gradiente

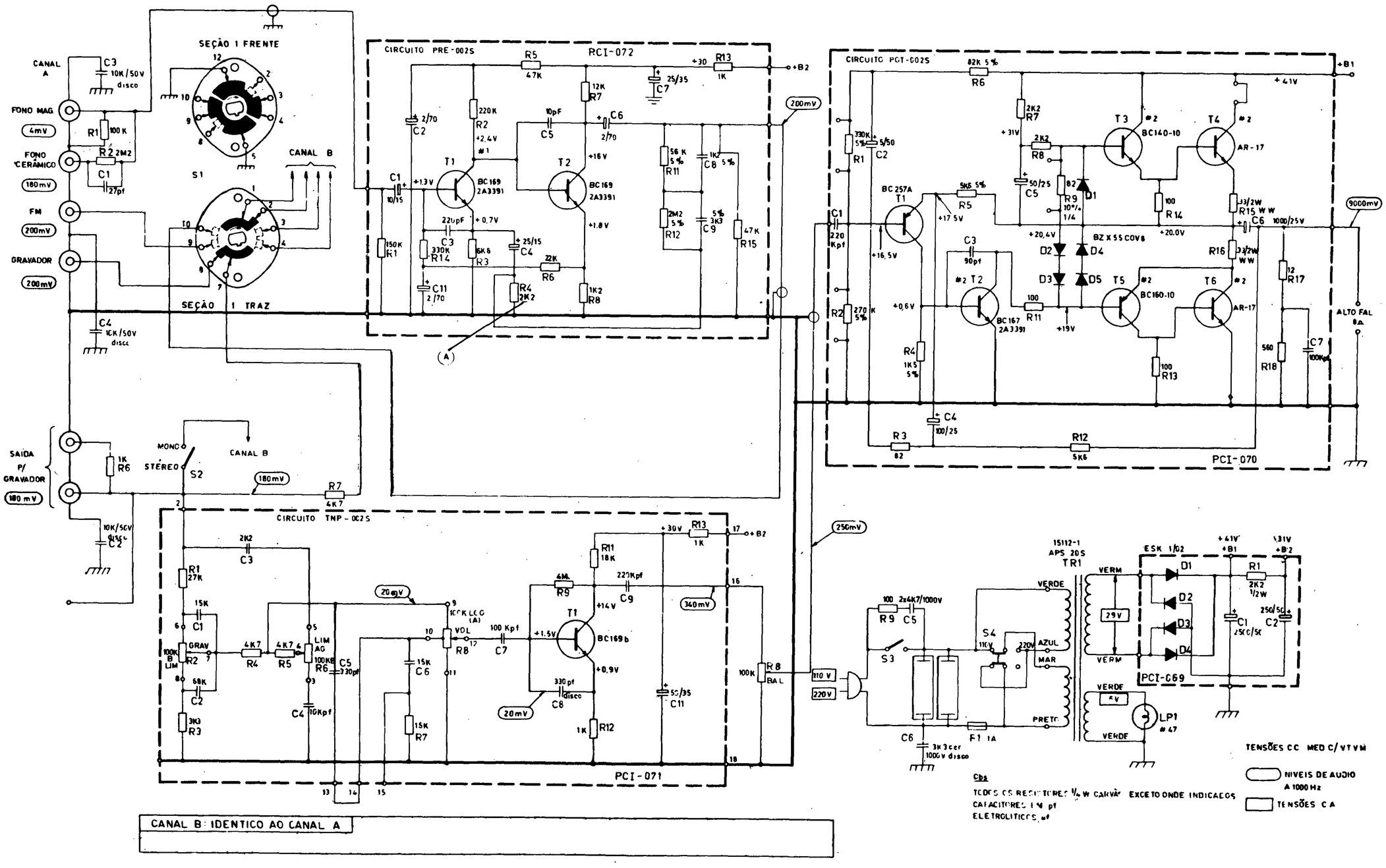
ESQUEMÁRIO

Vol. 1

AMPLIFICADORES ..... 1.
LAB - 40 ..... 1.3
LAB - 40 - SÉRIE II 1.4
LAB - 45 ..... 1.5
LAB - 70 ..... 1.6
LAB - 70 SÉRIE II 1.7
LAB - 75 ..... 1.8
LAB - 95 ..... 1.9
LAB - 500 ..... 1.10
LAB - 1000 ..... 1.11
STÉREO ST - 20 - SÉRIE II 1.12
ST - 36 S 1.13
STA - 900 ..... 1.14
STA - 950 ..... 1.15
STC - 100/MTC - 50 ..... 1.16
SPT - 100 ..... 1.17
PRO - 1200 S 1.18
PRO - 2000 MK II 1.19
M - 76 ..... 1.20
M - 80 ..... 1.21
M - 86 ..... 1.22
M - 120 ..... 1.23
M - 126 ..... 1.24
M - 160 ..... 1.25
M - 166/E/G/U/A/MEX 1.26
M - 360 ..... 1.27
M - 360 ..... 1.28
M - 360 ..... 1.29
M - 360 ..... 1.30
M - 360 ..... 1.31
M - 360 ..... 1.32

