

LAB.GRUPPEN

ACN 2C, 2S, 3C

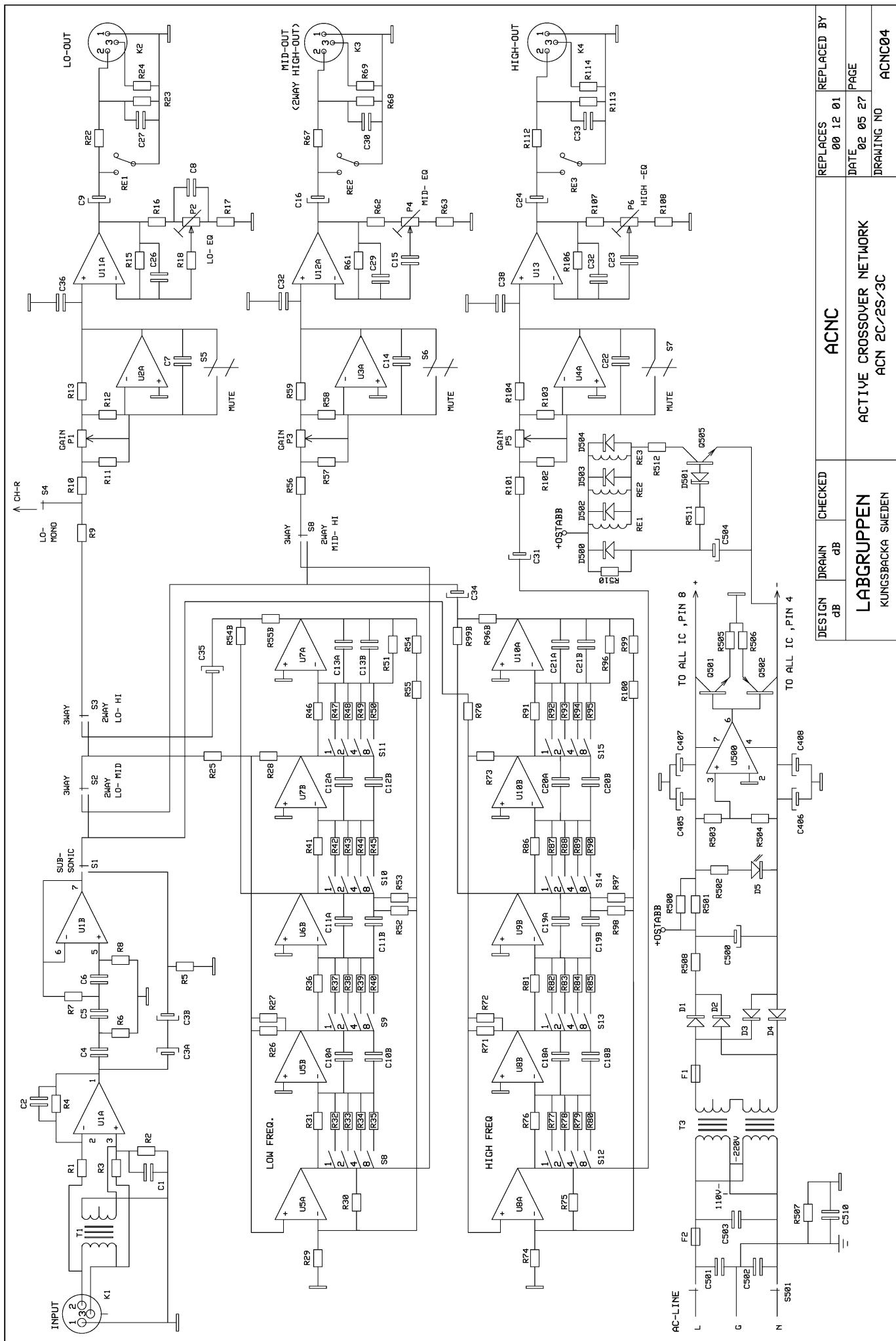
SERVICE MANUAL

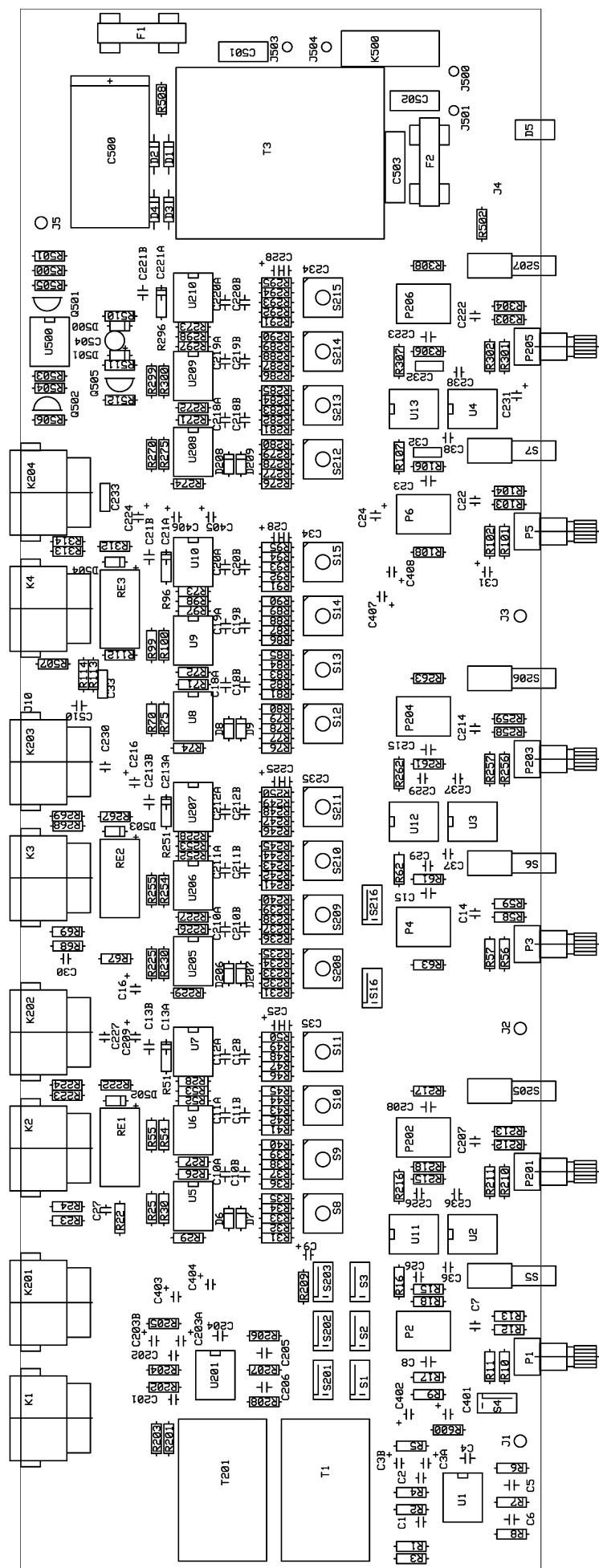
Version 2

Lab.gruppen AB
Gullregnsvägen 16, SE-434 44 KUNGSBACKA, SWEDEN
Phone: +46 300 56 28 00
Fax: +46 300 56 28 99
info@labgruppen.com
www.labgruppen.com

ACN 2C, 2S, 3C

Schematics for ACN-C	2
Board placement for ACN-C	3
Component list for ACN-C - rev 04A	4
Variant specific components	12
Description for variant dependent components	15
Sparepart list for ACN-C	17





DESIGN dB	DRAWN dB	CHECKED dB	ACN C	REPLACES 00 12 01	REPLACED BY 02 05 27
LABGRUPPEN KUNGSSBACKA SWEDEN	ACTIVE CROSSOVER NETWORK ACN 2C/2S/3C				PAGE DRAFTING NO ACN004-P

Component list for ACN-C - rev 04A

 - Safety critical component. Should only be replaced with the specified type.

Position	Partnumber	Description	Comment	Side
C1	100p200VNP05%5	Capacitor ceramic 100p 200V NP0 5% 5mm		Top
C2	100p200VNP05%5	Capacitor ceramic 100p 200V NP0 5% 5mm		Top
C3A	4u750V	Capacitor electrolytic 4u7 50V 5mm		Top
C3B	4u750V	Capacitor electrolytic 4u7 50V 5mm		Top
C4	R02M.6	Resistor jumper 0R 2modules D.6mm		Top
C5	220n63VMMK5	Capacitor polyester 220n 63V MMK 5mm		Top
C6	220n63VMMK5	Capacitor polyester 220n 63V MMK 5mm		Top
C7	100p200VNP05%5	Capacitor ceramic 100p 200V NP0 5% 5mm		Top
C8	68n63VMMK5	Capacitor polyester 68n 63V MMK 5mm		Top
C9	47u25V	Capacitor electrolytic 47u 25V 5mm		Top
C10A		Variant dependent, see separate list		Top
C10B		Variant dependent, see separate list		Top
C11A		Variant dependent, see separate list		Top
C11B		Variant dependent, see separate list		Top
C12A		Variant dependent, see separate list		Top
C12B		Variant dependent, see separate list		Top
