 mA AC  
 GRAY-GRAY 30 V 400 mA AC  
 BROWN-BROWN 8 V 500 mA AC  
 VIOLET-VIOLET 5.7 V 250 mA AC

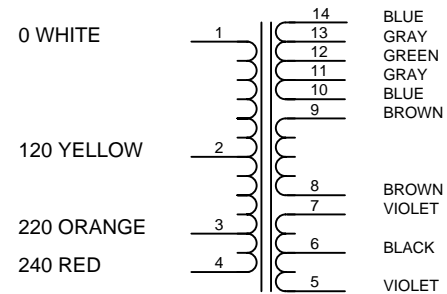
AGENCY REQUIREMENTS:

UL  
 CSA  
 VDE

REFERENCE

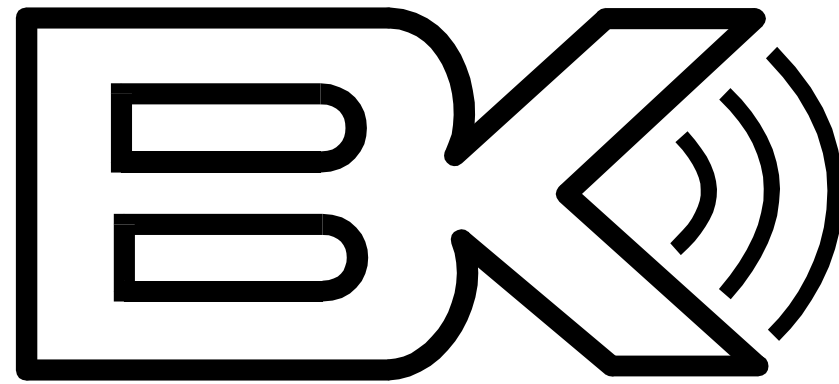
ENSIGN P/N 93042

B&K P/N 10753A



Title			AVP SERIES TRANSFORMER		
Size	Number			Rev	
A	P/N 10753A			A	
Date	2/21/96	Drawn by	ESM		
Filename	10753A.S01	Sheet	1	of	1