AMPLIFICADORES ..... 1.
M - 360 ..... 1.33
M - 360 - MONTADO C/ PCI 181/182 NO VU 1.34
M - 360 ..... 1.35
M - 246/E/G/U/A/MEX 1.36
M - 366E/G/U/A 1.37
TAPE DECKS ..... 2.
GR - 400 ..... 2.3
CD - 1655 ..... 2.4
CD - 1666 ..... 2.5
CD - 2000/S95 ..... 2.6
S - 96 ..... 2.7
CD - 2100 ..... 2.8
CD - 2300/S 125 ..... 2.9
CD - 2500 ..... 2.10
CD - 2600/S 106 ..... 2.11
CD - 2800/S 126 ..... 2.12
CD - 3500 ..... 2.13
CD - 3700 ..... 2.14
CD - 4000 ..... 2.15
CD - 5500 ..... 2.16
CD - 5500/CD 2 ..... 2.17
CD 1. FL 1 ..... 2.18
CD 1. FL 2 ..... 2.19
TOCA-DISCOS ..... 3.
DD - 1 ..... 3.3
DD - 100/200 ..... 3.4
TD - D 20 ..... 3.5
TD - D 30 ..... 3.6
TD - B 35 ..... 3.7
TD - D 35 ..... 3.8

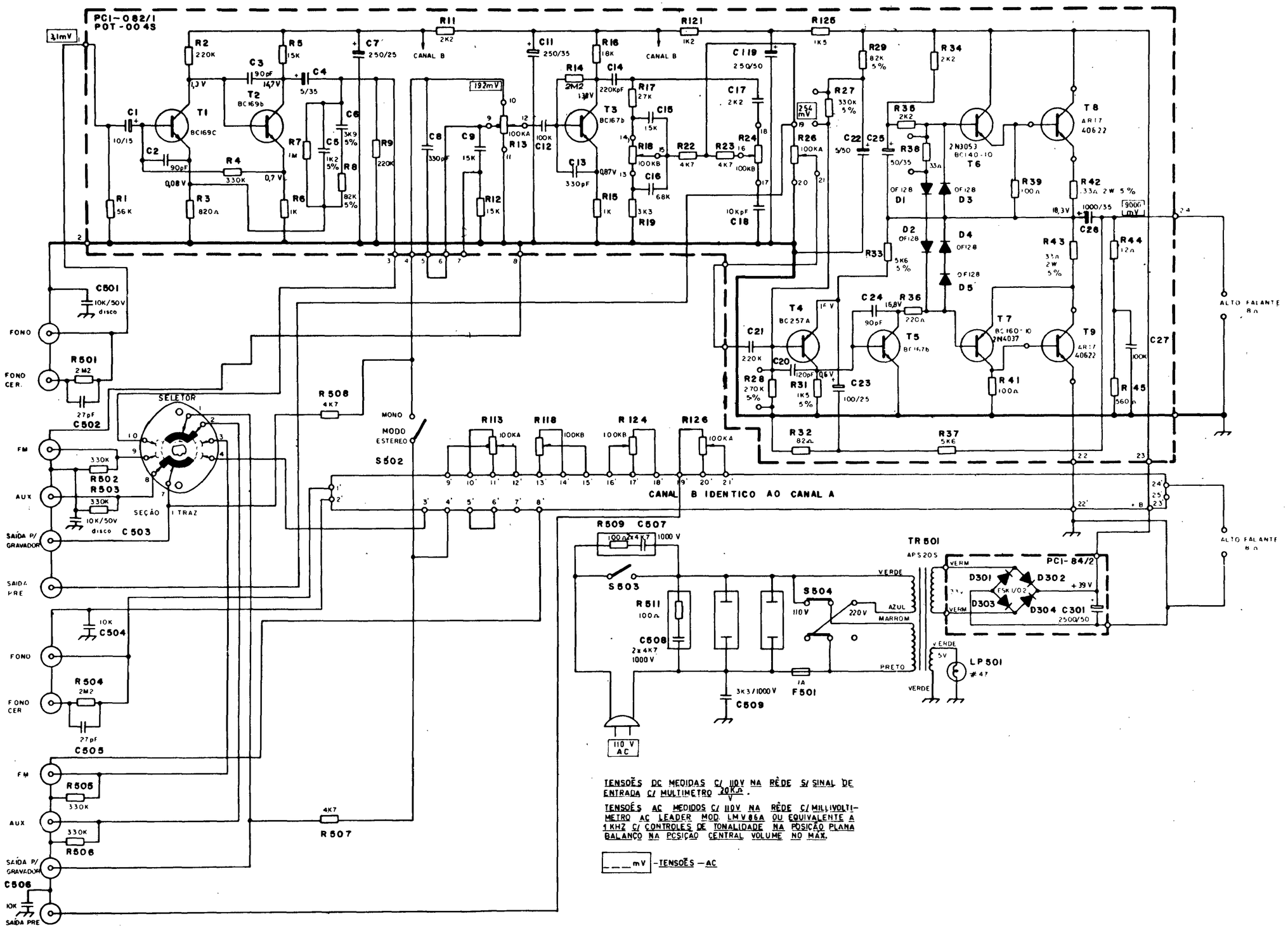
AMPLIFICADORES

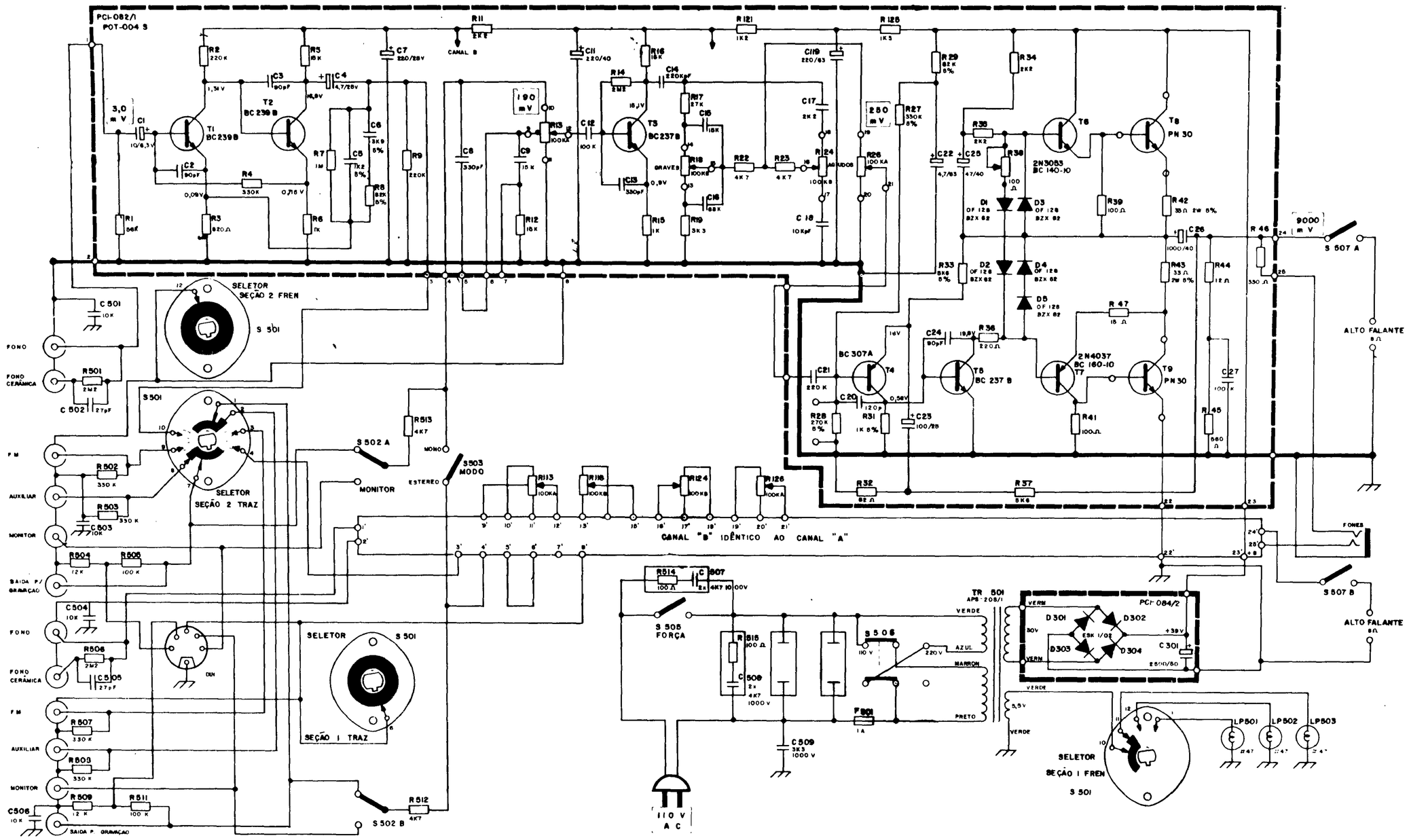


