



Service Manual

circuit diagram

Amplifier PT series
PT3 PT5 PT7 PT9

Zeck Audio
Service department
Turnhallenweg 6
D-79183 Waldkirch
Germany

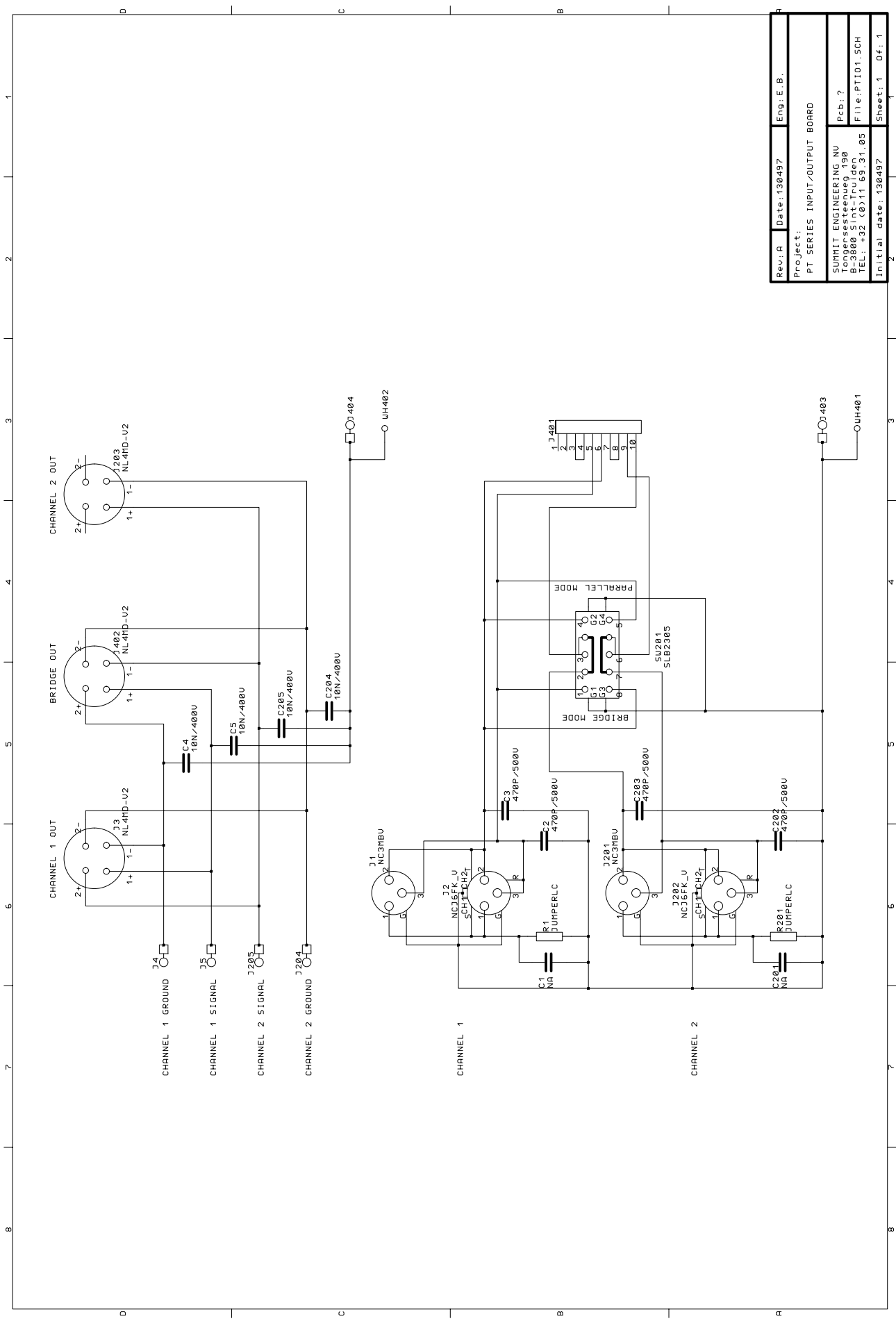
Phone: +49-(0)7681-2004-18
Fax: +49-(0)7681-2004-972
email: support@zeck-audio.de
www: www.zeck-audio.de

This manual has been provided for the use of authorized service personnel. It has been assumed that basic service procedures inherent to the industry, and more specifically Zeck Products, are already known and understood by the users.

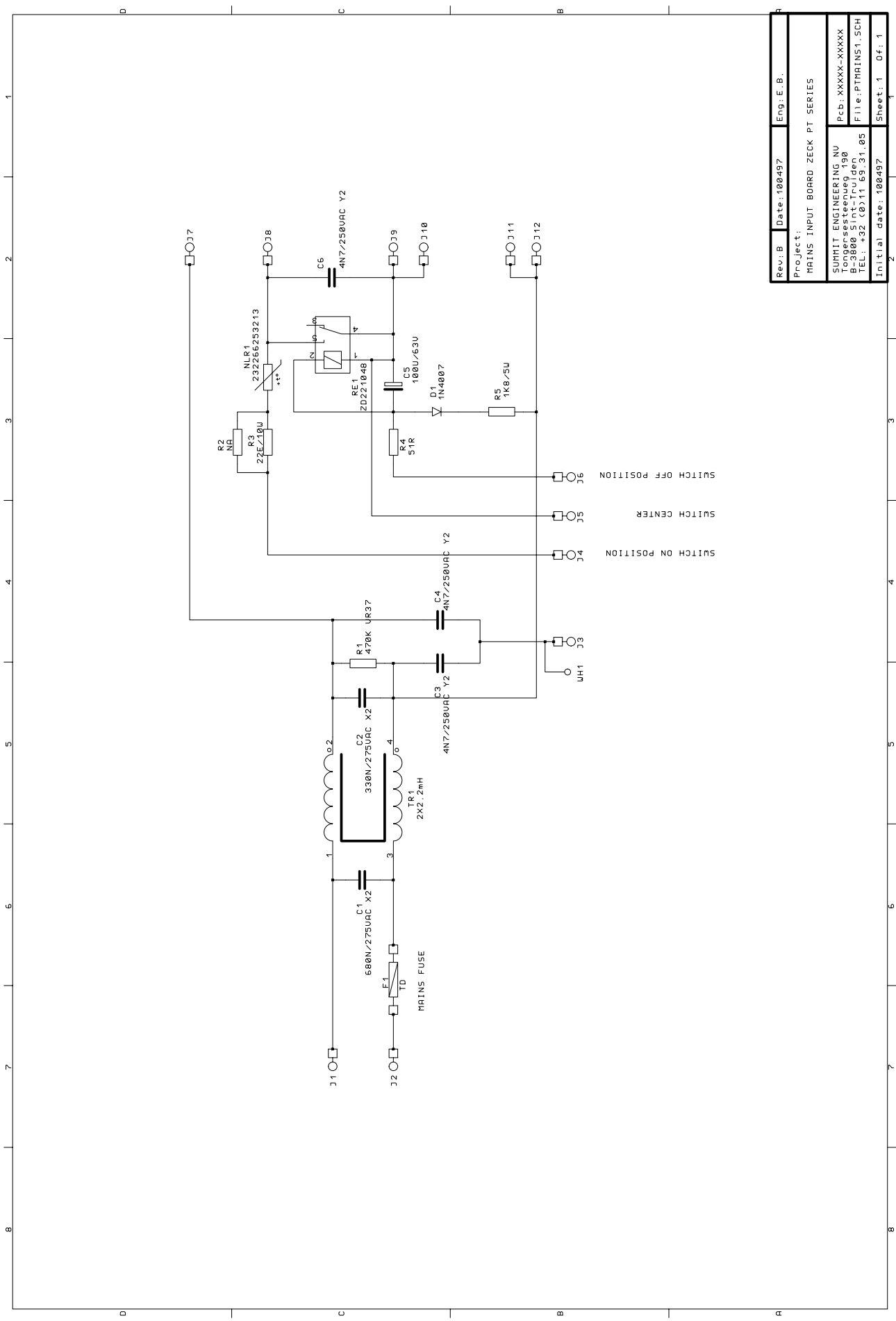
- Warning:** Failure to follow appropriate service and safety procedures when servicing this product may result in personal injury, destruction of expensive components and failure of the product to perform as specified. For these reasons, we advise all Zeck product owners that all service required should be performed by qualified service personnel.
Static discharge can destroy expensive components. Discharge any static electricity your body may have accumulated by grounding yourself to the ground buss in the unit.
- Important:** Turn the unit OFF during disassembly and parts replacement. Recheck all work before you apply power to the unit.
- Safety related component warning:** Components identified by mark "!" on the schematic diagrams and in the parts list are critical to safe operation. Replace these components with Zeck original parts only.
-

Dieses Service-Manual ist für den Gebrauch durch autorisiertes Service-Personal bestimmt. Es wird vorausgesetzt, daß der Benutzer über grundlegende und industrieübliche Kenntnisse im Elektronik-Service verfügt und insbesondere mit der Technik von Zeck-Produkten vertraut ist.

- Warnung:** Die Nichtbeachtung von Service- und Sicherheits-Richtlinien kann bei Arbeit an diesem Gerät zu körperlichen Schäden, Zerstörung wertvoller Bauteile und zum Ausfall des Gerätes führen. Aus diesem Grunde empfehlen wir dem Benutzer dringend, alle anfallenden Service-Arbeiten ausschließlich qualifiziertem Personal zu überlassen. Eventuell vorhandene elektrostatische Aufladungen können wertvolle Bauteile zerstören. Vor der Arbeit an dem Gerät sollte der Service-Techniker sich daher durch Berühren des Schaltungs-Nullpunkts des Gerätes von jedweder elektrostatischer Aufladung befreien.
- Wichtig:** Vor Öffnung des Gerätes und während des Auswechslens von Bauteilen muß das Gerät abgeschaltet sein.
- Sicherheitsrelevante Bauteile** Für die Funktion des Gerätes kritische Bauteile sind durch das Symbol "!" im Schaltplan und in der Ersatzteilleiste markiert. Diese Bauteile dürfen nur durch original Zeck-Ersatzteile ersetzt werden.