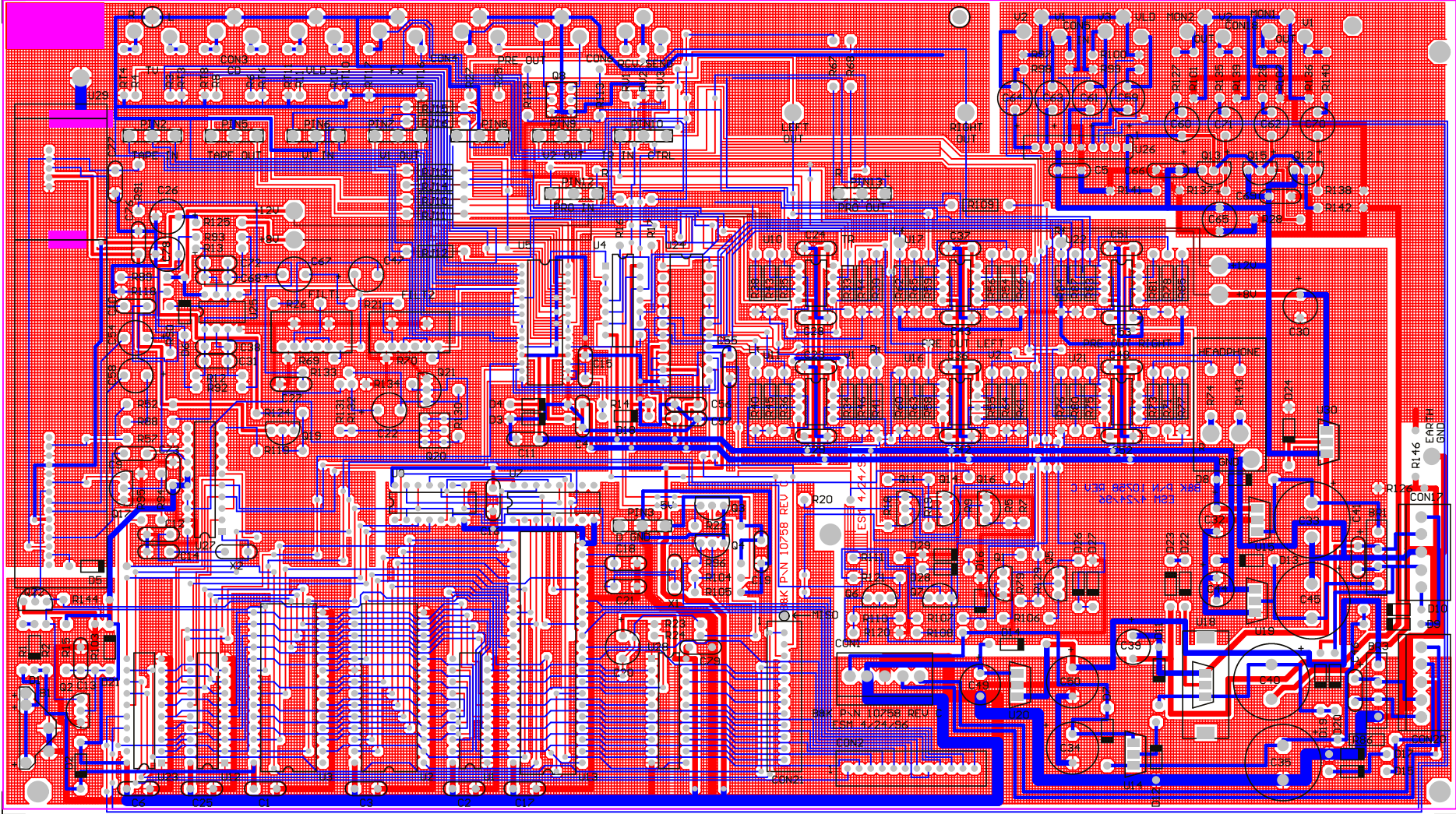
7/22/97



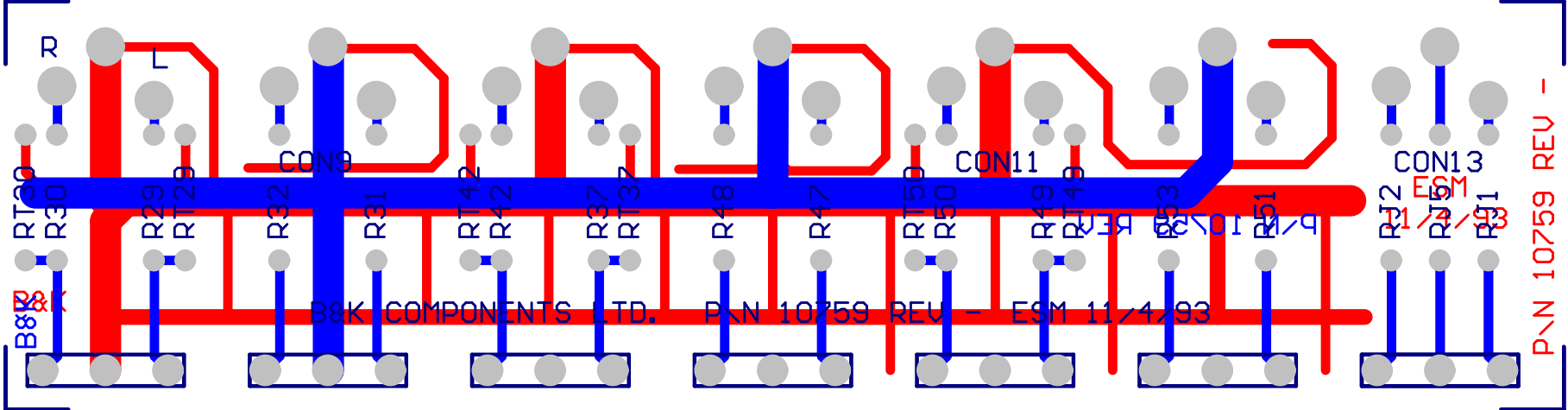
# Printed Circuit Boards

## PCB's

B&K COMPONENTS, LTD.  
2100 Old Union Road  
Buffalo, New York 14227-2725  
U.S.A.



