PROJECTION | DO NOT SCALE | IF IN DOUBT ASK

REVISION

NO	DATE	CHANGE	APPROVED

PL1 CW 1 2 3 — OV

SK1 — NC 1–8 — RL1 RL2 RL3 — ØV LOGIC 12 — NC 13 14 15 — DATA STROBES F 16, E 17, D 18, C 19, B 20 — NC 21 22 23 — D7 24 D6 25 D5 26 D4 27 D3 28 D2 29 DI 30 DØ 31

SK2 — MAIN OSC. OUT 37 — 2ND OSC. OUT 38 — NC 39 40 41 — RL4 — + 23V 42 — − 23V 43 — + 16V 44 — − 16V 45 — + 9V 46 — − 9V 47 — + 4 V 48 — OV 49 — +5V LOGIC 50 — OV LOGIC 51 — NC 52

+16V

R51 3K30 R58 3K30

R52 15K0 R55 15K0

IC23 1537 — R73 100R 5% R72 100R 5% — R63 3K57 R64 100R

IC24 1537 — R59 15K R62 15K — R75 100R 5% R74 100R 5% — R70 3K57 R71 100R

R57 4K70 R60 5K1 R61 5K1 R53 5K1 R56 10K R54 5K1

C43 47/16 R15 10K C41 47/16 R17 10K R18 7K50

R24 15K R23 15K R21 33R 5% C34 0·1/50

IC19 5162 — R22 100R 5% — +20mV — C61 22p — R19 33R 5% — C40 0·1µF/50 — −16V

TP3

VR10 100K — C63 1p8F

R31 100K R30 49K9 VR4 4K7 R33 49K9 R32 100K — IC20 4200

R47 100K R48 62K R28 100K R44 49K9 R49 62K R36 100K R35 49K9 R34 100K — IC21 4200

R45 820R 5% C38 33/25 VR3 1K VR5 4K7 R38 49K9 R37 100K — VR1 10K

R107 OMIT R39 36K — IC22a LF353 — ½ LF353 — -5V

R40 4K99 — R41 4K7 D15 IN4148 — IC22b LF353 — +5V — TP5

R42 15K — VR6 470R R76 43K — IC25b LF353

C39 100/6V3 D14 ZN423 R43 3K74 R50 3K3 5% — -1,26V — TP8

+16V — TP12 — TP11

R106 22K 5% — D17 D16 4V3 4V3 — R77 27K 5% R65 180K C42 1/16 D22 IN4148 — IC11 ⅓ 4053

-2V TO -8V — TP6 TP7

R69 2K4 R67 15K8 R68 15K8 — IC25a LF353 — C45 0·1µ/50 C44 0·1µ/50

RN5a 12K RN6a 24K3 — RN5b 12K RN6b 24K3 — RN5c 12K RN6c 24K3 — RN3a 12K RN4a 24K — RN3b 12K RN4b 24K — RN3c 12K RN4c 24K — RN1a 12K RN2a 24K — RN1b 12K RN2b 24K — RN1c 12K RN2c 24K — R103 24K

R102 3K24 — RN7A 6K34 — RN7B 12K4 — RN7C 24K3

IC5 40538P — IC4 4053 — IC3 4053 — IC2 4053 — IC1 — NC

IC1 ½

IC7 HC374 — IC6 HC374 — +9V — +4V — D7 D6 D5 D4 D3 D2 D1 DØ

RN22D 267K — RN23B 62K5 RN23A 3K24 — RN22A 160K RN2 A 6K34 — RN22B 316K RN2 B 12K4 — RN22C 620K RN2C 24K3 — RN19a 11K5 RN20a 24K3 — RN19b 12K RN20b 24K3 — RN19c 12K RN20c 24K3 — RN17a 12K RN18a 24K — RN17b 12K RN18b 24K — RN17c 12K RN18c 24K — RN15a 12K RN16a 24K — RN15b 12K RN16b 24K — RN15c 12K RN16c 24K — R100 24K