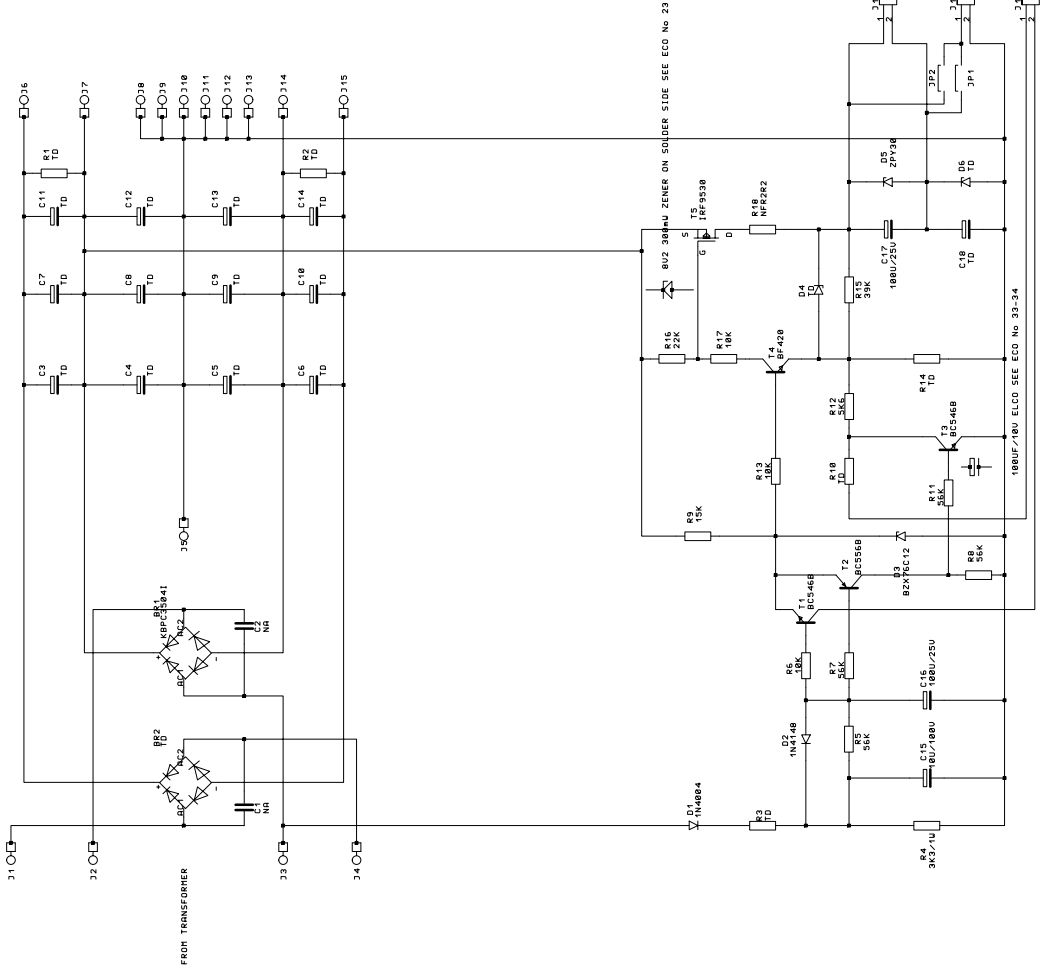
Rev.: A	Date: 130497	Eng: E. B.
Project: PT SERIES INPUT/OUTPUT BOARD		
SUMMIT ENGINEERING NV Tongersesteenweg 190 B-3800 Sint-Truiden TEL: +32 (0)11 69.31.05		
Initial date: 130497		Sheet: 1 Of: 1



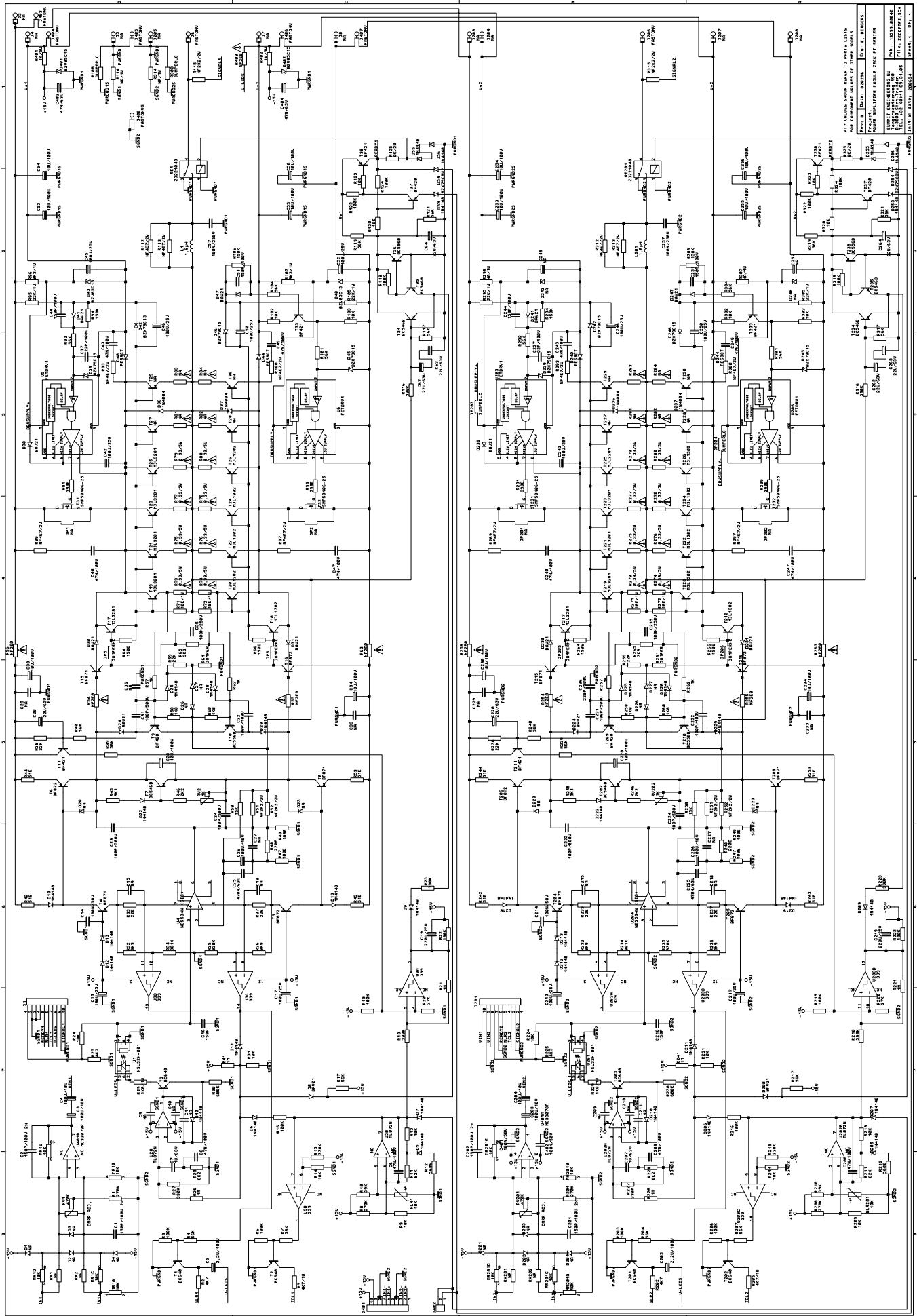
Rev: B	Date: 100497	Eng: E. B.
Project: MAINS INPUT BOARD ZECK PT SERIES		
SUMMIT ENGINEERING NU Tongerssteenuweg 190 B-3800 Sint-Truiden TEL: +32 (0)11 69.31.05		
Initial date: 100497		Sheet: 1 Of: 1

TYPE DEPENDENT (T/D REFERENCES) COMPONENT TABLE

REF	PT3	PT5	PT7	PT9
C3	NA	15000U/50U	15000U/50U	10000U/53U
C4	4700U/100U	15000U/50U	15000U/50U	10000U/53U
C5	4700U/100U	15000U/50U	15000U/50U	10000U/53U
C6	NA	15000U/50U	15000U/50U	10000U/53U
C7	NA	15000U/50U	15000U/50U	10000U/53U
C8	NA	NA	15000U/50U	10000U/53U
C9	NA	NA	15000U/50U	10000U/53U
C10	NA	NA	15000U/50U	10000U/53U
C11	NA	NA	NA	10000U/53U
C12	NA	NA	NA	10000U/53U
C13	NA	NA	NA	10000U/53U
C14	NA	NA	NA	10000U/53U
C18	100U/25U	NA	NA	100U/25U
BR2	NA	KPFC33841	KPFC33841	KPFC58041
JP1	JUMPER	NA	NA	JUMPER
JP2	JUMPER	JUMPER	JUMPER	NA
D4	BZX79C39	BZX79C13	BZX79C13	BZX79C39
D6	2P438	JUMPER	JUMPER	2P438
R1	NA	3K9/5U	3K9/5U	3K9/5U
R2	NA	3K9/5U	3K9/5U	3K9/5U
R3	1K/2U	JUMPER	JUMPER	JUMPER
R10	3K9	15K	15K	3K9
R14	22K	68K	68K	22K



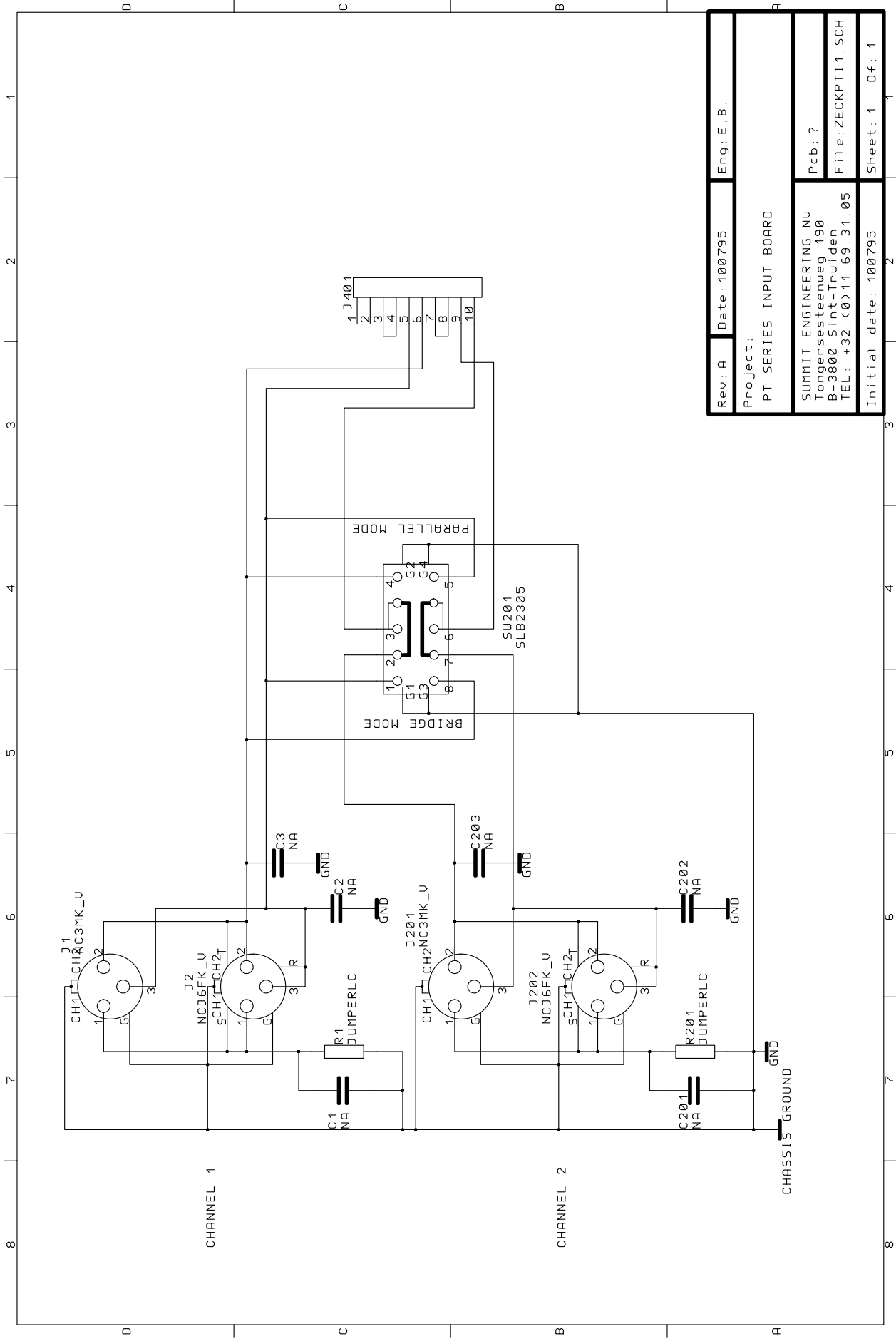
Rev. B	Date: 07/06/99	Eng. E. B.
Project: SUPPLY BOARD PT SERLES		
SUMMIT ENGINEERING, INC.		
2000 WASHINGTON 150		
TEL: 82 (611) 69 31 85		
File: P5U0791.SCH		
Incl. date: 08/09/97		
Sheet: 1 of 1		