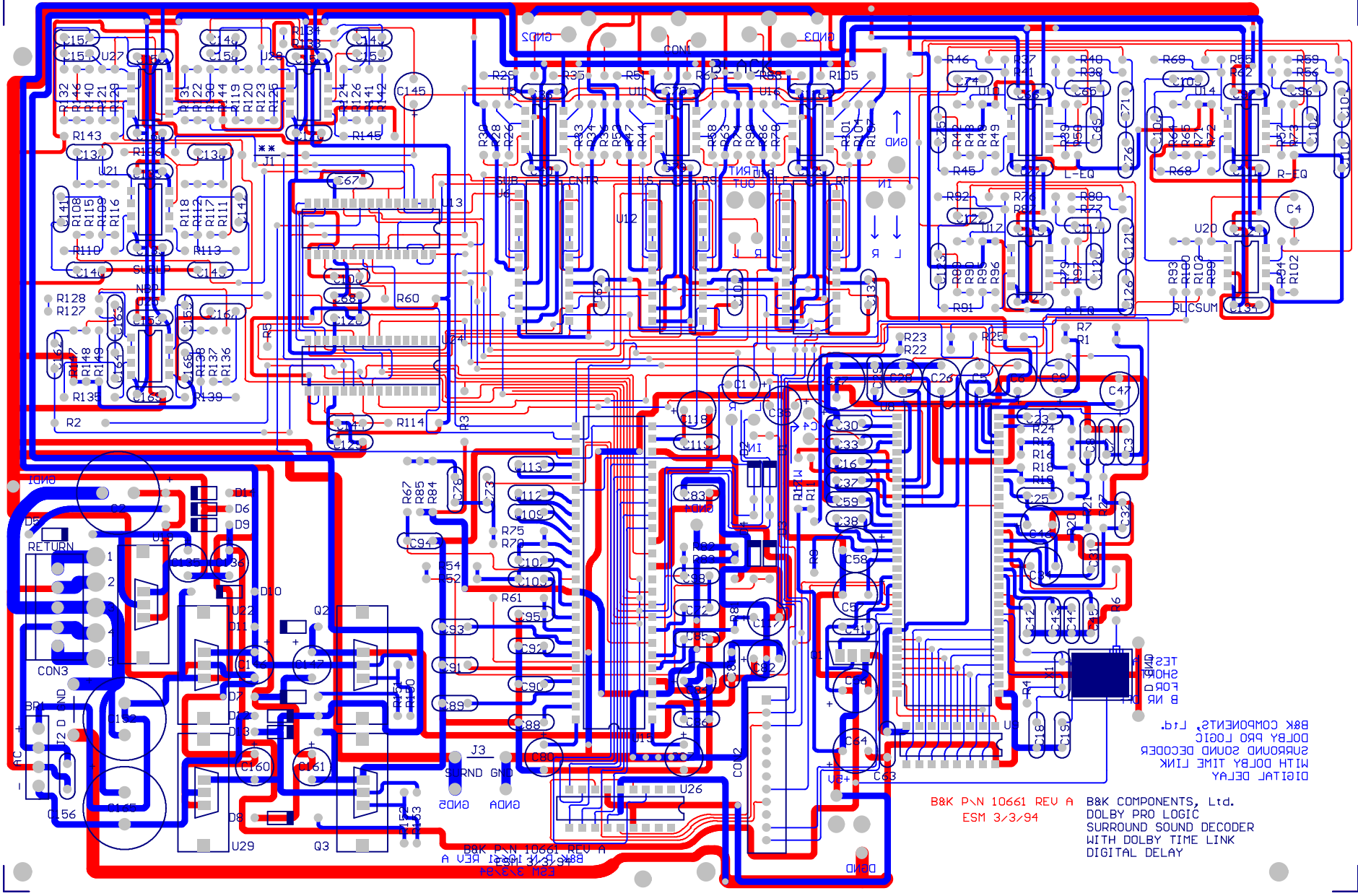




B&K  
RT30  
R30  
R29  
RT29  
R32  
CON9  
R31  
RT42  
R42  
R37  
RT37  
R48  
R47  
RT50  
R50  
R49  
RT49  
R53  
CON11  
R51  
R12  
CON13  
R15  
R91