C13A		Variant dependent, see separate list		Top
C13B		Variant dependent, see separate list		Top
C14	100p200VNP05%5	Capacitor ceramic 100p 200V NP0 5% 5mm		Top
C15		Variant dependent, see separate list		Top
C16	47u25V	Capacitor electrolytic 47u 25V 5mm		Top
C18A		Variant dependent, see separate list		Top
C18B	-	Not used		Top
C19A		Variant dependent, see separate list		Top
C19B	-	Not used		Top
C20A		Variant dependent, see separate list		Top
C20B	-	Not used		Top
C21A		Variant dependent, see separate list		Top
C21B	-	Not used		Top
C22		Variant dependent, see separate list		Top
C23		Variant dependent, see separate list		Top
C24		Variant dependent, see separate list		Top
C25	47u25V	Capacitor electrolytic 47u 25V 5mm		Top
C26	47p100VNP05%5	Capacitor ceramic 47p 100V NP0 5% 5mm		Top
C27	470p200VNP05%5	Capacitor ceramic 470p 200V NP0 5% 5mm		Top
C28		Variant dependent, see separate list		Top
C29	47p100VNP05%5	Capacitor ceramic 47p 100V NP0 5% 5mm		Top
C30	470p200VNP05%5	Capacitor ceramic 470p 200V NP0 5% 5mm		Top
C31		Variant dependent, see separate list		Top
C32		Variant dependent, see separate list		Top
C33		Variant dependent, see separate list		Top
C34	-	Not used		Top
C35	-	Not used		Top
C36	150p500VK20005%5	Capacitor ceramic 150p 500V K2000 5% 5mm		Top
C37	150p500VK20005%5	Capacitor ceramic 150p 500V K2000 5% 5mm		Top
C38		Variant dependent, see separate list		Top
C201	100p200VNP05%5	Capacitor ceramic 100p 200V NP0 5% 5mm		Top
C202	100p200VNP05%5	Capacitor ceramic 100p 200V NP0 5% 5mm		Top
C203A	4u750V	Capacitor electrolytic 4u7 50V 5mm		Top
C203B	4u750V	Capacitor electrolytic 4u7 50V 5mm		Top
C204	R02M.6	Resistor jumper 0R 2modules D.6mm		Top
C205	220n63VMMK5	Capacitor polyester 220n 63V MMK 5mm		Top