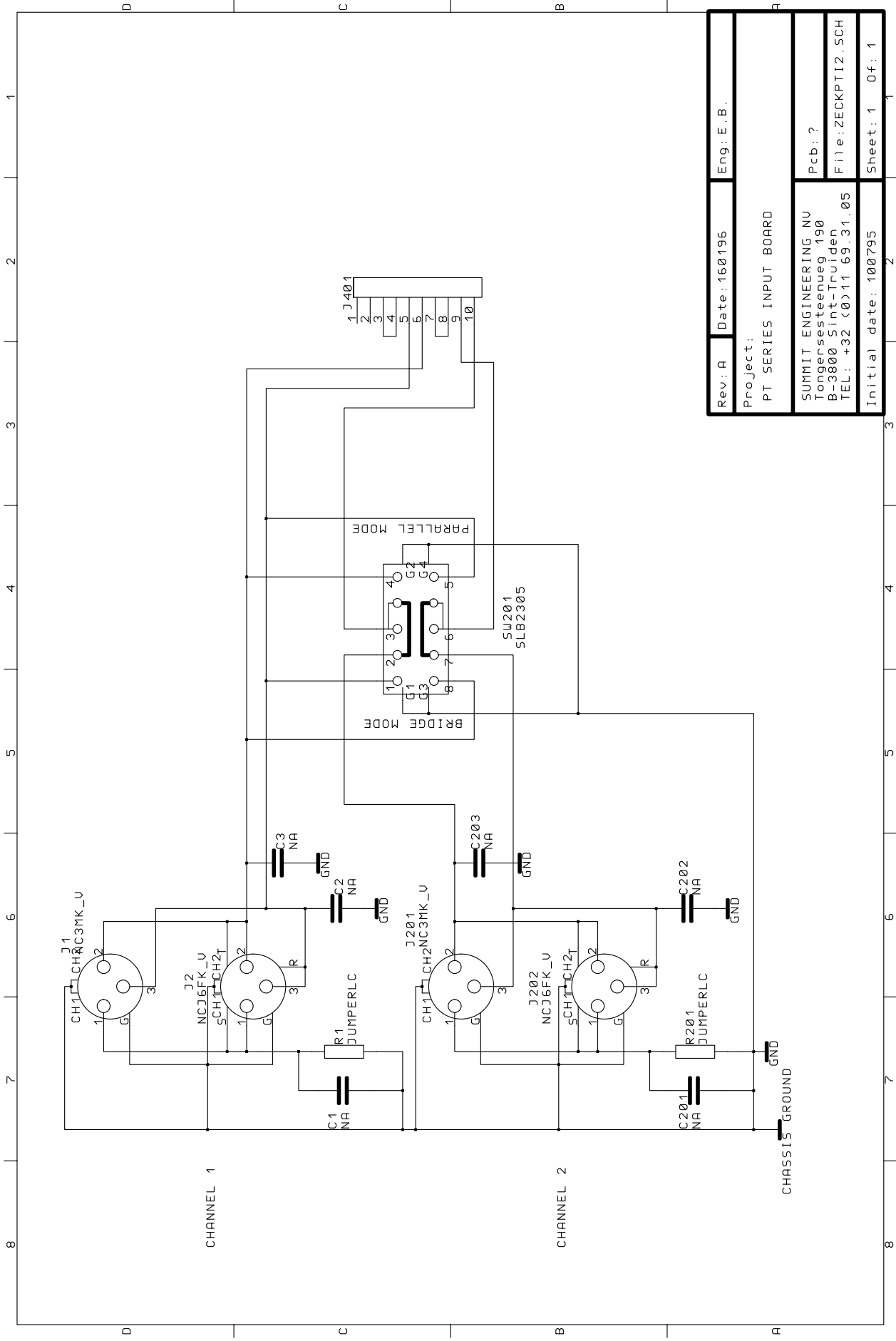
ATT VALUES SHOWN REFER TO PARTS LISTS
FOR COMPONENT VALUES OF OTHER MODELS

REV.	DATE	BY	CHK.	APP.	DESCRIPTION
1	11/14/68	DAVE	DAVE	DAVE	FINAL DESIGN
2	11/14/68	DAVE	DAVE	DAVE	POWER SUPPLY FILTER MODULE CHECK PT SERIES
3	11/14/68	DAVE	DAVE	DAVE	REVISIONS TO PARTS LISTS
4	11/14/68	DAVE	DAVE	DAVE	REVISIONS TO PARTS LISTS
5	11/14/68	DAVE	DAVE	DAVE	REVISIONS TO PARTS LISTS
6	11/14/68	DAVE	DAVE	DAVE	REVISIONS TO PARTS LISTS
7	11/14/68	DAVE	DAVE	DAVE	REVISIONS TO PARTS LISTS
8	11/14/68	DAVE	DAVE	DAVE	REVISIONS TO PARTS LISTS
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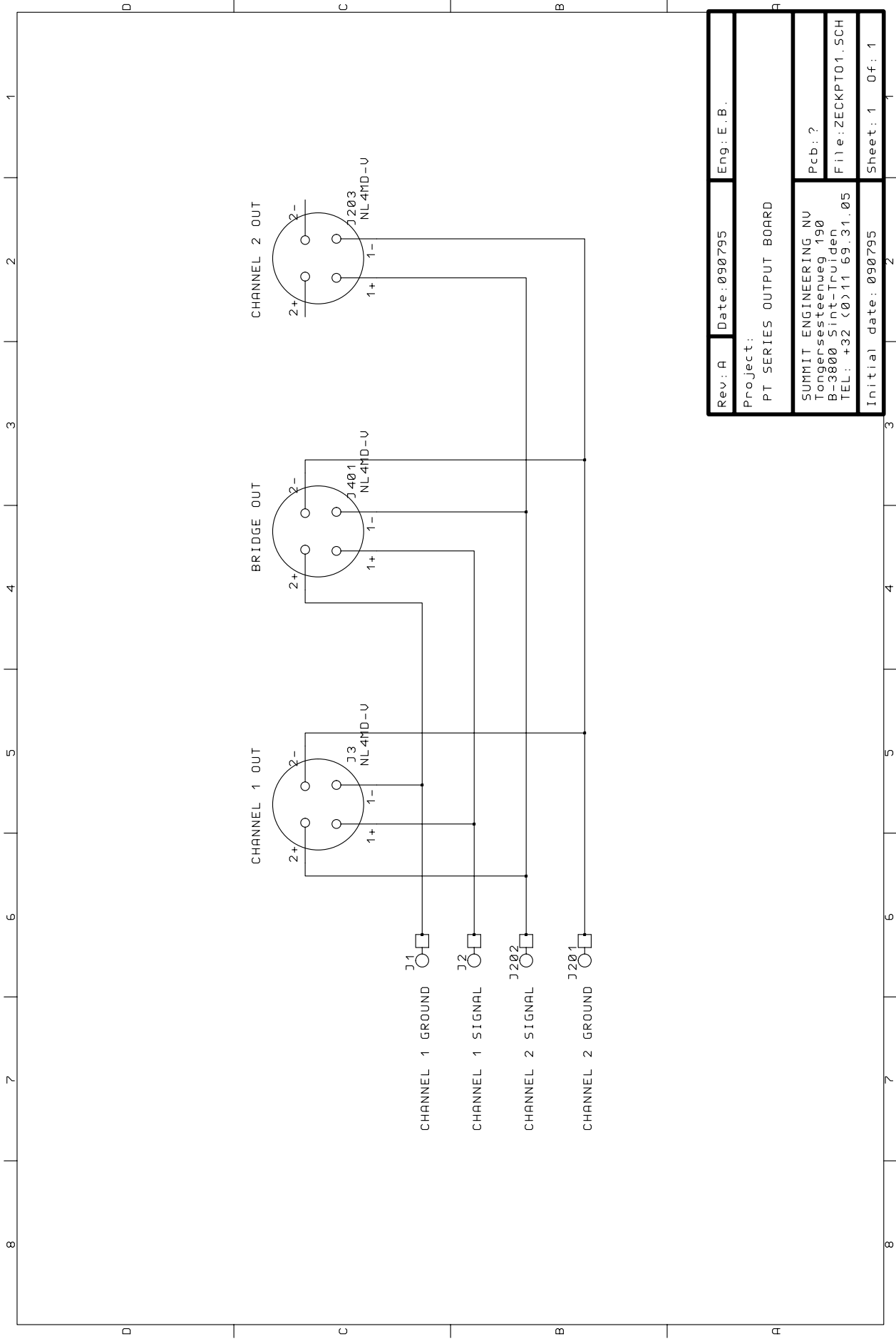
DAVE ENGINEERING, INC.
1000 S. 10TH AVENUE, SUITE 100
DENVER, COLORADO 80202
TELEPHONE (303) 733-1111
FAX (303) 733-1112