B&K COMPONENTS LTD. P\N 10759 REV - ESM 11/4/93

P\N 10759 REV -



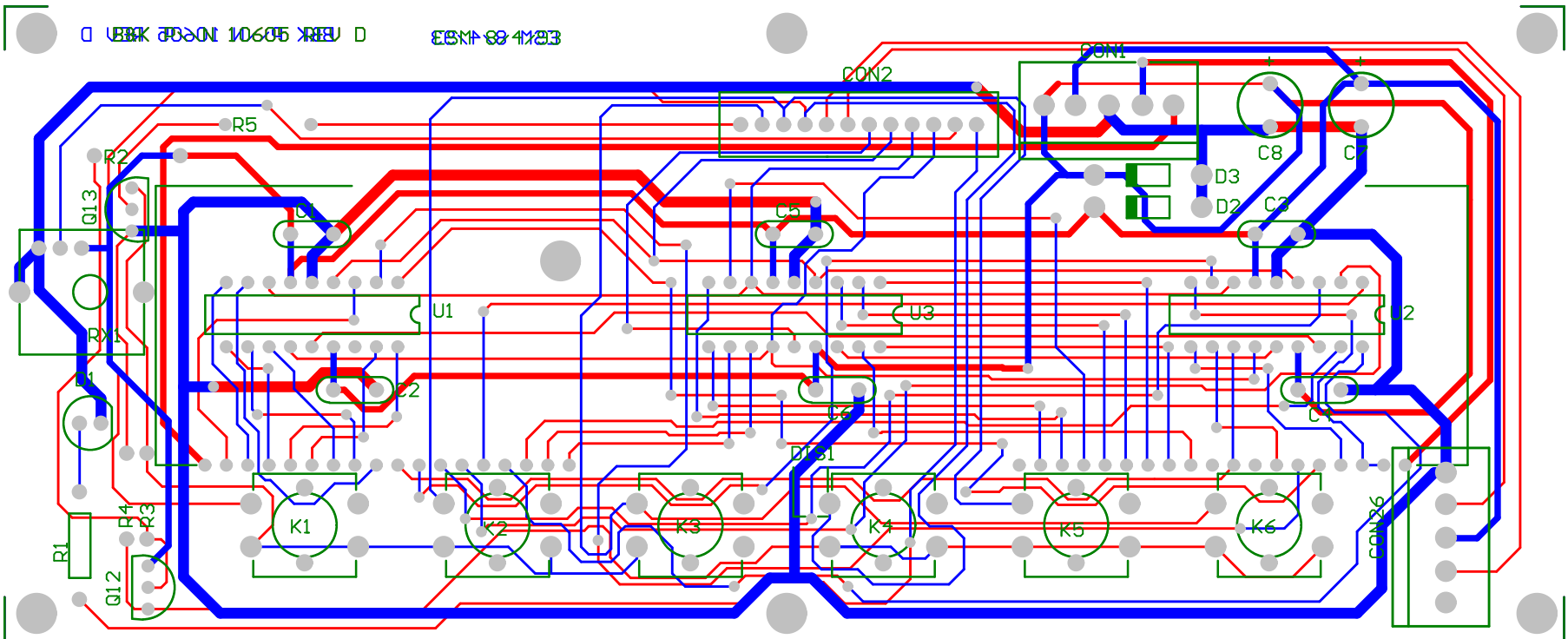
B&K P/N 10661 REV A  
ESM 3/3/94

B&K COMPONENTS, Ltd.  
DOLBY PRO LOGIC  
SURROUND SOUND DECODER  
WITH DOLBY TIME LINK  
DIGITAL DELAY

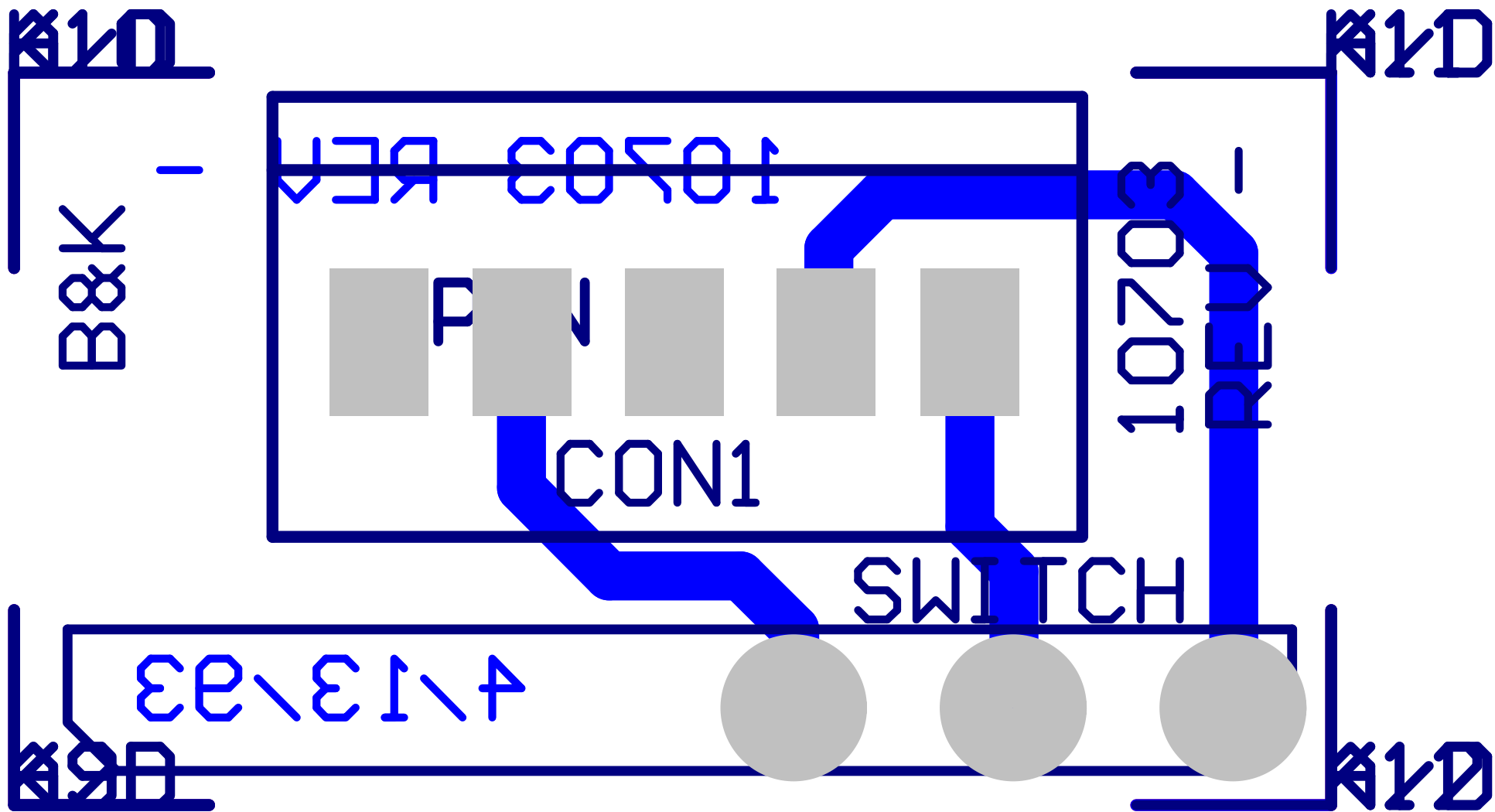