Position	Partnumber	Description	Comment	Side
C206	220n63VMMK5	Capacitor polyester 220n 63V MMK 5mm		Top
C207	100p200VNP05%5	Capacitor ceramic 100p 200V NP0 5% 5mm		Top
C208	68n63VMMK5	Capacitor polyester 68n 63V MMK 5mm		Top
C209	47u25V	Capacitor electrolytic 47u 25V 5mm		Top
C210A		Variant dependent, see separate list		Top
C210B		Variant dependent, see separate list		Top
C211A		Variant dependent, see separate list		Top
C211B		Variant dependent, see separate list		Top
C212A		Variant dependent, see separate list		Top
C212B		Variant dependent, see separate list		Top
C213A		Variant dependent, see separate list		Top
C213B		Variant dependent, see separate list		Top
C214	100p200VNP05%5	Capacitor ceramic 100p 200V NP0 5% 5mm		Top
C215		Variant dependent, see separate list		Top
C216	47u25V	Capacitor electrolytic 47u 25V 5mm		Top
C218A		Variant dependent, see separate list		Top
C218B	-	Not used		Top
C219A		Variant dependent, see separate list		Top
C219B	-	Not used		Top
C220A		Variant dependent, see separate list		Top
C220B	-	Not used		Top
C221A		Variant dependent, see separate list		Top
C221B	-	Not used		Top
C222		Variant dependent, see separate list		Top
C223		Variant dependent, see separate list		Top
C224		Variant dependent, see separate list		Top
C225	47u25V	Capacitor electrolytic 47u 25V 5mm		Top
C226	47p100VNP05%5	Capacitor ceramic 47p 100V NP0 5% 5mm		Top
C227	470p200VNP05%5	Capacitor ceramic 470p 200V NP0 5% 5mm		Top
C228		Variant dependent, see separate list		Top
C229	47p100VNP05%5	Capacitor ceramic 47p 100V NP0 5% 5mm		Top
C230	470p200VNP05%5	Capacitor ceramic 470p 200V NP0 5% 5mm		Top
C231		Variant dependent, see separate list		Top
C232		Variant dependent, see separate list		Top
C233		Variant dependent, see separate list		Top
C234	-	Not used		Top
C235	-	Not used		Top
C236	150p500VK20005%5	Capacitor ceramic 150p 500V K2000 5% 5mm		Top
C237	150p500VK20005%5	Capacitor ceramic 150p 500V K2000 5% 5mm		Top
C238		Variant dependent, see separate list		Top
C401	47u25V	Capacitor electrolytic 47u 25V 5mm		Top
C402	47u25V	Capacitor electrolytic 47u 25V 5mm		Top
C403	47u25V	Capacitor electrolytic 47u 25V 5mm		Top
C404	47u25V	Capacitor electrolytic 47u 25V 5mm		Top
C405	47u25V	Capacitor electrolytic 47u 25V 5mm		Top
C406	47u25V	Capacitor electrolytic 47u 25V 5mm		Top
C407	47u25V	Capacitor electrolytic 47u 25V 5mm		Top
C408	47u25V	Capacitor electrolytic 47u 25V 5mm		Top
C500	2200u40V18x30A	Capacitor electrolytic 2200u 40V 18x30mm axial		Top
▲ C501	4n7Y10	Capacitor 4n7 Y2 metallized paper 10mm		Top
▲ C502	4n7Y10	Capacitor 4n7 Y2 metallized paper 10mm		Top
▲ C503	47nX15	Capacitor 47n X2 metallized paper 10mm		Top
C504	100u50V	Capacitor electrolytic 100u 50V 5mm		Top
C510	330n63VMMK5	Capacitor polyester 330n 63V MMK 5mm		Top
D1	1N4004	Diode power 1N4004		Top

Position	Partnumber	Description	Comment	Side
D2	1N4004	Diode power 1N4004		Top
D3	1N4004	Diode power 1N4004		Top
D4	1N4004	Diode power 1N4004		Top
D5	LGRN2.5x5LY	Diode LED Green 2.5x5mm lying		Top
D6	1N4148	Diode signal 1N4148		Top
D7	1N4148	Diode signal 1N4148		Top
D8		Variant dependent, see separate list		Top
D9		Variant dependent, see separate list		Top
D206	1N4148	Diode signal 1N4148		Top
D207	1N4148	Diode signal 1N4148		Top
D208		Variant dependent, see separate list		Top
D209		Variant dependent, see separate list		Top
D500	1N4148	Diode signal 1N4148		Top
D501	15V.4W5%	Diode zener 15V .4W 5%		Top
D502	1N4148	Diode signal 1N4148		Top
D503	1N4148	Diode signal 1N4148		Top
D504		Variant dependent, see separate list		Top
⚠ F1	TA160250-5x20	Fuse slow blow 160mA 250V 5x20mm		Top
⚠ F2-115V	TA315250-5x20	Fuse slow blow 315mA 250V 5x20mm		Top
⚠ F2-230V	TA160250-5x20	Fuse slow blow 160mA 250V 5x20mm		Top
K1	NC3FA-H2_NEU	Connector XLR 3pole female 90dg NEUTRIK NC3FA-H2		Top
K2	NC3MA-H_NEU	Connector XLR 3pole male 90dg NEUTRIK NC3MA-H		Top
K3	NC3MA-H_NEU	Connector XLR 3pole male 90dg NEUTRIK NC3MA-H		Top
K4		Variant dependent, see separate list		Top
K201	NC3FA-H2_NEU	Connector XLR 3pole female 90dg NEUTRIK NC3FA-H2		Top
K202	NC3MA-H_NEU	Connector XLR 3pole male 90dg NEUTRIK NC3MA-H		Top
K203	NC3MA-H_NEU	Connector XLR 3pole male 90dg NEUTRIK NC3MA-H		Top
K204		Variant dependent, see separate list		Top
K500	TBPC3P4M2.5	Terminal block PCB 3pole 4module 2.5mm2		Top
⚠ K500B	MLEU3x.752mBLK	Mains lead EU Plug type CEE7/VII 3x.75mm2 2m Black		Top
P1	VR10KLIN2_TOK	Potentiometer 10K LIN 2step TOKOS B103 TP96N01 RY5194A		Top
P2	VR47KLY2X3M	Trimpotentiometer 47K lying 2x3modules		Top
P3	VR10KLIN2_TOK	Potentiometer 10K LIN 2step TOKOS B103 TP96N01 RY5194A		Top
P4	VR47KLY2X3M	Trimpotentiometer 47K lying 2x3modules		Top
P5		Variant dependent, see separate list		Top
P6		Variant dependent, see separate list		Top
P201	VR10KLIN2_TOK	Potentiometer 10K LIN 2step TOKOS B103 TP96N01 RY5194A		Top
P202	VR47KLY2X3M	Trimpotentiometer 47K lying 2x3modules		Top
P203	VR10KLIN2_TOK	Potentiometer 10K LIN 2step TOKOS B103 TP96N01 RY5194A		Top
P204	VR47KLY2X3M	Trimpotentiometer 47K lying 2x3modules		Top
P205		Variant dependent, see separate list		Top
P206		Variant dependent, see separate list		Top
Q501	BC337	Transistor bipolar signal BC337		Top
Q502	BC327	Transistor bipolar signal BC327		Top
Q505	BC547B	Transistor bipolar signal BC547B		Top
R1	19K6.7W1%	Resistor Metal Film 19K6.7W1%		Top
R2	19K6.7W1%	Resistor Metal Film 19K6.7W1%		Top
R3	19K6.7W1%	Resistor Metal Film 19K6.7W1%		Top
R4	19K6.7W1%	Resistor Metal Film 19K6.7W1%		Top
R5	100K.7W1%	Resistor Metal Film 100K.7W1%		Top
R6	-	Not used		Top
R7	34K.7W1%	Resistor Metal Film 34K.7W1%		Top