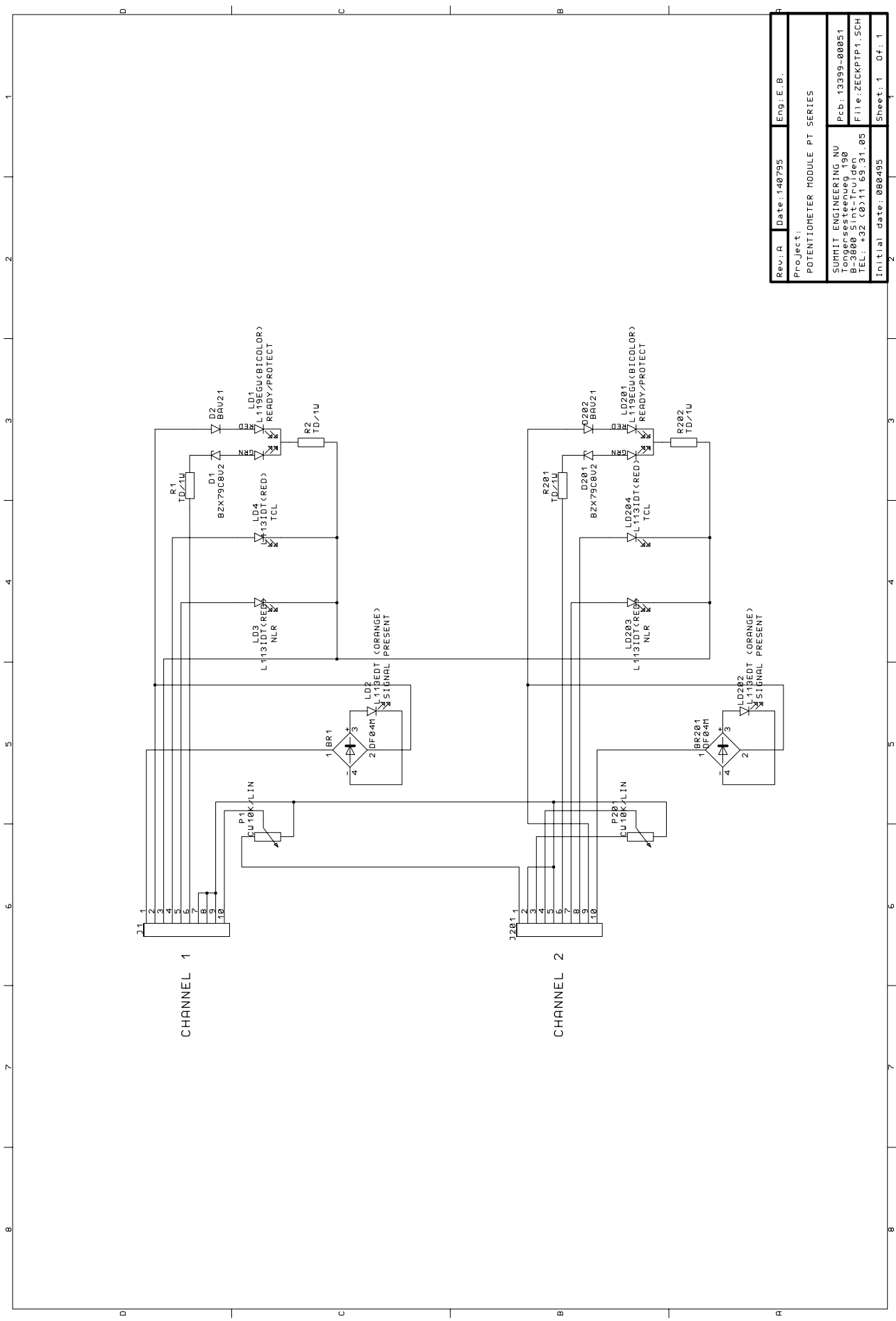
Rev: A	Date: 100795	Eng: E. B.
Project: PT SERIES INPUT BOARD		
SUMMIT ENGINEERING NV Tongersesteenweg 190 B-3800 Sint-Truiden TEL: +32 (0)11 69.31.05		Pcb: ?
Initial date: 100795		File: ZECKPTI1.SCH
Sheet: 1		Of: 1



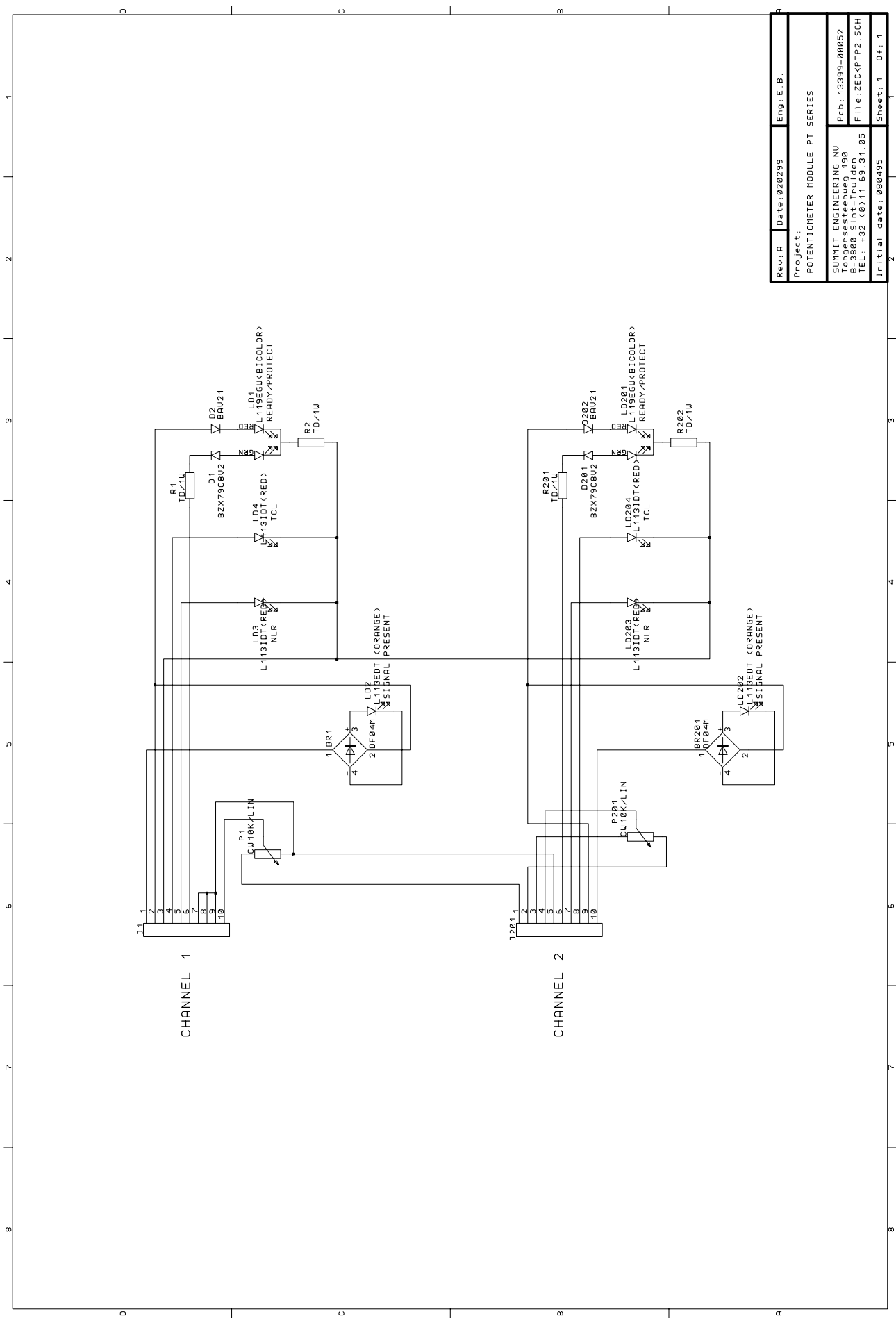
Rev: A	Date: 160196	Eng: E. B.
Project: PT SERIES INPUT BOARD		
SUMMIT ENGINEERING NV Tongersesteenweg 190 B-3800 Sint-Truiden TEL: +32 (0)11 69.31.05		Pcb: ?
Initial date: 100795		File: ZECKPT12.SCH
Sheet: 1		Of: 1



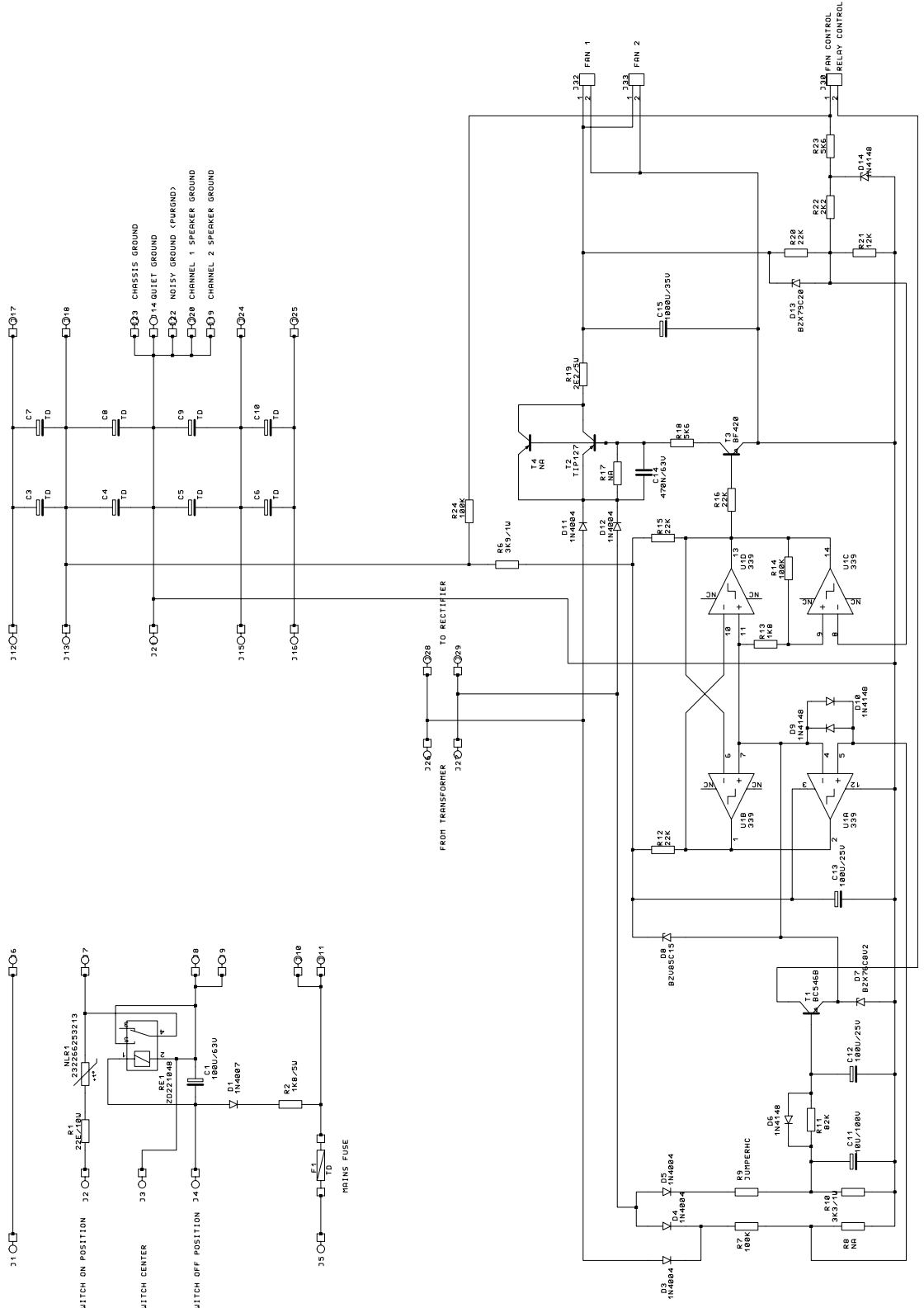
Rev: A	Date: 090795	Eng: E. B.
Project: PT SERIES OUTPUT BOARD		
SUMMIT ENGINEERING NV Tongersesteenweg 190 B-3800 Sint-Truiden TEL: +32 (0)11 69.31.05		Pcb: ?
Initial date: 090795		File: ZECKPT01.SCH
Sheet: 1		Of: 1