B&K P/N 10661 REV A  
ESM 3/3/94

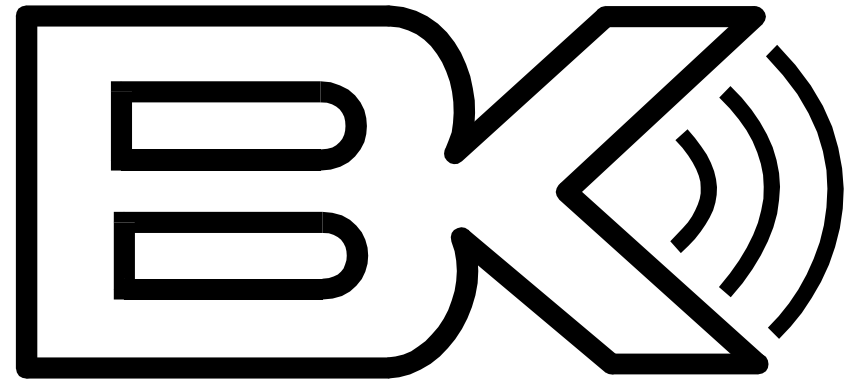
B N R  
FOR  
SHO  
TEST

BOOK POSITION 10605 REV D ESM 89 4123



CON27





# **Bill of Materials**

## **BOM's**

B&K COMPONENTS, LTD.  
2100 Old Union Road  
Buffalo, New York 14227-2725  
U.S.A.