Position	Partnumber	Description	Comment	Side
R8	68K.7W1%	Resistor Metal Film 68K.7W1%		Top
R9	1K.7W1%	Resistor Metal Film 1K.7W1%		Top
R10	1K.7W1%	Resistor Metal Film 1K.7W1%		Top
R11	4K.7W1%	Resistor Metal Film 4K.7W1%		Top
R12	4K.7W1%	Resistor Metal Film 4K.7W1%		Top
R13	2K.7W1%	Resistor Metal Film 2K.7W1%		Top
R15	47K.7W1%	Resistor Metal Film 47K.7W1%		Top
R16	100R.7W1%	Resistor Metal Film 100R.7W1%		Top
R17	4K7.7W1%	Resistor Metal Film 4K7.7W1%		Top
R18	10K.7W1%	Resistor Metal Film 10K.7W1%		Top
R22	100R.7W1%	Resistor Metal Film 100R.7W1%		Top
R23	22K.25W5%	Resistor Carbon Film 22K.25W5%		Top
R24	100R.7W1%	Resistor Metal Film 100R.7W1%		Top
R25	19K6.7W1%	Resistor Metal Film 19K6.7W1%		Top
R26	6K8.7W1%	Resistor Metal Film 6K8.7W1%		Top
R27	-	Not used		Top
R28	6K8.7W1%	Resistor Metal Film 6K8.7W1%		Top
R29	30K.7W1%	Resistor Metal Film 30K.7W1%		Top
R30	19K6.7W1%	Resistor Metal Film 19K6.7W1%		Top
R31		Variant dependent, see separate list		Top
R32		Variant dependent, see separate list		Top
R33		Variant dependent, see separate list		Top
R34		Variant dependent, see separate list		Top
R35		Variant dependent, see separate list		Top
R36		Variant dependent, see separate list		Top
R37		Variant dependent, see separate list		Top
R38		Variant dependent, see separate list		Top
R39		Variant dependent, see separate list		Top
R40		Variant dependent, see separate list		Top
R41		Variant dependent, see separate list		Top
R42		Variant dependent, see separate list		Top
R43		Variant dependent, see separate list		Top
R44		Variant dependent, see separate list		Top
R45		Variant dependent, see separate list		Top
R46		Variant dependent, see separate list		Top
R47		Variant dependent, see separate list		Top
R48		Variant dependent, see separate list		Top
R49		Variant dependent, see separate list		Top
R50		Variant dependent, see separate list		Top
R51	-	Not used		Top
R52	10K.7W1%	Resistor Metal Film 10K.7W1%		Top
R53	10K.7W1%	Resistor Metal Film 10K.7W1%		Top
R54	10K.7W1%	Resistor Metal Film 10K.7W1%		Top
R55	10K.7W1%	Resistor Metal Film 10K.7W1%		Top
R56	2K.7W1%	Resistor Metal Film 2K.7W1%		Top
R57	4K.7W1%	Resistor Metal Film 4K.7W1%		Top
R58	4K.7W1%	Resistor Metal Film 4K.7W1%		Top
R59	2K.7W1%	Resistor Metal Film 2K.7W1%		Top
R61	47K.7W1%	Resistor Metal Film 47K.7W1%		Top
R62	4K7.7W1%	Resistor Metal Film 4K7.7W1%		Top
R63	4K7.7W1%	Resistor Metal Film 4K7.7W1%		Top
R67	100R.7W1%	Resistor Metal Film 100R.7W1%		Top
R68	22K.25W5%	Resistor Carbon Film 22K.25W5%		Top
R69	100R.7W1%	Resistor Metal Film 100R.7W1%		Top
R70		Variant dependent, see separate list		Top

Position	Partnumber	Description	Comment	Side
R71		Variant dependent, see separate list		Top
R72	-	Not used		Top
R73		Variant dependent, see separate list		Top
R74		Variant dependent, see separate list		Top
R75		Variant dependent, see separate list		Top
R76		Variant dependent, see separate list		Top
R77		Variant dependent, see separate list		Top
R78		Variant dependent, see separate list		Top
R79		Variant dependent, see separate list		Top
R80		Variant dependent, see separate list		Top
R81		Variant dependent, see separate list		Top
R82		Variant dependent, see separate list		Top
R83		Variant dependent, see separate list		Top
R84		Variant dependent, see separate list		Top
R85		Variant dependent, see separate list		Top
R86		Variant dependent, see separate list		Top
R87		Variant dependent, see separate list		Top
R88		Variant dependent, see separate list		Top
R89		Variant dependent, see separate list		Top
R90		Variant dependent, see separate list		Top
R91		Variant dependent, see separate list		Top
R92		Variant dependent, see separate list		Top
R93		Variant dependent, see separate list		Top
R94		Variant dependent, see separate list		Top
R95		Variant dependent, see separate list		Top
R96	-	Not used		Top
R97		Variant dependent, see separate list		Top
R98		Variant dependent, see separate list		Top
R99		Variant dependent, see separate list		Top
R100		Variant dependent, see separate list		Top
R101		Variant dependent, see separate list		Top
R102		Variant dependent, see separate list		Top
R103		Variant dependent, see separate list		Top
R104		Variant dependent, see separate list		Top
R106		Variant dependent, see separate list		Top
R107		Variant dependent, see separate list		Top
R108		Variant dependent, see separate list		Top
R112		Variant dependent, see separate list		Top
R113		Variant dependent, see separate list		Top
R114		Variant dependent, see separate list		Top
R201	19K6.7W1%	Resistor Metal Film 19K6.7W1%		Top
R202	19K6.7W1%	Resistor Metal Film 19K6.7W1%		Top
R203	19K6.7W1%	Resistor Metal Film 19K6.7W1%		Top
R204	19K6.7W1%	Resistor Metal Film 19K6.7W1%		Top
R205	100K.7W1%	Resistor Metal Film 100K.7W1%		Top
R206	-	Not used		Top
R207	34K.7W1%	Resistor Metal Film 34K.7W1%		Top
R208	68K.7W1%	Resistor Metal Film 68K.7W1%		Top
R209	1K.7W1%	Resistor Metal Film 1K.7W1%		Top
R210	1K.7W1%	Resistor Metal Film 1K.7W1%		Top
R211	4K.7W1%	Resistor Metal Film 4K.7W1%		Top
R212	4K.7W1%	Resistor Metal Film 4K.7W1%		Top
R213	2K.7W1%	Resistor Metal Film 2K.7W1%		Top
R215	47K.7W1%	Resistor Metal Film 47K.7W1%		Top
R216	100R.7W1%	Resistor Metal Film 100R.7W1%		Top