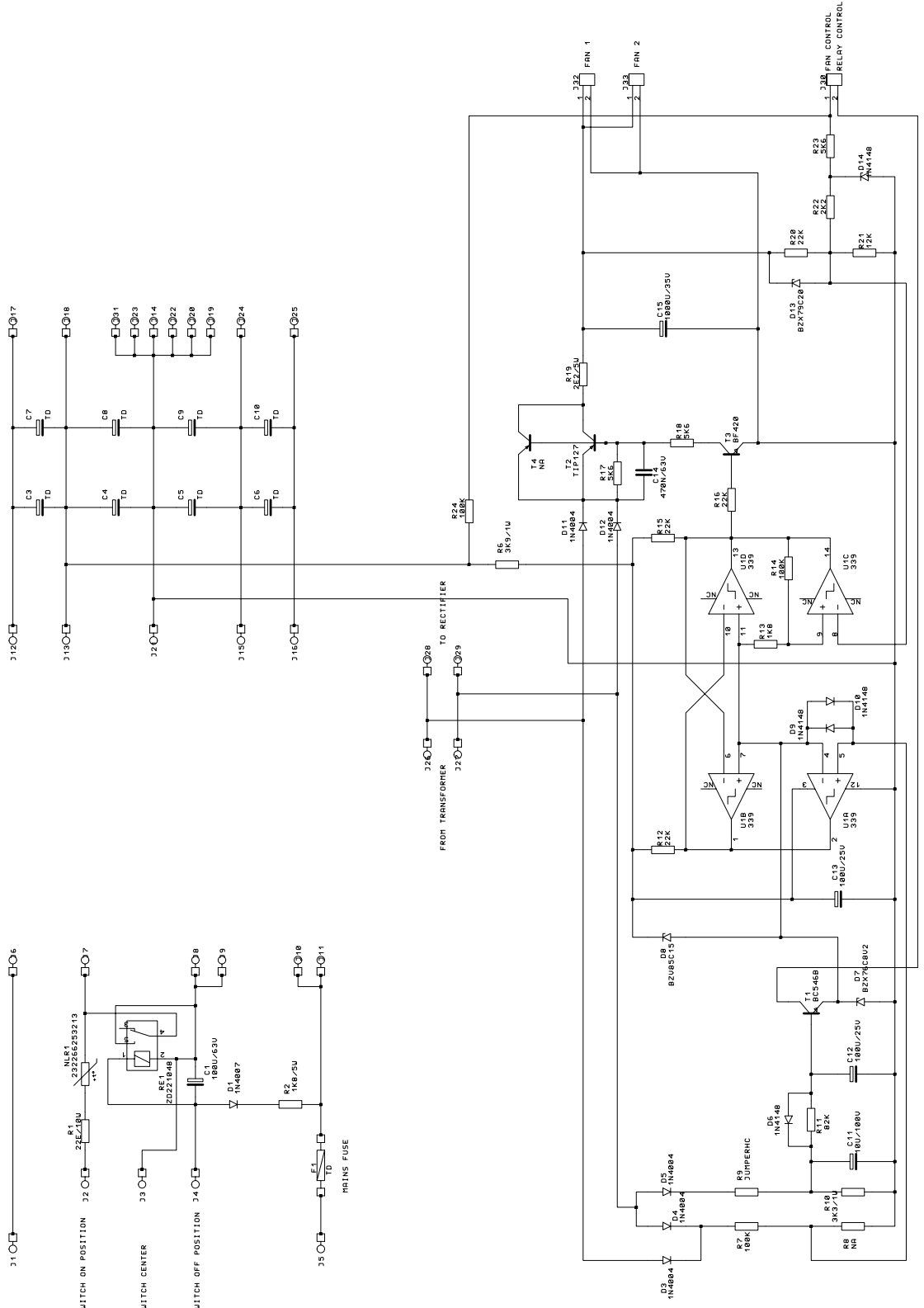
Rev: A	Date: 140795	Eng: E. B.
Project: POTENTIOMETER MODULE PT SERIES		
SUMMIT ENGINEERING NV Tongersesteenweg 190 B-3800 Sint-Truiden TEL: +32 (0)11 69.31.05		
Initial date: 080495		Sheet: 1 Of: 1



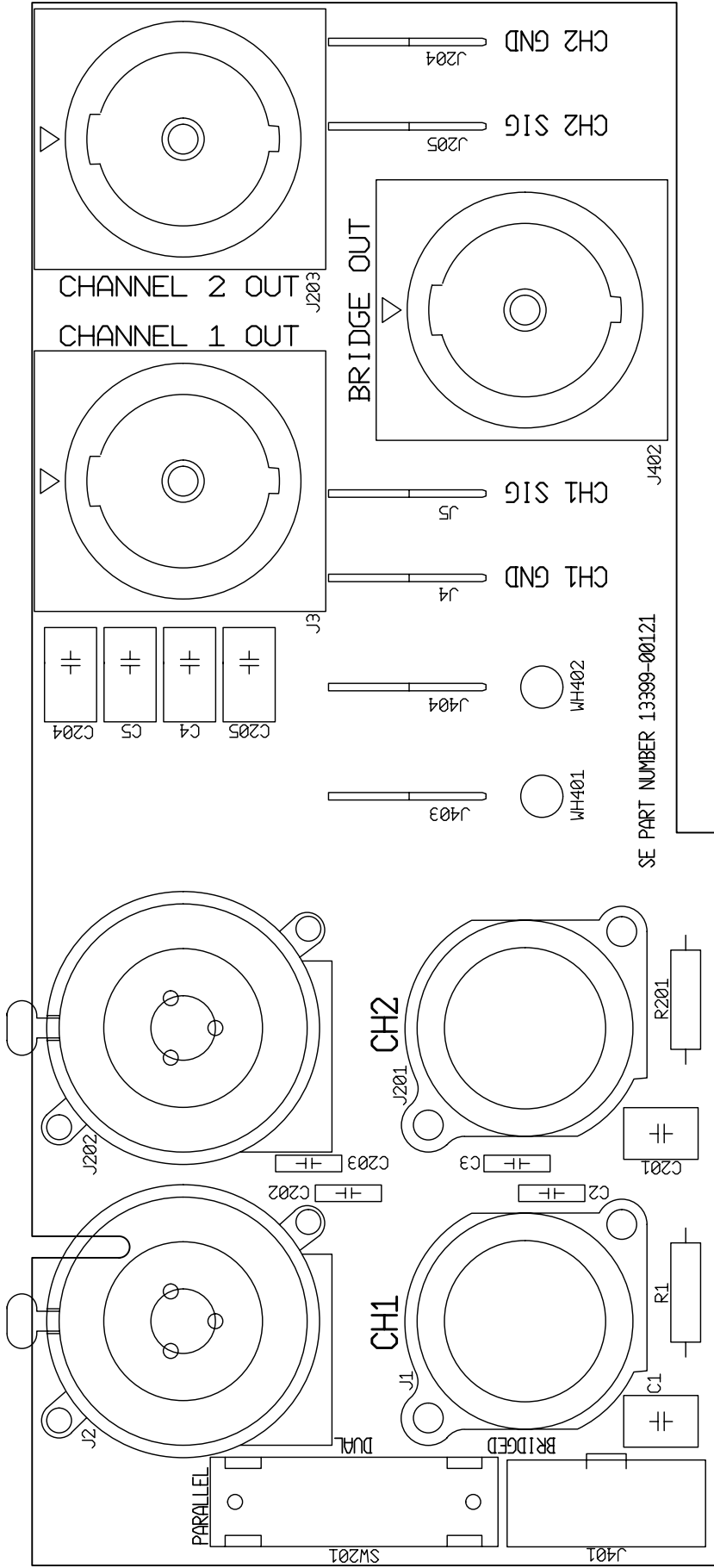
Rev: A	Date: 020299	Eng: E. B.
Project: POTENTIOMETER MODULE PT SERIES		
SUMMIT ENGINEERING NV Tongersesteenweg 190 B-3800 Sint-Truiden TEL: +32 (0)11 69.31.05		
Initial date: 080495		Sheet: 1 Of: 1

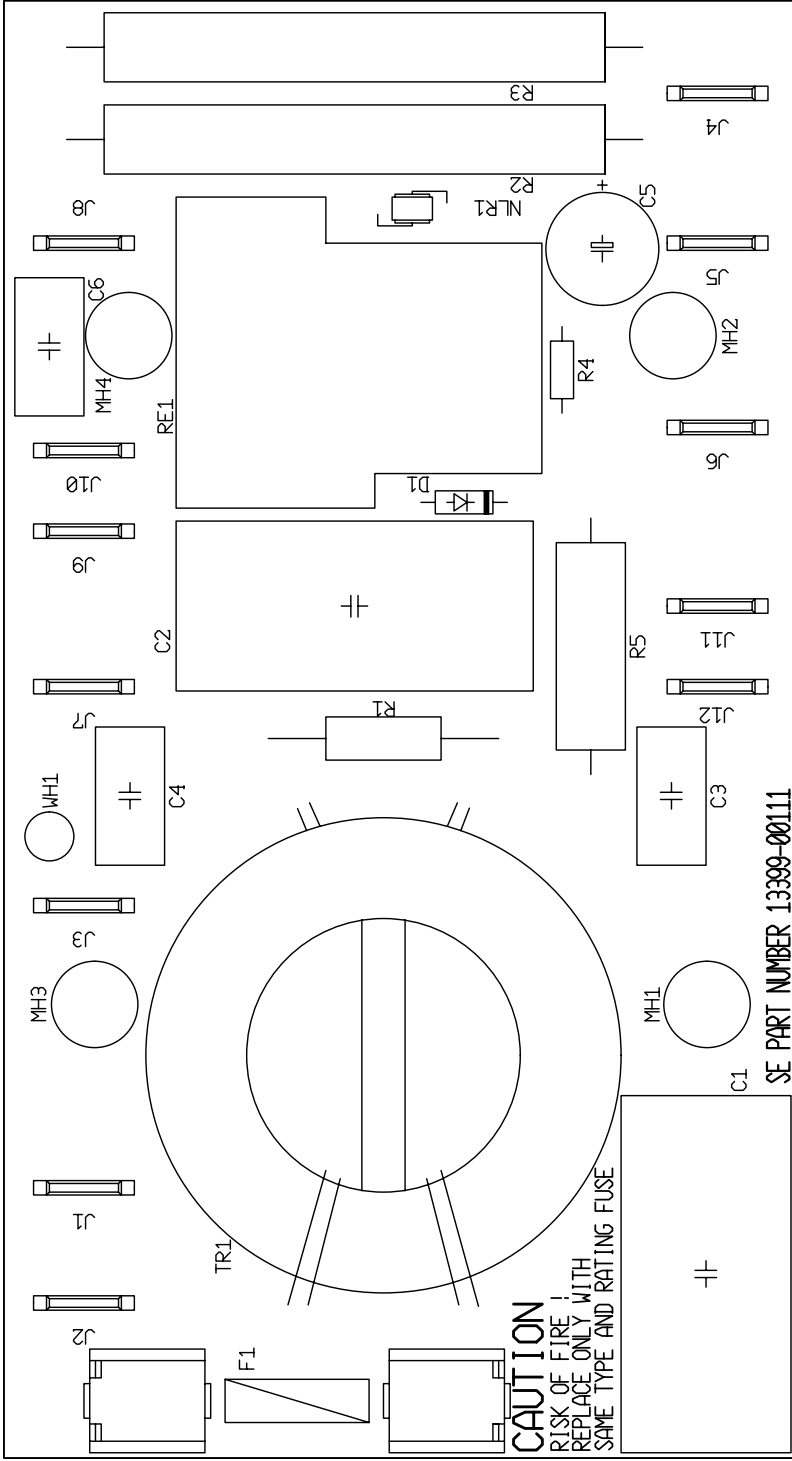


Rev. B	Date: 06/01/96	Eng: E.B.
Project: SUPPLY BOARD PT SERIES - P17		
Submitted: 06/01/96		
Approved: 06/01/96		
File: ZECKPT52.SCH		
Initials:	Date: 06/01/96	Sheet: 1 of 1