Bill of Material for P/N 10758  
 AVP1000/1030/4000/4090 MAIN BOARD

Comment	Pattern	Quantity	Components
12 PIN RIBBON	RIBBON12	1	CON2
CONN12	CONN12	1	CON21
MOLEX5	MOLEX5	3	CON1, CON17, CON20
.01UF	RAD200	3	C9, C10, C76
.033UF	RAD200	30	C1, C2, C3, C4, C6, C11, C15, C16, C17, C19, C23, C24, C25, C27, C28, C29, C36, C37, C41, C42, C43, C46, C48, C51, C52, C53, C55, C56, C57, C77
.12UF	RAD200	4	C5, C66, C69, C73
1.5K	RES400	1	R19
100	RES500	6	R33, R34, R35, R36, R55, R58
1000UF 16V	CAP250RP	1	C50
1000UF 50V	CAPPOW	4	C33, C35, C40, C45
100K	RES400	13	R89, R112, R113, R118, R120, RT3, RT4, RT6, RT8, RT10, RT11, RT16, RT17
100K	RES500	12	R38, R39, R40, R41, R43, R44, R45, R46, R60, R61, R63, R64
100UF 100V	CAP250RP	1	C34
100UF 25V	CAP200RP	10	C30, C32, C39, C44, C49, C60, C62, C65, C70, C71
10K	RES400	18	R2, R22, R23, R24, R79, R92, R93, R96, R101, R102, R104, R105, R107, R110, R130, R136, R139, R144
10K	RES500	9	R54, R56, R71, R73, R75, R78, R80, R81, R86
10UF 25V	CAP200RP	12	C20, C22, C26, C47, C54, C58, C59, C61, C63, C64, C67, C78
12MHZ	RAD200	1	X1
17.4K	RES400	6	R5, R7, R15, R111, R119, R121
17.4K	RES500	2	R59, R83
1K	RES400	11	R3, R4, R6, R8, R10, R11, R16, R17, R91, R129, R133
1K	RES500	1	R109
1M	RES500	2	R62, R84
1N4002	DIODE.5	11	D3, D4, D7, D8, D9, D10, D11, D13, D14, D19, D20
1N4148	DIODE.4	8	D1, D2, D16, D18, D21, D26, D27, D28
1N4148	DIODE.5	2	D5, D6
1N748B	DIODE.4	2	D22, D23
1N748B	DIODE.5	3	D15, D17, D24
1N965B	DIODE.4	1	D29
1N965B	DIODE.5	1	D12
1NF	RAD200	3	C13, C31, C72
2.26K	RES500	2	R65, R87
221	RES400	6	R1, R25, R27, R28, R137, R138