Position	Partnumber	Description	Comment	Side
R217	4K7.7W1%	Resistor Metal Film 4K7.7W1%		Top
R218	10K.7W1%	Resistor Metal Film 10K.7W1%		Top
R222	100R.7W1%	Resistor Metal Film 100R.7W1%		Top
R223	22K.25W5%	Resistor Carbon Film 22K.25W5%		Top
R224	100R.7W1%	Resistor Metal Film 100R.7W1%		Top
R225	19K6.7W1%	Resistor Metal Film 19K6.7W1%		Top
R226	6K8.7W1%	Resistor Metal Film 6K8.7W1%		Top
R227	-	Not used		Top
R228	6K8.7W1%	Resistor Metal Film 6K8.7W1%		Top
R229	30K.7W1%	Resistor Metal Film 30K.7W1%		Top
R230	19K6.7W1%	Resistor Metal Film 19K6.7W1%		Top
R231		Variant dependent, see separate list		Top
R232		Variant dependent, see separate list		Top
R233		Variant dependent, see separate list		Top
R234		Variant dependent, see separate list		Top
R235		Variant dependent, see separate list		Top
R236		Variant dependent, see separate list		Top
R237		Variant dependent, see separate list		Top
R238		Variant dependent, see separate list		Top
R239		Variant dependent, see separate list		Top
R240		Variant dependent, see separate list		Top
R241		Variant dependent, see separate list		Top
R242		Variant dependent, see separate list		Top
R243		Variant dependent, see separate list		Top
R244		Variant dependent, see separate list		Top
R245		Variant dependent, see separate list		Top
R246		Variant dependent, see separate list		Top
R247		Variant dependent, see separate list		Top
R248		Variant dependent, see separate list		Top
R249		Variant dependent, see separate list		Top
R250		Variant dependent, see separate list		Top
R251	-	Not used		Top
R252	10K.7W1%	Resistor Metal Film 10K.7W1%		Top
R253	10K.7W1%	Resistor Metal Film 10K.7W1%		Top
R254	10K.7W1%	Resistor Metal Film 10K.7W1%		Top
R255	10K.7W1%	Resistor Metal Film 10K.7W1%		Top
R256	2K.7W1%	Resistor Metal Film 2K.7W1%		Top
R257	4K.7W1%	Resistor Metal Film 4K.7W1%		Top
R258	4K.7W1%	Resistor Metal Film 4K.7W1%		Top
R259	2K.7W1%	Resistor Metal Film 2K.7W1%		Top
R261	47K.7W1%	Resistor Metal Film 47K.7W1%		Top
R262	4K7.7W1%	Resistor Metal Film 4K7.7W1%		Top
R263	4K7.7W1%	Resistor Metal Film 4K7.7W1%		Top
R267	100R.7W1%	Resistor Metal Film 100R.7W1%		Top
R268	22K.25W5%	Resistor Carbon Film 22K.25W5%		Top
R269	100R.7W1%	Resistor Metal Film 100R.7W1%		Top
R270		Variant dependent, see separate list		Top
R271		Variant dependent, see separate list		Top
R272	-	Not used		Top
R273		Variant dependent, see separate list		Top
R274		Variant dependent, see separate list		Top
R275		Variant dependent, see separate list		Top
R276		Variant dependent, see separate list		Top
R277		Variant dependent, see separate list		Top
R278		Variant dependent, see separate list		Top