#1 TRANSISTORES T1 E T2 SELECIONADOS P/ BAIXO RUIDO E HFE

#2 TRANSISTORES SELECIONADOS EM VCEO

LAB - 40 - SÉRIE II





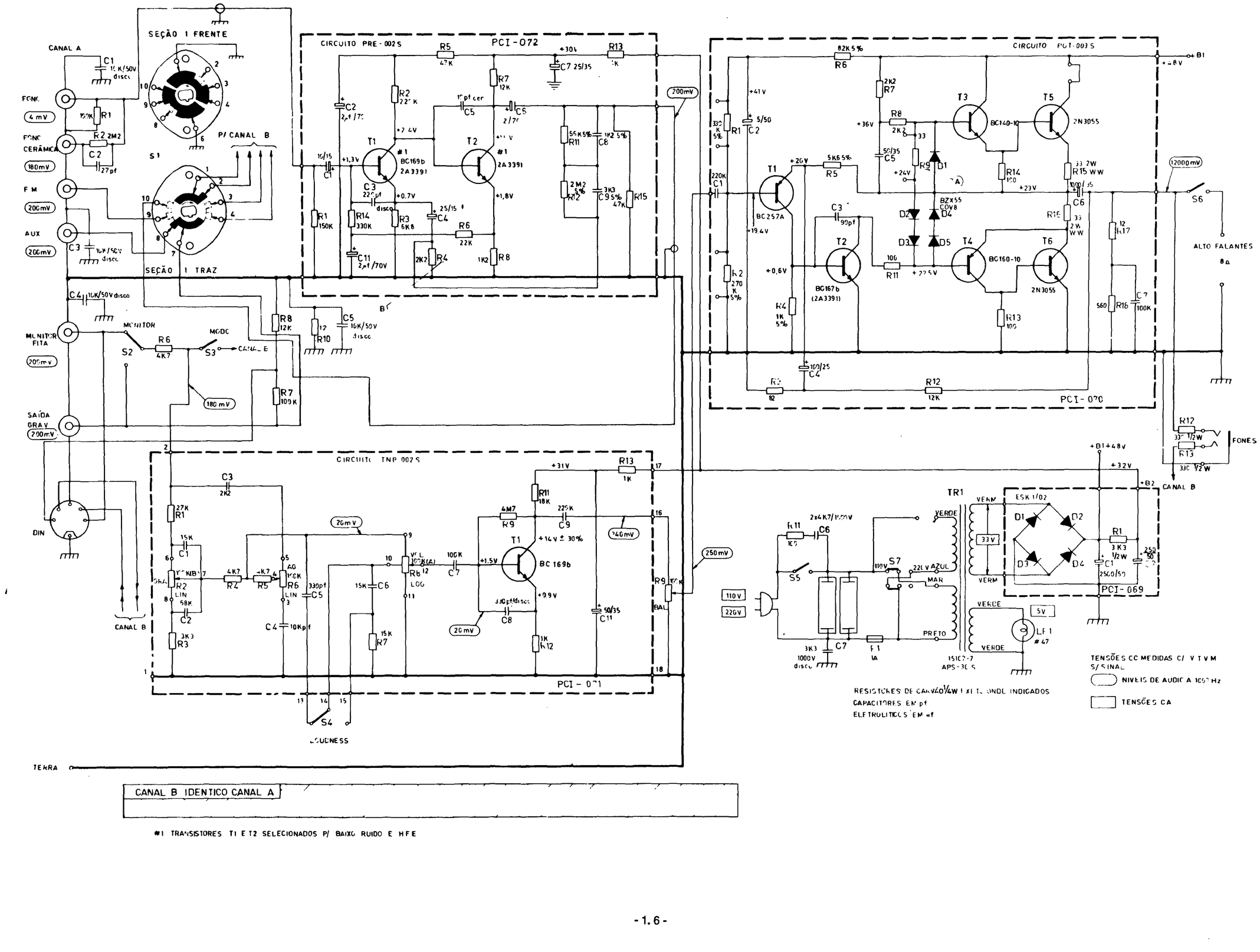
REDE 110 V

TENSÕES CC, MEDIDOS C/ VOLTIMETRO 20 K Ω/V S/ SINAL

TENSÕES AC, MEDIDOS C/ CONTROLES DE TONALIDADES NA POSIÇÃO PLANA, BALANÇO NO CENTRO, VOLUME NO MÁXIMO, FREQUÊNCIA 1 KHZ, E VOLTIMETRO AC LEADER LMV 98A OU EQUIVALENTE.