257BLR-3718N	MPXFILT	2	FILT1, FILT2
26.7K	RES400	1	R108
27C512	DIP28	1	U2
400V 2A	BRIDGE.SM	2	BR1, BR3
2N5087	TO92	4	Q5, Q6, Q11, Q19
2N5210	TO92	13	Q1, Q2, Q3, Q4, Q7, Q12, Q13, Q14, Q15, Q16, Q17, Q21, Q22
3.01K	RES400	13	R21, R26, R52, R57, R69, R70, R88, R90, R95, R103, R134, R141, R142
3.01K	RES500	4	R66, R76, R77, R85
30PF	RAD200	2	C18, C21
33.2K	RES400	3	R9, R14, R94
33NF	RAD200	1	C79
3PIN	3PIN.2	10	PIN2, PIN3, PIN5, PIN6, PIN7, PIN8, PIN9, PIN10, PIN12, PIN13
3V	BATLITH.6	1	B1
402	RES400	1	R132
47.5	RES400	3	R74, R106, R143
47.5K	RES400	5	R12, R13, R18, R20, R124
475	RES400	1	R131
5.62	RES400	1	R125
560PF	RAD200	2	C38, C68
60PF	RAD200	2	C12, C14
61C64	DIP28	1	U3
7.2MHZ	RAD200	1	X2
74HC138	DIP16	1	U7
74HC573	DIP20	1	U1
74HC574	DIP20	3	U12, U23, U28
75	RES400	8	R97, R98, R99, R100, R127, R128, R135, R140
7805	TO220	2	U20, U30
7805	TO220WHS	1	U18
7815	TO220	2	U14, U15
7915	TO220	1	U19
80C31	DIP40	1	U13
AM/FM FRONT	KES-209AV-U1	1	U29
AUDIO	RCA.X2	2	CON4, CON6
AUDIO	RCA.X3	1	CON3
HC4001	DIP14	1	U9
JUMPER	AXIAL.5	7	RJ10, RJ11, RJ12, RJ13, RJ14, RJ15, RJ16
JUMPER	RES400	7	R67, R68, R126, R146, RV1, RV2, RV3
LA7952	SIP9	1	U26
LC4966	DIP14	1	U4
LC7535	DIP22	1	U24 *IF UNIT IS WITH PROCESSOR THIS CHIP IS NOT INSERTED

LC7821	DIP30S	1	U5
LF353	DIP8	5	U10, U11, U16, U21, U25
LM7000	DIP20	1	U27
OP249	DIP8	2	U17, U22
SK332	DUALJFET	2	Q8, Q20
VIDEO	RCA.X2	2	CON5, CON18



Bill of Material for P/N 10759  
AVP1000/1030/4000/4090 AUDIO I/O BOARD

Comment	Pattern	Quantity	Components
100K	RES400	6	RT29, RT30, RT37, RT42, RT49, RT50
1K	RES400	6	R29, R30, R37, R42, R49, R50
221	RES400	6	R31, R32, R47, R48, R51, R53
AUDIO_2PAIR	RCA.X2	2	CON11, CON13
AUDIO_3PAIR	RCA.X3	1	CON9
SAMTEC 3 PIN	3PIN.2	7	3PIN1, 3PIN2, 3PIN3, 3PIN4, 3PIN5, 3PIN6, 3PIN7
WIRE	RES400	3	RJ1, RJ2, RJ5

Bill of Material for P/N 10661  
 DOLBY SURROUND PROCESSOR BOARD  
 WITH DOLBY TIME LINK DIGITAL DELAY

Comment	Pattern	Quantity	Components
.12uF	RAD200	2	C30, C41
.1uF	RAD200	9	C72, C73, C78, C81, C83, C98, C113, C119, C155
.22uF	RAD200	17	C42, C74, C75, C85, C86, C88, C89, C105, C106, C122, C123, C137, C138, C140, C141, C142, C143
.33uF	RAD200	4	C90, C91, C92, C93
1.5K	RES400	2	R151, R152
100	RES400	3	R39, R57, R79
1000uF 50V	CAP250RP	3	C2, C152, C165
100K	RES400	3	R20, R82, R84
100uF 25V	CAP200RP	8	C82, C84, C118, C136, C146, C147, C160, C161
10K	RES400	14	R6, R7, R16, R19, R25, R43, R50, R54, R65, R73, R75, R90, R97, R148
10M	RES400	1	R81
10uF 25V	CAP200RP	9	C1, C5, C6, C9, C34, C35, C47, C117, C135
120pF	RAD200	1	C33
150pF	RAD200	1	C38
17.4K	RES400	19	R21, R42, R49, R64, R72, R83, R85, R89, R93, R94, R96, R99, R100, R102, R103, R115, R116, R117, R118
1K	RES400	11	R38, R45, R56, R68, R77, R91, R106, R110, R113, R135, R139
1M	RES400	7	R4, R30, R36, R53, R74, R98, R107
1N4002	DIODE.5	6	D9, D10, D11, D12, D13, D14
1N4148	DIODE.5	6	D1, D2, D3, D4, D7, D8
1N748B	DIODE.5	2	D5, D6
1nF	RAD200	5	C3, C16, C37, C108, C144
1uF	CAP200RP	1	C46
2.26K	RES400	3	R127, R150, R153
220K	RES400	2	R11, R17
220uF 25V	CAP200RP	4	C56, C57, C58, C64
221	RES400	7	R9, R29, R35, R51, R66, R88, R105
22nF	RAD200	6	C29, C59, C103, C107, C109, C112
24.3K	RES400	7	R26, R33, R44, R58, R78, R101, R147
2A BRIDGE	BRIDGE.SM	1	BR1
3.01K	RES400	11	R3, R23, R28, R34, R47, R63, R86, R104, R136, R137, R138
3.9nF	RAD200	1	C45
30pF	RAD200	2	C18, C19