Rev. B	Date: 02/02/96	Eng. E. B.
Project:		
SUPPLY BOARD PT SERIES - P17		
Drawn: ENGINEERING		
Checked: T. J. B.		
Approved: J. B.		
File: ZECKPT52.SCH		
Initials:	Date: 06/04/95	Sheet: 1 of 1

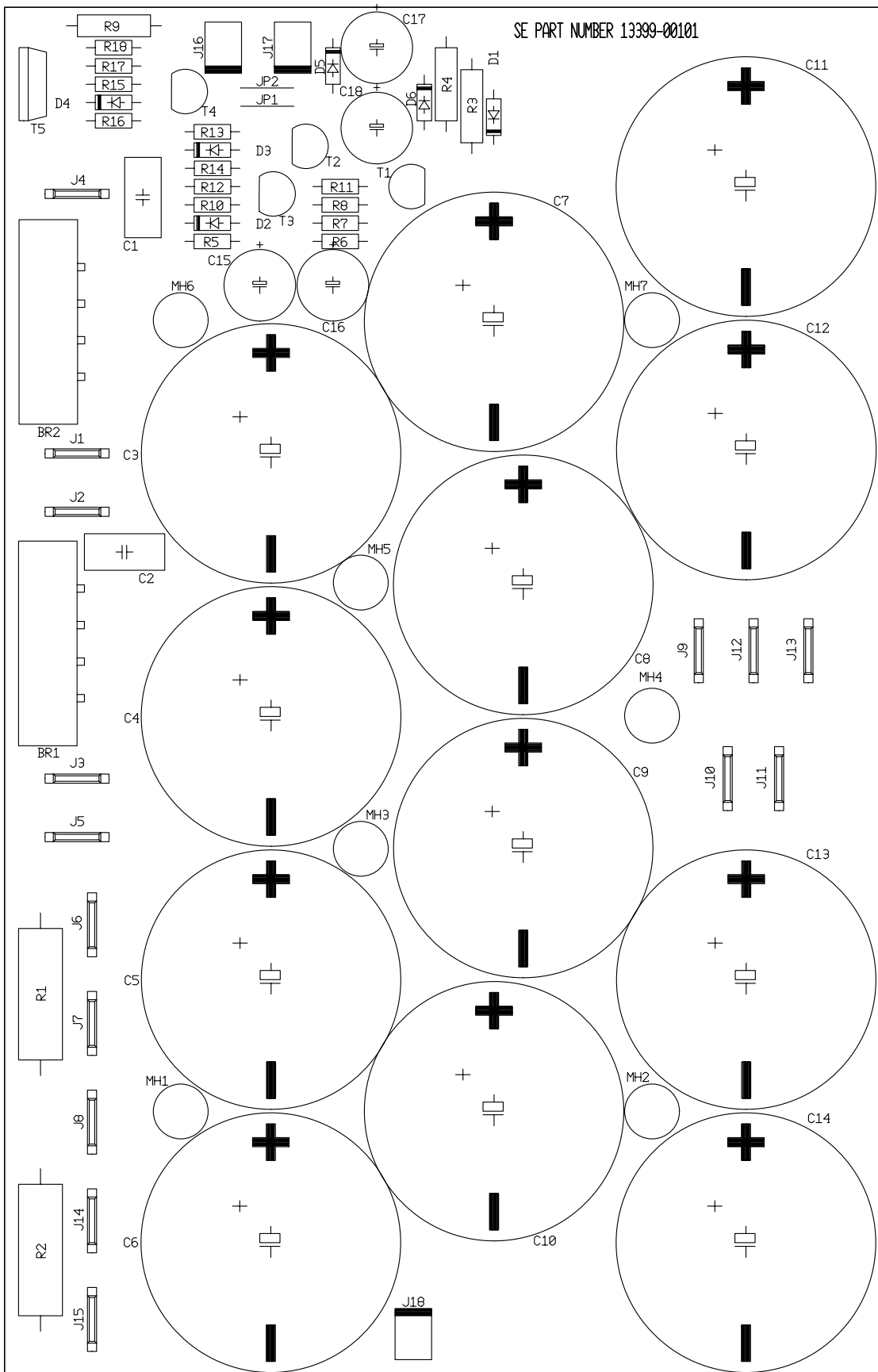


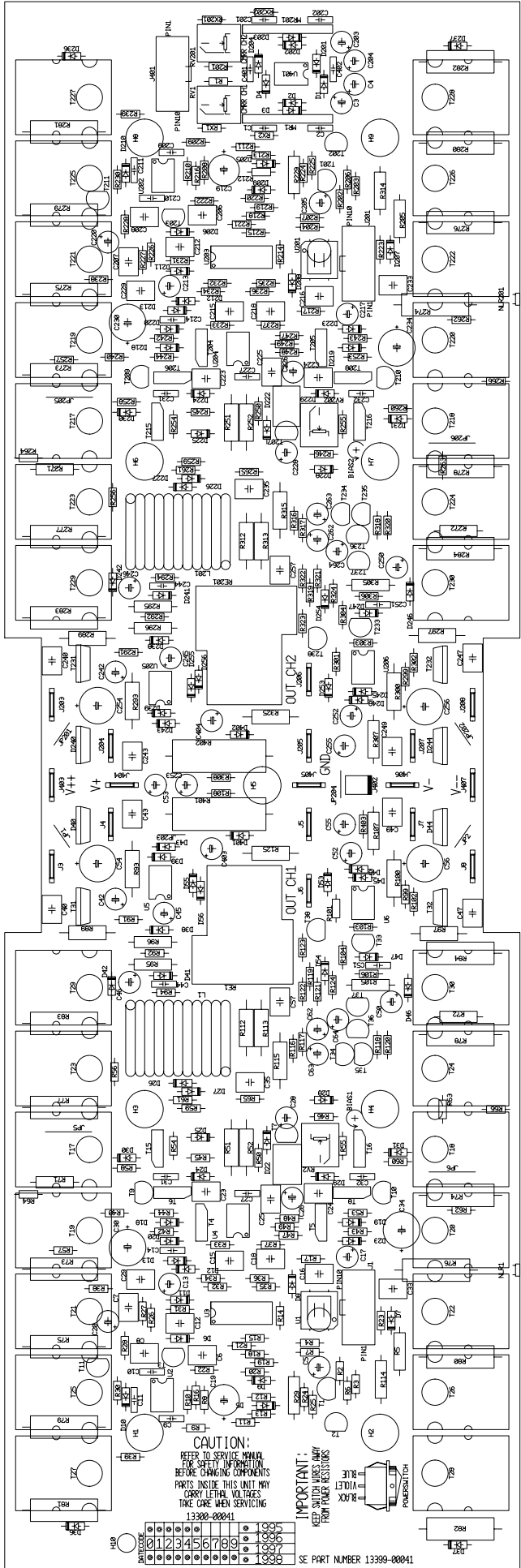


CAUTION
 RISK OF FIRE !
 REPLACE ONLY WITH
 SAME TYPE AND RATING FUSE

SE PART NUMBER 13399-00111

SE PART NUMBER 13399-00101



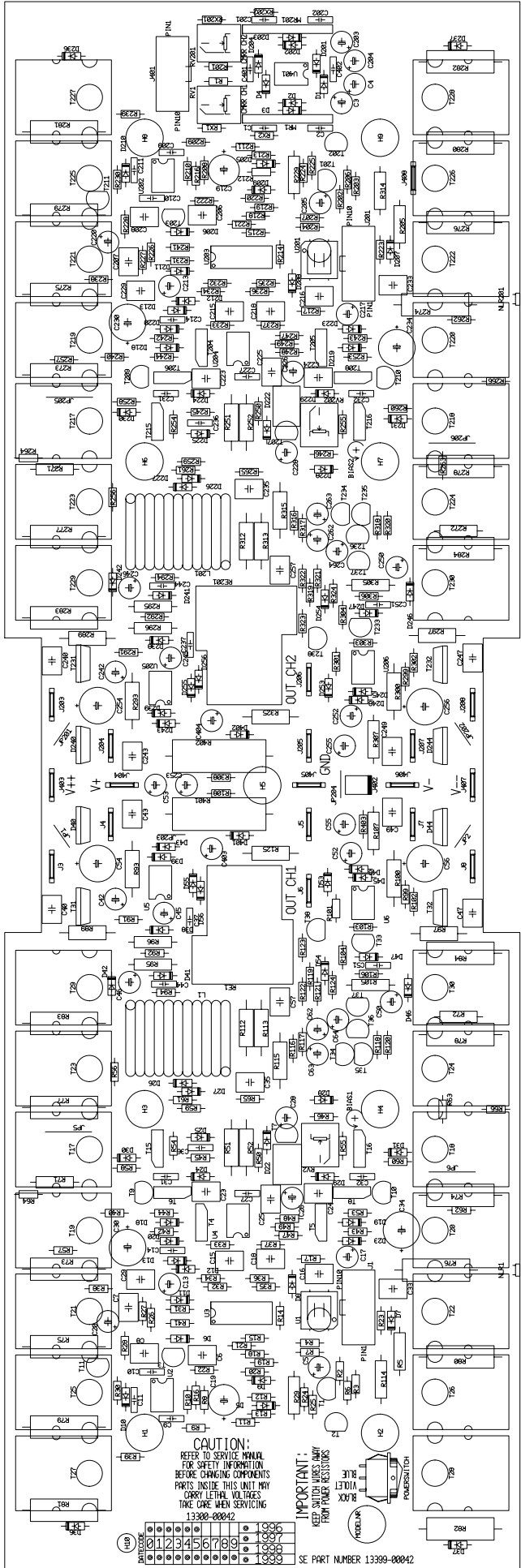


CAUTION:
 REFER TO SERVICE MANUAL
 BEFORE CHANGING COMPONENTS
 PARTS INSIDE THIS UNIT MAY
 CARRY LETHAL VOLTAGES
 TAKE CARE WHEN SERVICING