Position	Partnumber	Description	Comment	Side
R279		Variant dependent, see separate list		Top
R280		Variant dependent, see separate list		Top
R281		Variant dependent, see separate list		Top
R282		Variant dependent, see separate list		Top
R283		Variant dependent, see separate list		Top
R284		Variant dependent, see separate list		Top
R285		Variant dependent, see separate list		Top
R286		Variant dependent, see separate list		Top
R287		Variant dependent, see separate list		Top
R288		Variant dependent, see separate list		Top
R289		Variant dependent, see separate list		Top
R290		Variant dependent, see separate list		Top
R291		Variant dependent, see separate list		Top
R292		Variant dependent, see separate list		Top
R293		Variant dependent, see separate list		Top
R294		Variant dependent, see separate list		Top
R295		Variant dependent, see separate list		Top
R296	-	Not used		Top
R297		Variant dependent, see separate list		Top
R298		Variant dependent, see separate list		Top
R299		Variant dependent, see separate list		Top
R300		Variant dependent, see separate list		Top
R301		Variant dependent, see separate list		Top
R302		Variant dependent, see separate list		Top
R303		Variant dependent, see separate list		Top
R304		Variant dependent, see separate list		Top
R306		Variant dependent, see separate list		Top
R307		Variant dependent, see separate list		Top
R308		Variant dependent, see separate list		Top
R312		Variant dependent, see separate list		Top
R313		Variant dependent, see separate list		Top
R314		Variant dependent, see separate list		Top
R500	100R.7W1%	Resistor Metal Film 100R.7W1%		Top
R501	100R.7W1%	Resistor Metal Film 100R.7W1%		Top
R502	2K2.25W5%	Resistor Carbon Film 2K2.25W5%		Top
R503	10K.7W1%	Resistor Metal Film 10K.7W1%		Top
R504	10K.7W1%	Resistor Metal Film 10K.7W1%		Top
R505	33R.25W5%	Resistor Carbon Film 33R.25W5%		Top
R506	33R.25W5%	Resistor Carbon Film 33R.25W5%		Top
R507	100R.7W1%	Resistor Metal Film 100R.7W1%		Top
R508		Variant dependent, see separate list		Top
R510	19K6.7W1%	Resistor Metal Film 19K6.7W1%		Top
R511	4K7.7W1%	Resistor Metal Film 4K7.7W1%		Top
R512	220R.7W1%	Resistor Metal Film 220R.7W1%		Top
R600	-	Not used		Top
RE1	PCDPCO1A24V	Relay PCB double pole change over 1A 24V		Top
RE2	PCDPCO1A24V	Relay PCB double pole change over 1A 24V		Top
RE3		Variant dependent, see separate list		Top
S1	DI1-1_EPC	Switch DIL single pole double through EPCOS C42315A1347-A212		Top
S2		Variant dependent, see separate list		Top
S3	DI1-1_EPC	Switch DIL single pole double through EPCOS C42315A1347-A212		Top
S4	DI1-1_EPC	Switch DIL single pole double through EPCOS C42315A1347-A212		Top
S5	SPPJ32F29A_ALP	Switch inter locking PCB DPDT ALPS SPPJ32F29A		Top

Position	Partnumber	Description	Comment	Side
S6	SPPJ32F29A_ALP	Switch inter locking PCB DPDT ALPS SPPJ32F29A		Top
S7		Variant dependent, see separate list		Top
S8	RDHEX	Switch rotary DIL HEX		Top
S9	RDHEX	Switch rotary DIL HEX		Top
S10	RDHEX	Switch rotary DIL HEX		Top
S11	RDHEX	Switch rotary DIL HEX		Top
S12		Variant dependent, see separate list		Top
S13		Variant dependent, see separate list		Top
S14		Variant dependent, see separate list		Top
S15		Variant dependent, see separate list		Top
S16		Variant dependent, see separate list		Top
S201	DI1-1_EPC	Switch DIL single pole double through EPCOS C42315A1347-A212		Top
S202		Variant dependent, see separate list		Top
S203	DI1-1_EPC	Switch DIL single pole double through EPCOS C42315A1347-A212		Top
S205	SPPJ32F29A_ALP	Switch inter locking PCB DPDT ALPS SPPJ32F29A		Top
S206	SPPJ32F29A_ALP	Switch inter locking PCB DPDT ALPS SPPJ32F29A		Top
S207		Variant dependent, see separate list		Top
S208	RDHEX	Switch rotary DIL HEX		Top
S209	RDHEX	Switch rotary DIL HEX		Top
S210	RDHEX	Switch rotary DIL HEX		Top
S211	RDHEX	Switch rotary DIL HEX		Top
S212		Variant dependent, see separate list		Top
S213		Variant dependent, see separate list		Top
S214		Variant dependent, see separate list		Top
S215		Variant dependent, see separate list		Top
S216		Variant dependent, see separate list		Top
⚠ S501	RK2-0-10A15x21	Switch Rocker Double Pole Single Trough on - off 10A 15x21mm		Top
⚠ T1	-	Not used		Top
⚠ T3	6W4x7.5V23x44x53	Transformer PCB 6W 4x7.5V 23x44x53mm		Top
T201	-	Not used		Top
U1	NE5532	IC Operational amplifier NE5532		Top
U2	LF353	IC Operational amplifier LF353		Top
U3	LF353	IC Operational amplifier LF353		Top
U4		Variant dependent, see separate list		Top
U5	LF353	IC Operational amplifier LF353		Top
U6	LF353	IC Operational amplifier LF353		Top
U7	LF353	IC Operational amplifier LF353		Top
U8		Variant dependent, see separate list		Top
U9		Variant dependent, see separate list		Top
U10		Variant dependent, see separate list		Top
U11	NE5532	IC Operational amplifier NE5532		Top
U12	NE5532	IC Operational amplifier NE5532		Top
U13		Variant dependent, see separate list		Top
U201	NE5532	IC Operational amplifier NE5532		Top
U205	LF353	IC Operational amplifier LF353		Top
U206	LF353	IC Operational amplifier LF353		Top
U207	LF353	IC Operational amplifier LF353		Top
U208		Variant dependent, see separate list		Top
U209		Variant dependent, see separate list		Top
U210		Variant dependent, see separate list		Top
U500	UA741	IC Operational amplifier UA741		Top