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33.2K	RES400	2	R52, R70
33nF	RAD200	34	C31, C36, C40, C43, C44, C62, C63, C66, C67, C68, C70, C77, C79, C97, C101, C111, C115, C116, C124, C125, C127, C128, C129, C132, C133, C134, C139, C153, C156, C162, C163, C164, C167, C169
39K	RES400	1	R24
4.7nF	RAD200	2	C32, C168
4.7uF	CAP200RP	2	C26, C28
4.7uF 25V	CAP200RP	2	C80, C87
402	RES400	1	R128
47.5K	RES400	17	R1, R5, R12, R18, R27, R48, R60, R61, R67, R71, R95, R108, R109, R111, R112, R114, R149
470uF 6.3V	CAP250RP	1	C27
5.6nF	RAD200	2	C7, C8
560pF	RAD200	1	C25
5810	DIP18	1	U26
680pF	RAD200	3	C23, C94, C95
7805	TO220WHS	1	U19
7815	TO220WHS	1	U22
7915	TO220WHS	1	U29
8.0MHz	RAD200	1	X1
BLACK	RCA.X3	1	CON1
JUMPER	JUMP.4	2	J2, J3
JUMPER	JUMP.5	1	J1
JUMPER	RES400	6	R40, R46, R59, R69, R80, R92
LC7535	DIP22	3	U6, U12, U18
LC7821	DIP30S	2	U13, U24
LM33256K-15	DIP16	1	U9
LV1000NA	DIP64S	1	U8
MOLEX12	CONN12	1	CON2
MOLEX5M	MOLEX5	1	CON3
OP249	DIP8	3	U5, U11, U16
OPEN	CAP200RP	1	C145
OPEN	DIP8	2	U27, U28
OPEN	RAD200	22	C65, C69, C71, C76, C96, C102, C104, C110, C114, C120, C121, C126, C148, C149, C150, C151, C154, C157, C158, C159, C166, C170
OPEN	RES400	28	R22, R37, R41, R55, R62, R76, R87, R119, R120, R121, R122, R123, R124, R125, R126, R129, R130, R131, R132, R133, R134, R140, R141, R142, R143, R144, R145, R146
SSM-2125A	DIP48	1	U15
TIP31	TO220	1	Q1
TIP31	TO220WHS	1	Q2
TIP32	TO220WHS	1	Q3

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TL072C	DIP8	6	U10, U14, U17, U20, U21, U25
WIRE	RES400	1	R2

Bill of Material for P/N 10605  
 AVP1000/1030/2000/2030/3000/3090/4000/4090 DISPLAY BOARD

Comment	Pattern	Quantity	Components
.033uF	RAD200	6	C1, C2, C3, C4, C5, C6
100	RES500	1	R1
10K	RES400	2	R3, R5
10uF 25V	RAD200.POL	2	C7, C8
1N4002	D0-35	2	D2, D3
2N5087	T092	1	Q12
2N5210	T092	1	Q13
3.01K	RES400	2	R2, R4
5810	DIP18	3	U1, U2, U3
CONN12	CONN12	1	CON2
FG169K1A	FG169K1A	1	DIS1
INFRA	LED100	1	D1
MM-001E	MM-001E	1	RX1
MOLEX5	MOLEX5	2	CON1, CON26
PSWITCH	PUSH1	6	K1, K2, K3, K4, K5, K6

BELOW IS FOR P/N 10703 VOLUME UP/DOWN CONTROL

Comment	Pattern	Quantity	Components
MOLEX5	MOLEX	1	CON27
CTS ROTARY	MDM	1	K7