IMPORTANT:
 KEEP SWITCH Wires AWAY
 FROM POWER RESISTORS

1	2	3	4	5	6	7	8	9	0
1	2	3	4	5	6	7	8	9	0
1	2	3	4	5	6	7	8	9	0
1	2	3	4	5	6	7	8	9	0

SE PART NUMBER 13399-00041

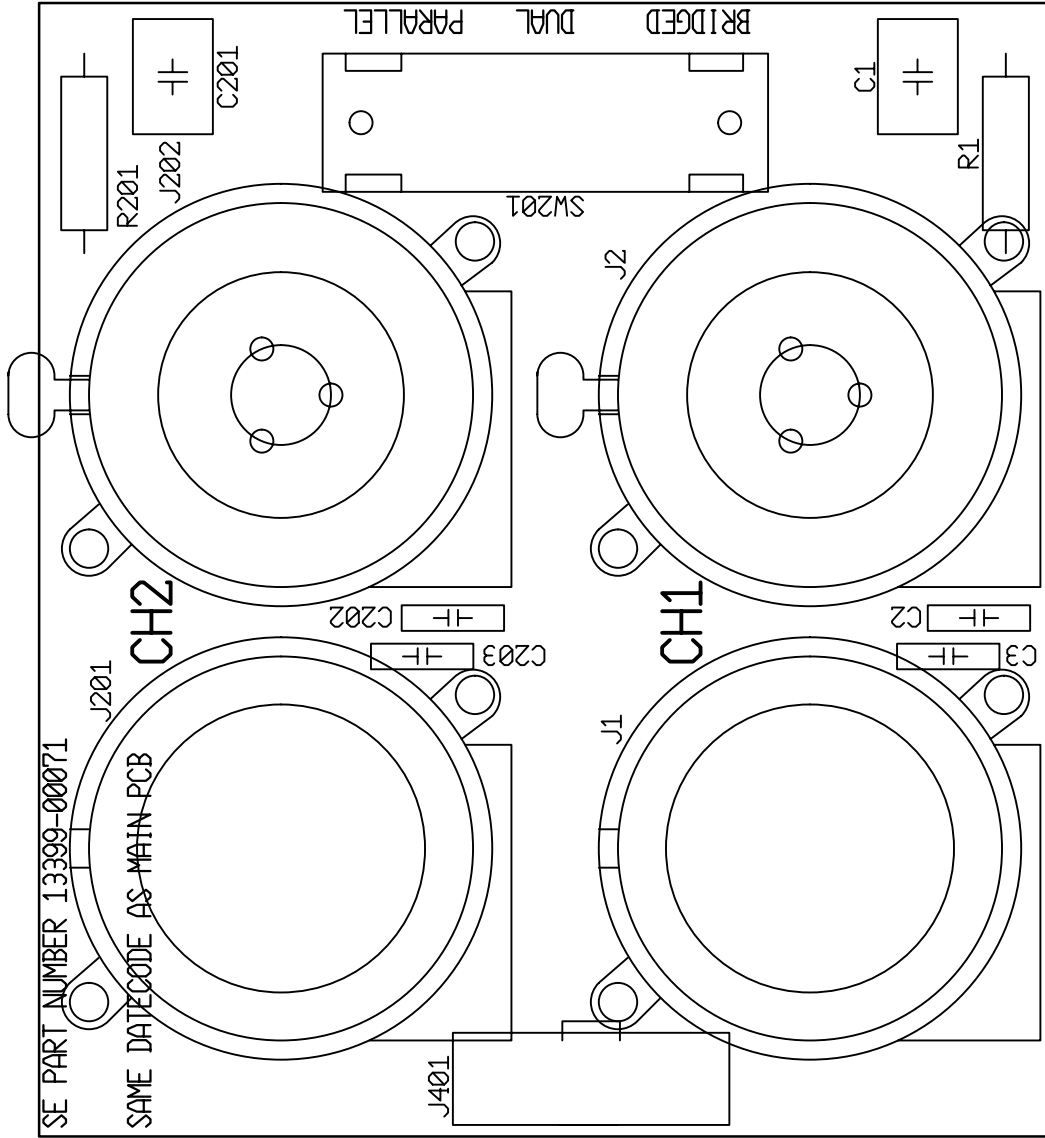


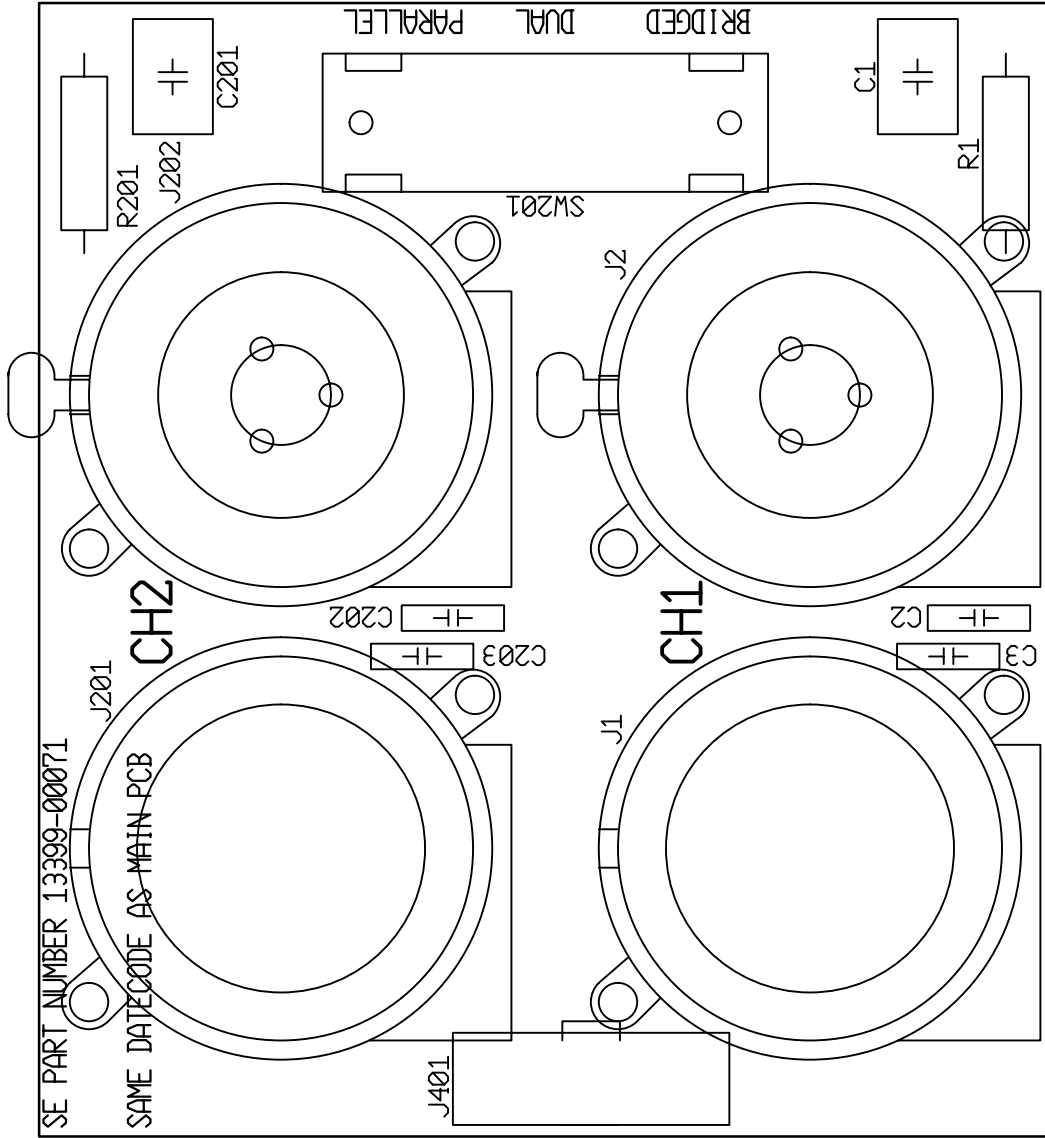
CAUTION:
 REFER TO SERVICE MANUAL
 FOR SAFETY INFORMATION
 BEFORE CHANGING COMPONENTS
 PARTS INSIDE THIS UNIT MAY
 CARRY LETHAL VOLTAGES
 TAKE CARE WHEN SERVICING
 13300-00042