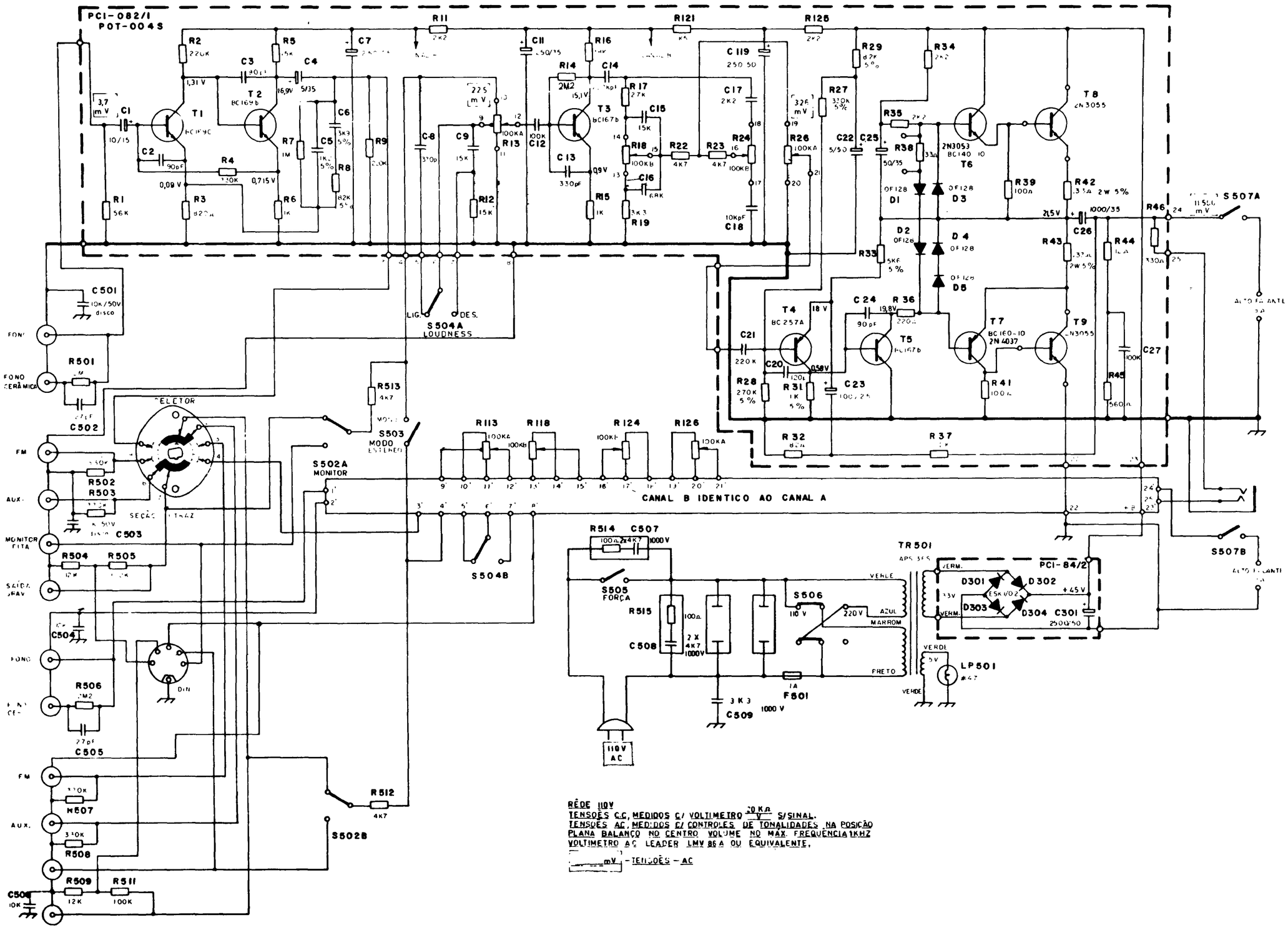
[... mV] – TENSÕES – AC

LAB - 70



CANAL B IDENTICO CANAL A

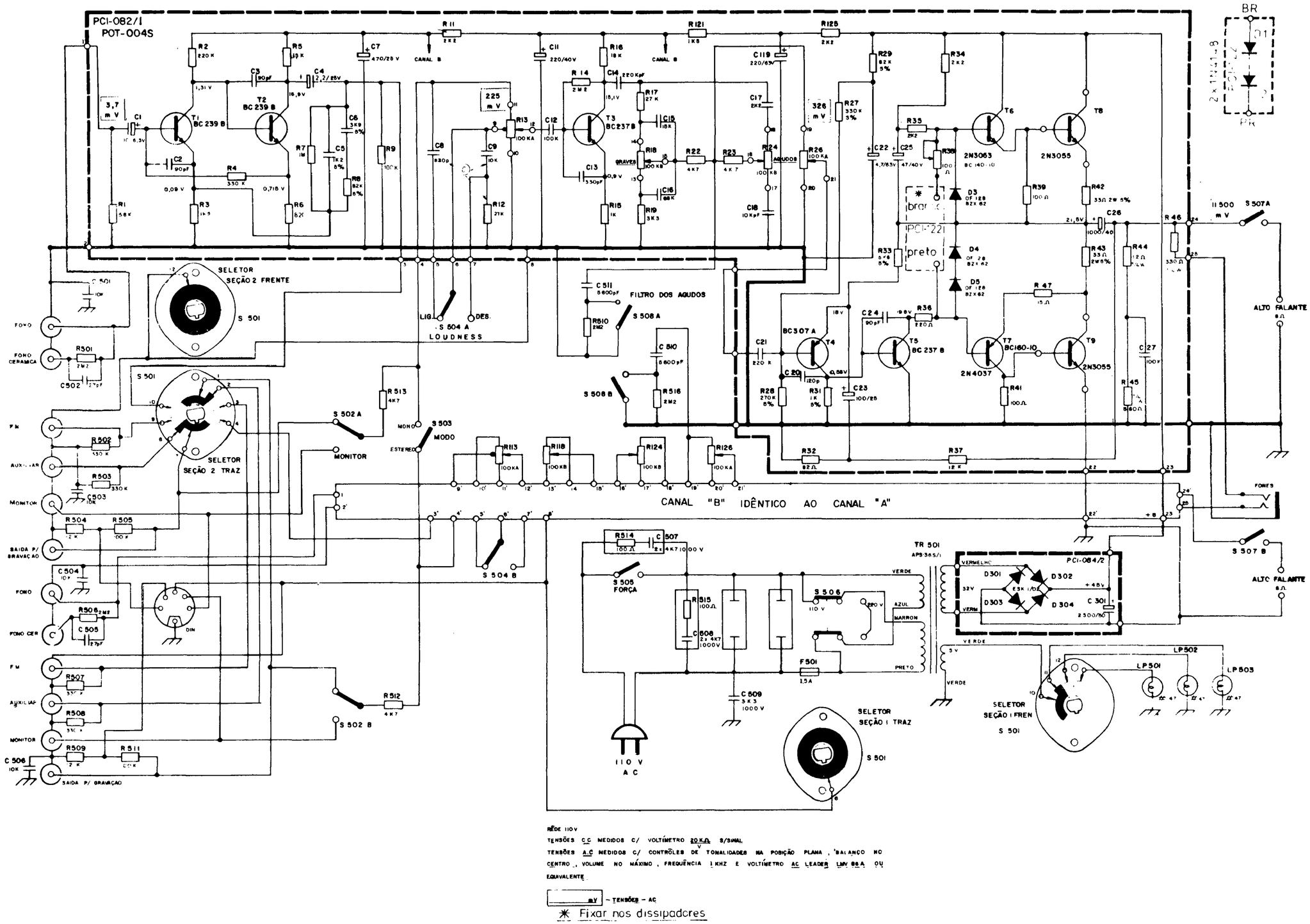
#1 TRANSISTORES T1 E T2 SELECIONADOS P/ BAIXO RUIDO E HFE



RÊDE 110V
TENSÕES C.C, MEDIDOS C/ VOLTIMETRO 20 KΩ/V S/SINAL.
TENSÕES AC, MEDIDOS C/ CONTROLES DE TONALIDADES NA POSIÇÃO PLANA BALANÇO NO CENTRO VOLUME NO MÁX. FREQUÊNCIA 1KHZ VOLTIMETRO AC LEADER LMV 86 A OU EQUIVALENTE.