Variant specific components

Position	ACNC-2C	ACNC-2S	ACNC-3C
C10A	220n63VMMK5	330n63VMMK5	330n63VMMK5
C10B	-	-	100n63VMMK5
C11A	220n63VMMK5	330n63VMMK5	330n63VMMK5
C11B	-	-	100n63VMMK5
C12A	220n63VMMK5	330n63VMMK5	330n63VMMK5
C12B	-	-	100n63VMMK5
C13A	220n63VMMK5	330n63VMMK5	330n63VMMK5
C13B	-	-	100n63VMMK5
C15	680p400VK20005%5	680p400VK20005%5	6n8250VMMK5
C18A	-	-	68n63VMMK5
C19A	-	-	68n63VMMK5
C20A	-	-	68n63VMMK5
C21A	-	-	68n63VMMK5
C22	-	-	100p200VNP05%5
C23	-	-	680p400VK20005%5
C24	-	-	47u25V
C28	-	-	47u25V
C31	-	-	47u25V
C32	-	-	47p100VNP05%5
C33	-	-	470p200VNP05%5
C38	-	-	150p500VK20005%5
C210A	220n63VMMK5	330n63VMMK5	330n63VMMK5
C210B	-	-	100n63VMMK5
C211A	220n63VMMK5	330n63VMMK5	330n63VMMK5
C211B	-	-	100n63VMMK5
C212A	220n63VMMK5	330n63VMMK5	330n63VMMK5
C212B	-	-	100n63VMMK5
C213A	220n63VMMK5	330n63VMMK5	330n63VMMK5
C213B	-	-	100n63VMMK5
C215	680p400VK20005%5	680p400VK20005%5	6n8250VMMK5
C218A	-	-	68n63VMMK5
C219A	-	-	68n63VMMK5
C220A	-	-	68n63VMMK5
C221A	-	-	68n63VMMK5
C222	-	-	100p200VNP05%5
C223	-	-	680p400VK20005%5
C224	-	-	47u25V
C228	-	-	47u25V
C231	-	-	47u25V
C232	-	-	47p100VNP05%5
C233	-	-	470p200VNP05%5
C238	-	-	150p500VK20005%5
D8	-	-	1N4148
D9	-	-	1N4148
D208	-	-	1N4148
D209	-	-	1N4148
D504	-	-	1N4148
K4	-	-	NC3MA-H_NEU
K204	-	-	NC3MA-H_NEU

Position	ACNC-2C	ACNC-2S	ACNC-3C
P5	-	-	VR10KLIN2_TOK
P6	-	-	VR47KLY2X3M
P205	-	-	VR10KLIN2_TOK
P206	-	-	VR47KLY2X3M
R31	10K.7W1%	12K.7W1%	4K7.7W1%
R32	7K87.7W1%	60K4.7W1%	7K87.7W1%
R33	4K.7W1%	30K.7W1%	4K.7W1%
R34	2K.7W1%	15K.7W1%	2K.7W1%
R35	1K.7W1%	7K5.7W1%	1K.7W1%
R36	10K.7W1%	12K.7W1%	4K7.7W1%
R37	7K87.7W1%	60K4.7W1%	7K87.7W1%
R38	4K.7W1%	30K.7W1%	4K.7W1%
R39	2K.7W1%	15K.7W1%	2K.7W1%
R40	1K.7W1%	7K5.7W1%	1K.7W1%
R41	10K.7W1%	12K.7W1%	4K7.7W1%
R42	7K87.7W1%	60K4.7W1%	7K87.7W1%
R43	4K.7W1%	30K.7W1%	4K.7W1%
R44	2K.7W1%	15K.7W1%	2K.7W1%
R45	1K.7W1%	7K5.7W1%	1K.7W1%
R46	10K.7W1%	12K.7W1%	4K7.7W1%
R47	7K87.7W1%	60K4.7W1%	7K87.7W1%
R48	4K.7W1%	30K.7W1%	4K.7W1%
R49	2K.7W1%	15K.7W1%	2K.7W1%
R50	1K.7W1%	7K5.7W1%	1K.7W1%
R70	-	-	19K6.7W1%
R71	-	-	6K8.7W1%
R73	-	-	6K8.7W1%
R74	-	-	30K.7W1%
R75	-	-	19K6.7W1%
R76	-	-	4K7.7W1%
R77	-	-	7K87.7W1%
R78	-	-	4K.7W1%
R79	-	-	2K.7W1%
R80	-	-	1K.7W1%
R81	-	-	4K7.7W1%
R82	-	-	7K87.7W1%
R83	-	-	4K.7W1%
R84	-	-	2K.7W1%
R85	-	-	1K.7W1%
R86	-	-	4K7.7W1%
R87	-	-	7K87.7W1%
R88	-	-	4K.7W1%
R89	-	-	2K.7W1%
R90	-	-	1K.7W1%
R91	-	-	4K7.7W1%
R92	-	-	7K87.7W1%
R93	-	-	4K.7W1%
R94	-	-	2K.7W1%
R95	-	-	1K.7W1%
R97	-	-	10K.7W1%

Position	ACNC-2C	ACNC-2S	ACNC-3C
R98	-	-	10K.7W1%
R99	-	-	10K.7W1%
R100	-	-	10K.7W1%
R101	-	-	2K.7W1%
R102	-	-	4K.7W1%
R103	-	-	4K.7W1%
R104	-	-	2K.7W1%
R106	-	-	47K.7W1%
R107	-	-	4K7.7W1%
R108	-	-	4K7.7W1%
R112	-	-	100R.7W1%
R113	-	-	22K.25W5%
R114	-	-	100R.7W1%
R231	10K.7W1%	12K.7W1%	4K7.7W1%
R232	7K87.7W1%	60K4.7W1%	7K87.7W1%
R233	4K.7W1%	30K.7W1%	4K.7W1%
R234	2K.7W1%	15K.7W1%	2K.7W1%
R235	1K.7W1%	7K5.7W1%	1K.7W1%
R236	10K.7W1%	12K.7W1%	4K7.7W1%
R237	7K87.7W1%	60K4.7W1%	7K87.7W1%
R238	4K.7W1%	30K.7W1%	4K.7W1%
R239	2K.7W1%	15K.7W1%	2K.7W1%
R240	1K.7W1%	7K5.7W1%	1K.7W1%
R241	10K.7W1%	12K.7W1%	4K7.7W1%
R242	7K87.7W1%	60K4.7W1%	7K87.7W1%
R243	4K.7W1%	30K.7W1%	4K.7W1%
R244	2K.7W1%	15K.7W1%	2K.7W1%
R245	1K.7W1%	7K5.7W1%	1K.7W1%
R246	10K.7W1%	12K.7W1%	4K7.7W1%
R247	7K87.7W1%	60K4.7W1%	7K87.7W1%
R248	4K.7W1%	30K.7W1%	4K.7W1%
R249	2K.7W1%	15K.7W1%	2K.7W1%
R250	1K.7W1%	7K5.7W1%	1K.7W1%
R270	-	-	19K6.7W1%
R271	-	-	6K8.7W1%
R273	-	-	6K8.7W1%
R274	-	-	30K.7W1%
R275	-	-	19K6.7W1%
R276	-	-	4K7.7W1%
R277	-	-	7K87.7W1%
R278	-	-	4K.7W1%
R279	-	-	2K.7W1%
R280	-	-	1K.7W1%
R281	-	-	4K7.7W1%
R282	-	-	7K87.7W1%
R283	-	-	4K.7W1%
R284	-	-	2K.7W1%
R285	-	-	1K.7W1%
R286	-	-	4K7.7W1%
R287	-	-	7K87.7W1%