IC15 40538P — IC14 4053 — IC13 4053 — IC12 4053 — IC11 ⅓ 4053

IC11

IC7 HC374 — IC6 HC374 — C66 1µF 50V — +9V — +4V

IC17 HC374 — IC16 HC374

CAP'S 22/35 — C21 C28 C22 C29 C23 C30 C24 C31 C25 C32 C26 C33

CAP'S 33/25

CAP'S 10/50

C27 10/50V — R25 47K 5% — TR1 BC 546 — XL1 — R27 100K 5% C37 150pF R26 1K0 5% C56 330p C36 27pF CV1 C35 150p

IC27 ½ HC74 — C1

IC28 MC145145P — ST — F1 — C50 1,50 — TP9

R90 30K 5% — R95 2K2 5% C48 10/50V C47 220nF 100V

IC29 ¼ LF347 — C62 SMIT — R94 3K3 5% — R93 2K2 5% — R99 33K 5% — R96 3K3 5% R16 3K3 5% R91 3K9 5% R92 3K9 5% — C54 100pF — IC30 LM339 — R29 5K1 5% — R66 100K 5% R112 10K 5% — TR2 BC546 — R13 3K9 5%

IC31 XR2209CP — C55 470pF — N.C. — VDD

IC26 HC273 — R84 41K2 — R85 22K1 — R86 41K9 — R87 41K9 — R88 22K1 — R89 41K2 — C51 2n2F — C52 4n7F — R111 10K — R110 10K5% — D20 1N4148

RN10C 33R 5% C10 0·1/50 — +23V — RN10A 27K 5% — +9,1V — D4 IN4148 — D3 9V1 — RN10D 100R 5% — C13 15p — R104 33R — C9 0·1/50 — C7 300pF — D1 IN4148 — RN10E 27K 5% — -23V — -9,1V

RL1A RL2A RL3A — C1 3n6F C3 51nF C5 680nF — R1 1M R3 1M R5 1M 5% — D25 D26 2x IN4148 — RL4

TP1 — +20mV — LINK — VR2 OMIT — CV2 2-22pF — R20 56K 5% — R10 10K — R12 10K0 — TP4

R109 4K35 — R11 100K — R9 499K — R8 1K 5% C16 330pF — IC10 2625 — R14 28K7 — R13 33R 5% C17 0·1/50 — R7 33R 5% C15 0·1/50 — +16V — -16V

RN13C 33R 5% C12 0·1/50 — +23V — RN13a 27K 5% — +9,1V — D8 IN4148 — D7 9V1 — RN13D 100R 5% — C14 15p — R105 33R 5% — C11 0·1/50 — C8 300pF — D5 IN4148 — RN13E 27K 5% — -23V — -9,1V

RL1B RL2B RL3B — C2 3n6F C4 51nF C6 680nF — R2 1M R4 1M R6 1M 5% — D23 D24 2x IN4148

PL2 — TP2 — ±20mV

TP10 — ±12 V BUT NOT SATURATED — C49 3n3F — R46 4K7 C46 10µF 50V — TP13 — VDD

R97 200K — VR9 10K — R98 75K — C19 100p — C20 10µF 50V — D21 IN4148

+4V +9V — C58 C59 — 4 x 1µF 50V — C57 C60 — -9V — 4053 IC1-5 IC11-15

] REPRESENT NOMINAL D.C. VOLTAGES, SMPTE OR DIN IMD SELECTED

HIGHEST	MISSING
R113	-
RN23	RN11, 14, 9, 12, 108, 138
C66	-
D26	D11, 12, 13, 18, 19, 10
IC31	IC 18
TP13	
VR10	VR7,8

NEUTRIK AG

TITLE: CIRCUIT DIAGRAM ANALOG BOARD No. 1 PCB 76503

TOLERANCES – UNLESS OTHERWISE STATED

MATERIAL

FINISH

ORIGINAL SCALE	N/A
REDRAWN	K.C.
DATE	7.4.86.
CHECKED	
DATE	

USE TO 404 TO 402

DRAWING NO

PROJECT NO	TYPE	SHEET NO	SIZE	REV
765	C	032	1	11