mV - TENSÕES - AC

LAB - 75



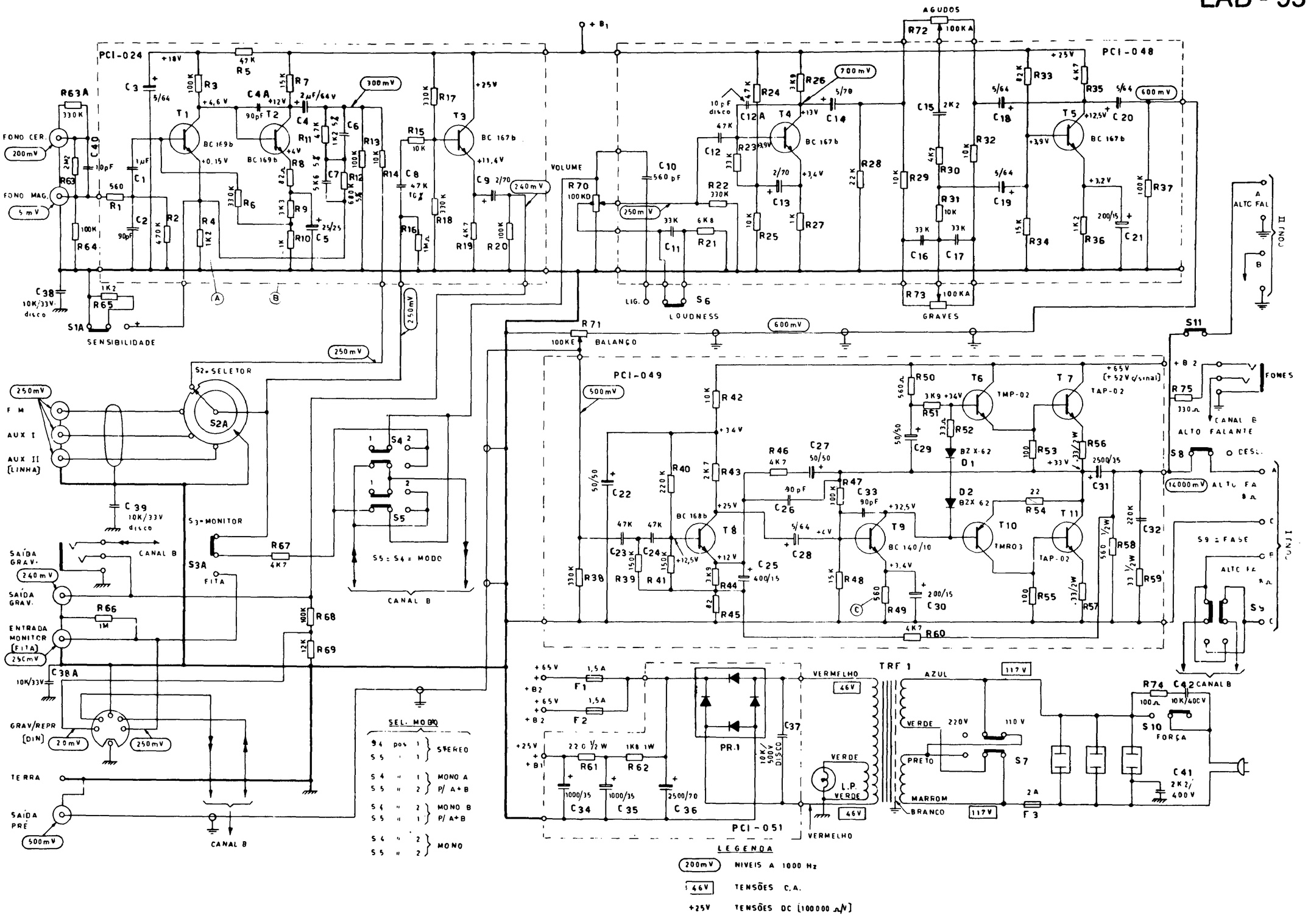
RÊDE 110V

TENSÕES C.C MEDIDOS C/ VOLTÍMETRO 20 KΩ/V S/SINAL

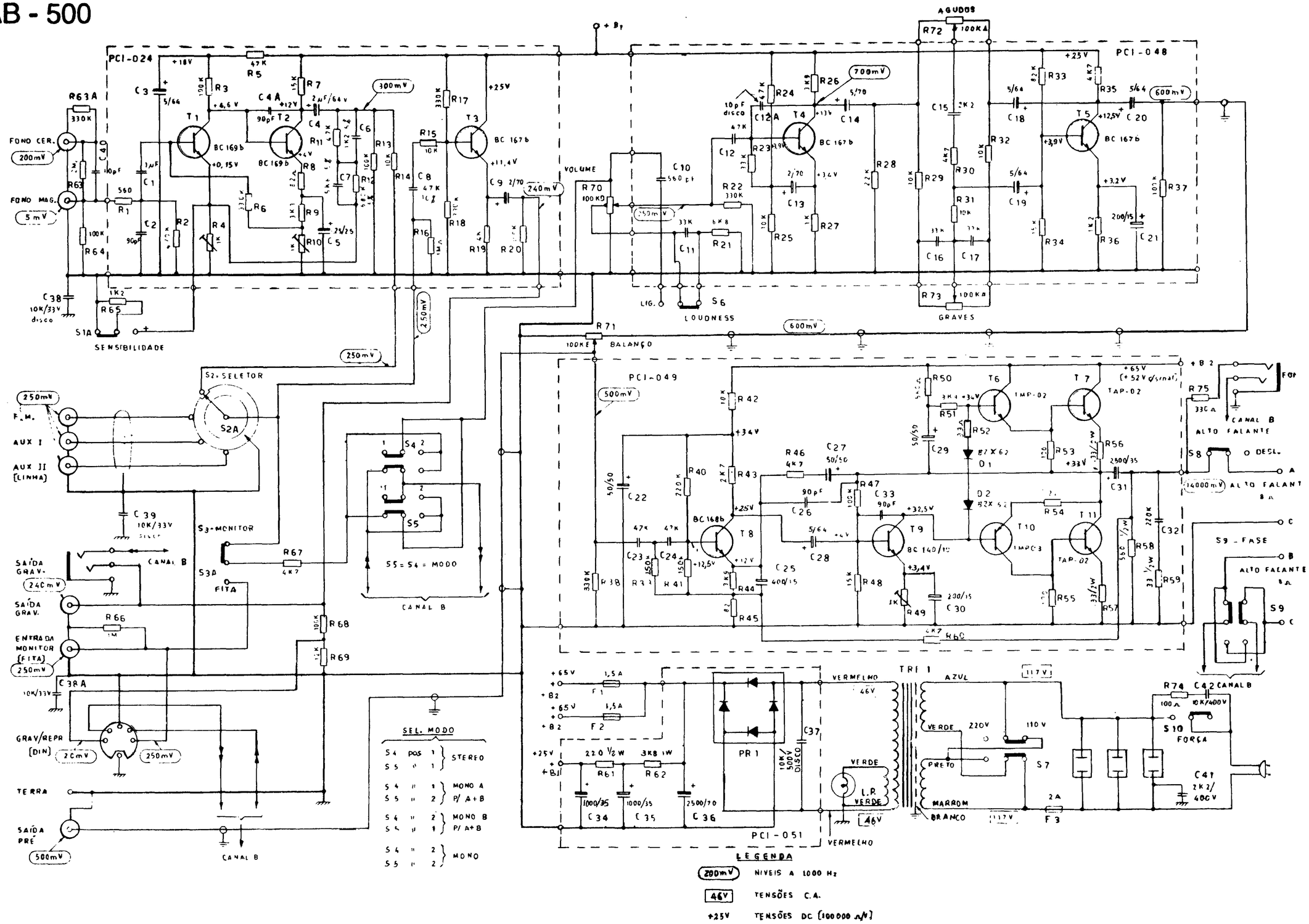
TENSÕES A.C MEDIDOS C/ CONTRÔLES DE TONALIDADES NA POSIÇÃO PLANA, BALANÇO NO CENTRO, VOLUME NO MÁXIMO, FREQUÊNCIA 1 KHZ E VOLTÍMETRO AC LEADER LMV 88A OU EQUIVALENTE