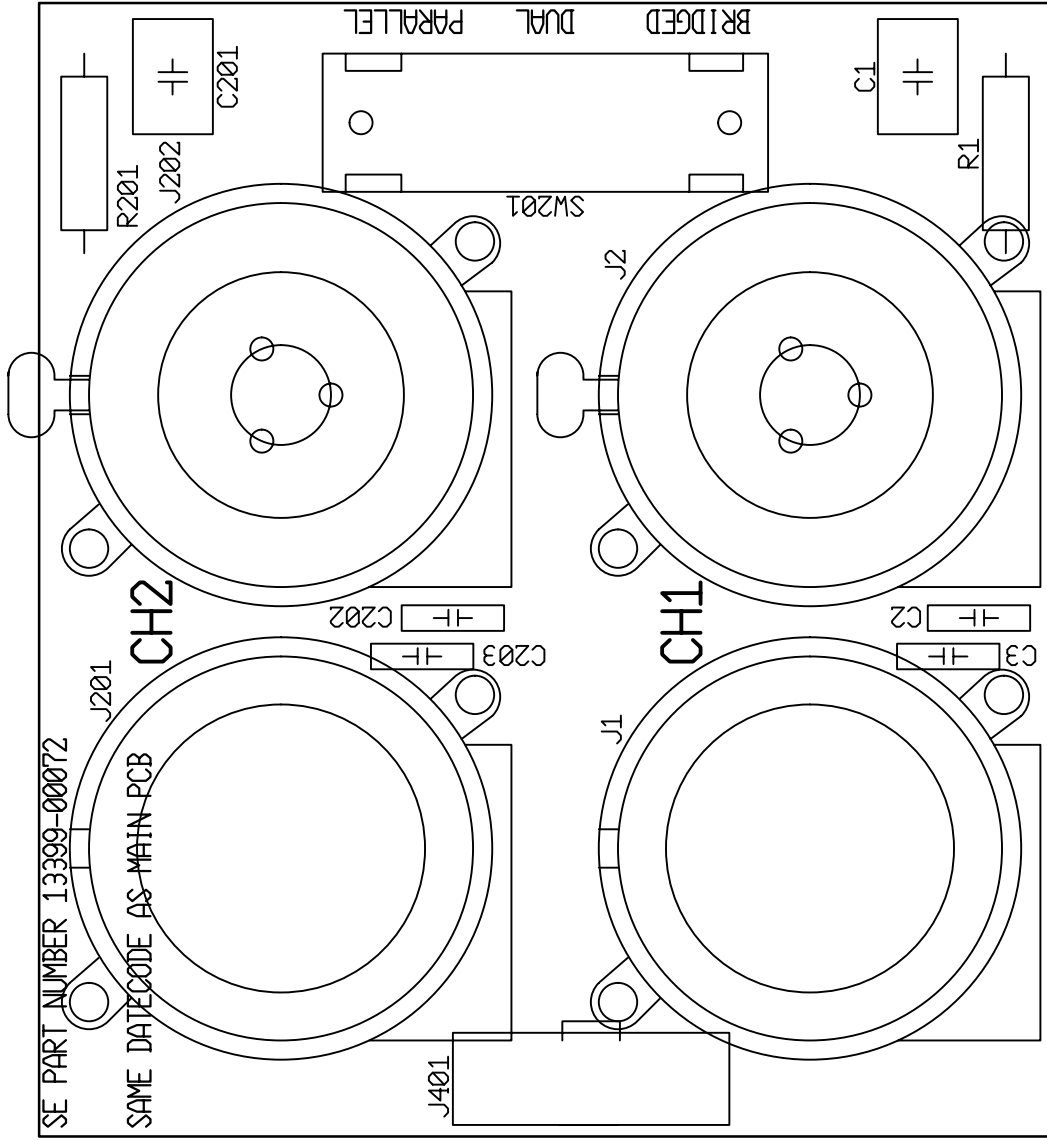
IMPORTANT:
 KEEP SWITCH WIPERS AWAY
 FROM PAIR RESISTORS

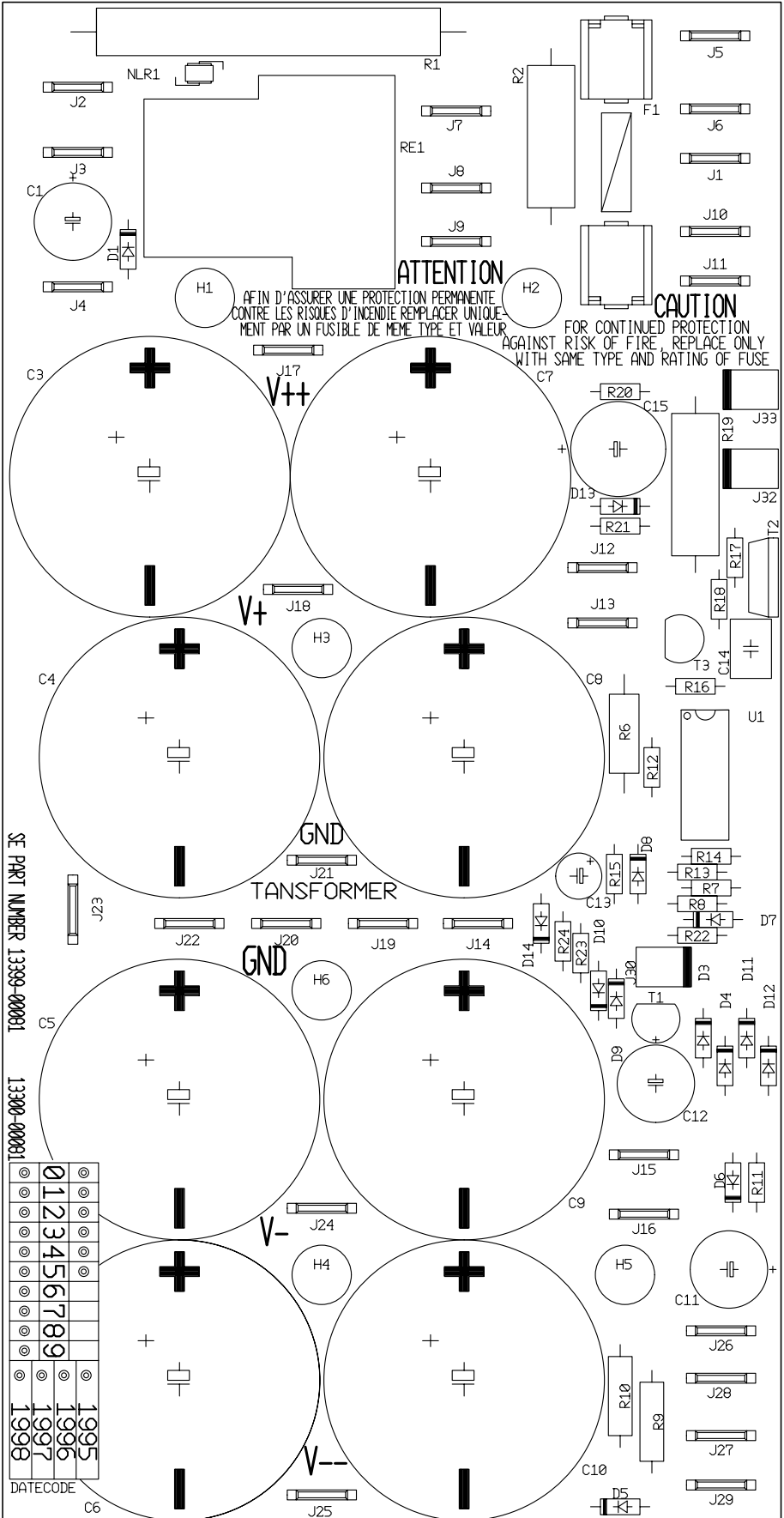
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110	111	112	113	114	115	116	117	118	119
120	121	122	123	124	125	126	127	128	129
130	131	132	133	134	135	136	137	138	139
140	141	142	143	144	145	146	147	148	149

SEE PART NUMBER 13300-00042









ATTENTION

AFIN D'ASSURER UNE PROTECTION PERMANENTE
CONTRE LES RISQUES D'INCENDIE REMPLACER UNIQUE-
MENT PAR UN FUSIBLE DE MEME TYPE ET VALEUR

CAUTION

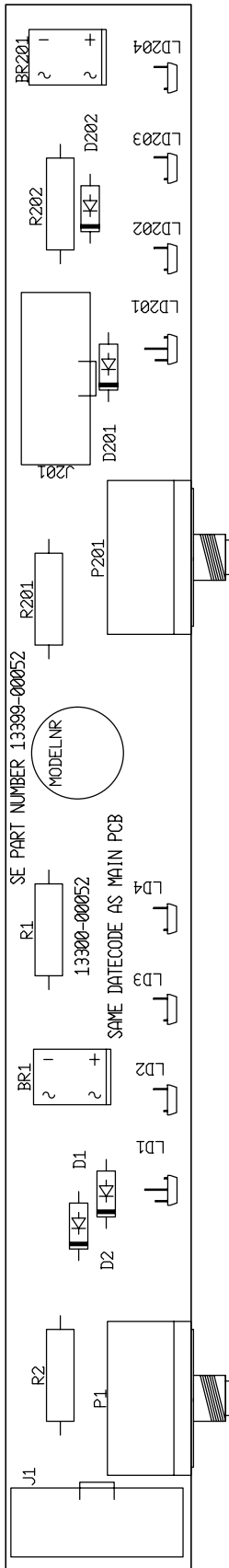
FOR CONTINUED PROTECTION
AGAINST RISK OF FIRE, REPLACE ONLY
WITH SAME TYPE AND RATING OF FUSE

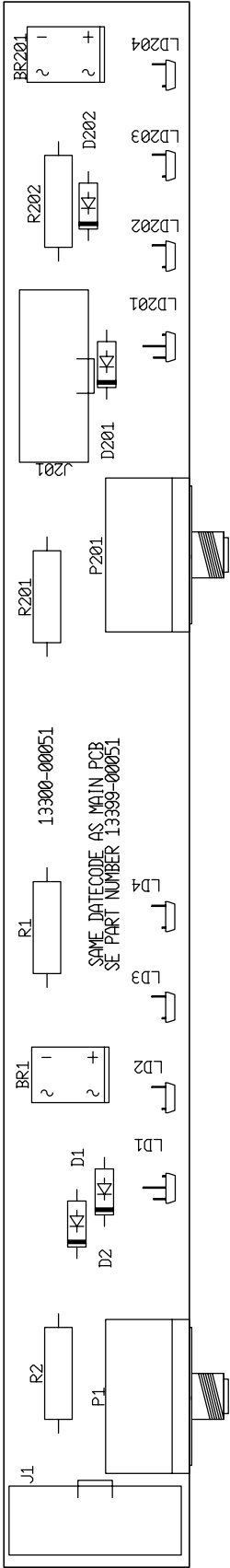
SE PART NUMBER 13399-00081

13300-00081

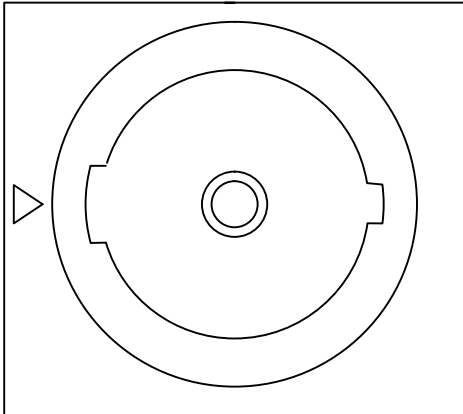
0	1	2	3	4	5	6	7	8	9
1995	1996	1997	1998						

DATECODE



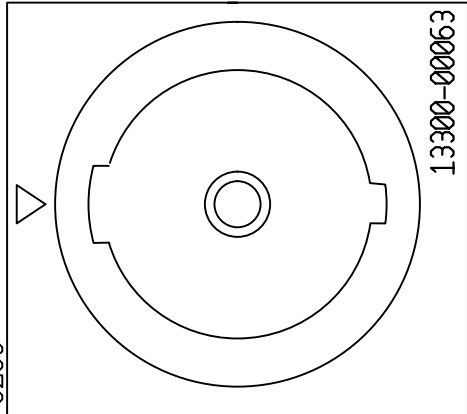


SE PART NUMBER 13399-00063 SAME DATECODE AS MAIN PCB



BRIDGE OUT

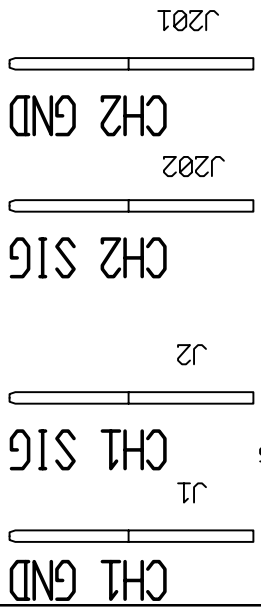
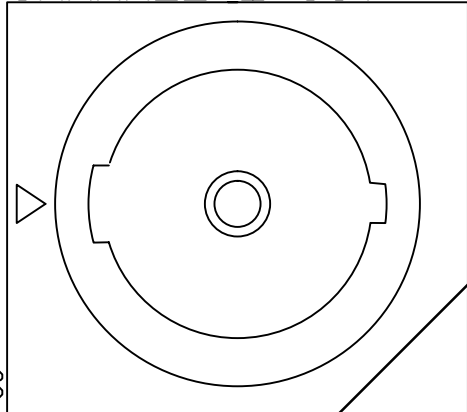
J401
J203



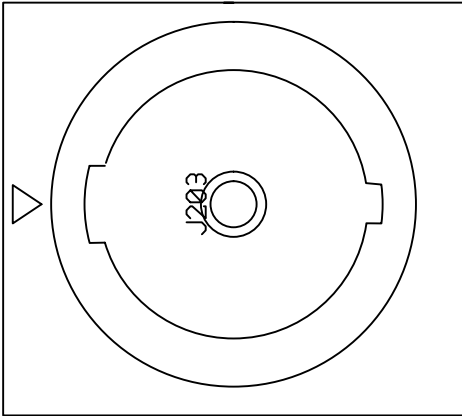
CHANNEL 2 OUT

13300-00063

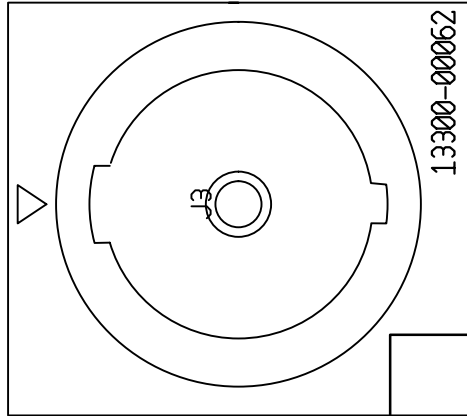
CHANNEL 1 OUT



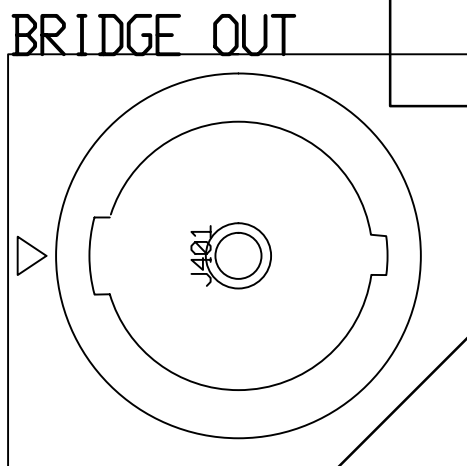
SE PART NUMBER 13399-00062 SAME DATECODE AS MAIN PCB



CHANNEL 2 OUT



CHANNEL 1 OUT



BRIDGE OUT