Position	ACNC-2C	ACNC-2S	ACNC-3C
R288	-	-	4K.7W1%
R289	-	-	2K.7W1%
R290	-	-	1K.7W1%
R291	-	-	4K7.7W1%
R292	-	-	7K87.7W1%
R293	-	-	4K.7W1%
R294	-	-	2K.7W1%
R295	-	-	1K.7W1%
R297	-	-	10K.7W1%
R298	-	-	10K.7W1%
R299	-	-	10K.7W1%
R300	-	-	10K.7W1%
R301	-	-	2K.7W1%
R302	-	-	4K.7W1%
R303	-	-	4K.7W1%
R304	-	-	2K.7W1%
R306	-	-	47K.7W1%
R307	-	-	4K7.7W1%
R308	-	-	4K7.7W1%
R312	-	-	100R.7W1%
R313	-	-	22K.25W5%
R314	-	-	100R.7W1%
R508	27R.7W1%	27R.7W1%	R04M.6
RE3	-	-	PCDPCO1A24V
S2	R03M.6	R03M.6	DI1-1_EPC
S7	-	-	SPPJ32F29A_ALP
S12	-	-	RDHEX
S13	-	-	RDHEX
S14	-	-	RDHEX
S15	-	-	RDHEX
S16	R03M.6	R03M.6	DI1-1_EPC
S202	R03M.6	R03M.6	DI1-1_EPC
S207	-	-	SPPJ32F29A_ALP
S212	-	-	RDHEX
S213	-	-	RDHEX
S214	-	-	RDHEX
S215	-	-	RDHEX
S216	R03M.6	R03M.6	DI1-1_EPC
U4	-	-	LF353
U8	-	-	LF353
U9	-	-	LF353
U10	-	-	LF353
U13	-	-	NE5532
U208	-	-	LF353
U209	-	-	LF353
U210	-	-	LF353

Description for variant dependent components

Partnumber	Description
100n63VMMK5	Capacitor polyester 100n 63V MMK 5mm

100p200VNP05%5	Capacitor ceramic 100p 200V NP0 5% 5mm
100R.7W1%	Resistor Metal Film 100R.7W1%
10K.7W1%	Resistor Metal Film 10K.7W1%
12K.7W1%	Resistor Metal Film 12K.7W1%
150p500VK20005%5	Capacitor ceramic 150p 500V K2000 5% 5mm
15K.7W1%	Resistor Metal Film 15K.7W1%
19K6.7W1%	Resistor Metal Film 19K6.7W1%
1K.7W1%	Resistor Metal Film 1K.7W1%
1N4148	Diode signal 1N4148
220n63VMMK5	Capacitor polyester 220n 63V MMK 5mm
22K.25W5%	Resistor Carbon Film 22K.25W5%
27R.7W1%	Resistor Metal Film 27R.7W1%
2K.7W1%	Resistor Metal Film 2K.7W1%
30K.7W1%	Resistor Metal Film 30K.7W1%
330n63VMMK5	Capacitor polyester 330n 63V MMK 5mm
470p200VNP05%5	Capacitor ceramic 470p 200V NP0 5% 5mm
47K.7W1%	Resistor Metal Film 47K.7W1%
47p100VNP05%5	Capacitor ceramic 47p 100V NP0 5% 5mm
47u25V	Capacitor electrolytic 47u 25V 5mm
4K.7W1%	Resistor Metal Film 4K.7W1%
4K7.7W1%	Resistor Metal Film 4K7.7W1%
60K4.7W1%	Resistor Metal Film 60K4.7W1%
680p400VK20005%5	Capacitor ceramic 680p 400V K2000 5% 5mm
68n63VMMK5	Capacitor polyester 68n 63V MMK 5mm
6K8.7W1%	Resistor Metal Film 6K8.7W1%
6n8250VMMK5	Capacitor polyester 6n8 250V MMK 5mm
7K5.7W1%	Resistor Metal Film 7K5.7W1%
7K87.7W1%	Resistor Metal Film 7K87.7W1%
DI1-1_EPC	Switch DIL single pole double through EPCOS C42315A1347-A212
LF353	IC Operational amplifier LF353
NC3MA-H_NEU	Connector XLR 3pole male 90dg NEUTRIK NC3MA-H
NE5532	IC Operational amplifier NE5532
PCDPCO1A24V	Relay PCB double pole change over 1A 24V
R03M.6	Resistor jumper 0R 3modules D.6mm
R04M.6	Resistor jumper 0R 4modules D.6mm
RDHEX	Switch rotary DIL HEX
SPPJ32F29A_ALP	Switch inter locking PCB DPDT ALPS SPPJ32F29A
VR10KLIN2_TOK	Potentiometer 10K LIN 2step TOKOS B103 TP96N01 RY5194A
VR47KLY2X3M	Trimpotentiometer 47K lying 2x3modules

Sparepart list for ACN-C

Mecanical parts

Partnumber	Description
TCACNC	Top cover
BCACNC	Bottom cover
FP-ACN2C	Front panel ACN 2C
FP-ACN2S	Front panel ACN 2S
FP-ACN3C	Front panel ACN 3C
RP-ACN2C	Rear panel ACN 2C
RP-ACN2S	Rear panel ACN 2S
RP-ACN3C	Rear panel ACN 3C
SPACNC	Side panel
KNBD18.5_TAI	Level potentiometer knob
KNB5x5GRY	Mute switch knob

Screws

Partnumber	Description
MK6S3x10SV	Hexagon socket screw, button head, M3x10, black
RTS-HST2.9x9.5SV	Self tapping screw, pan head, torx, 2.9x9.5mm, black
RXS-HST2.9x6.5SV	Self tapping screw, pan head, phillips, 2.9x6.5mm, black
RXS-HST3.5x13SV	Self tapping screw, pan head, phillips, 3.5x13mm, black