mV – TENSÕES – AC

✳ Fixar nos dissipadores

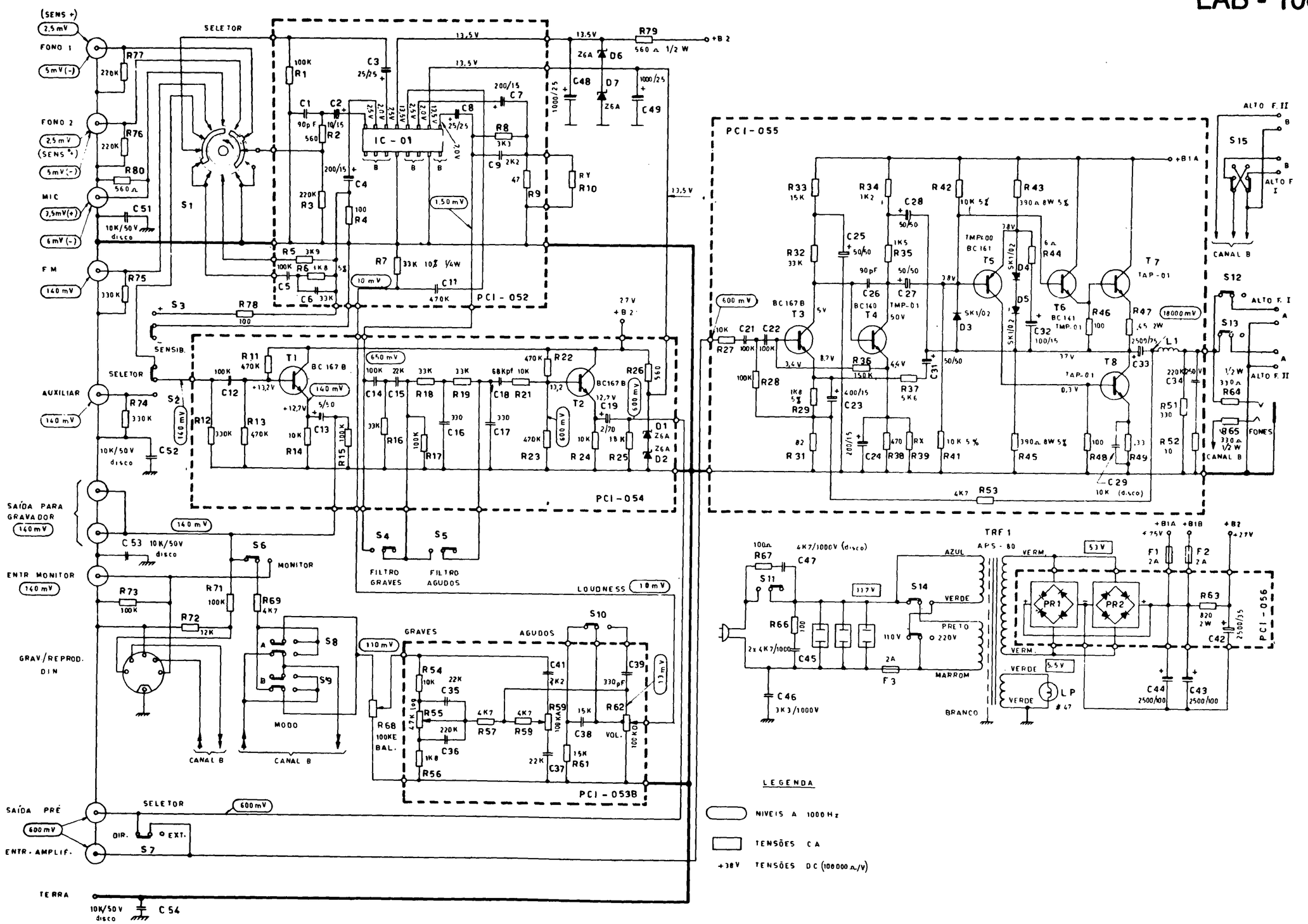

PCI-024
PCI-048
PCI-049
PCI-051
+ B1
+ B2
AGUDOS
R72 100KA
GRAVES
R73 100KA
VOLUME
R70 100KD
BALANÇO
R71 100KE
LOUDNESS
S6
LIG.
FONO CER.
200mV
FONO MAG.
5mV
R63A 330K
R63
R64 100K
C40 10pF
C38 10K/33V disco
S1A
SENSIBILIDADE
R65 1K2
S2 - SELETOR
S2A
FM
AUX I
AUX II (LINHA)
250mV
C39 10K/33V disco
S3 - MONITOR
S3A
FITA
R67 4K7
CANAL B
S4 - S5 = MODO
SAÍDA GRAV.
240mV
SAÍDA GRAV.
R66 1M
ENTRADA MONITOR (FITA)
25mV
C38A 10K/33V
GRAV/REPR (DIN)
20mV
250mV
TERRA
SAÍDA PRÉ
500mV
R68 100K
R69 12K
SEL. MODO
S4 pos 1 } STEREO
S5 " 1 }
S4 " 1 } MONO A
S5 " 2 } P/ A+B
S4 " 2 } MONO B
S5 " 1 } P/ A+B
S4 " 2 } MONO
S5 " 2 }
T1 BC 169b
T2 BC 169b
T3 BC 167b
T4 BC 167b
T5 BC 167b
T8 BC 168b
T9 BC 140/10
T10 TMRO3
T11 TAP-02
T6 TMP-02
T7 TAP-02
D1 BZX-62
D2 BZX 62
+65V (+52V c/sinal)
S11
FONES
R75 330Ω
CANAL B
ALTO FALANTE
S8
DESL.
14000mV
ALTO FALANTE
CONJ II
S9 = FASE
ALTC FAL
S9
R74 100Ω
C42 10K/400V
CANAL B
S10
FORÇA
C41 2K2/400V
TRF 1
AZUL
117V
VERDE
220V
110V
PRETO
MARROM
BRANCO
2A
F3
S7
VERMELHO
46V
L.P. VERDE
PR.1
F1 1,5A
F2 1,5A
C37 10K/500V DISCO
R61 22Ω ½W
R62 1K8 1W
C34 1000/35
C35 1000/35
C36 2500/70
LEGENDA
200mV NIVEIS A 1000 Hz
46V TENSÕES C.A.
+25V TENSÕES DC (100000 Ω/V)

LAB - 500

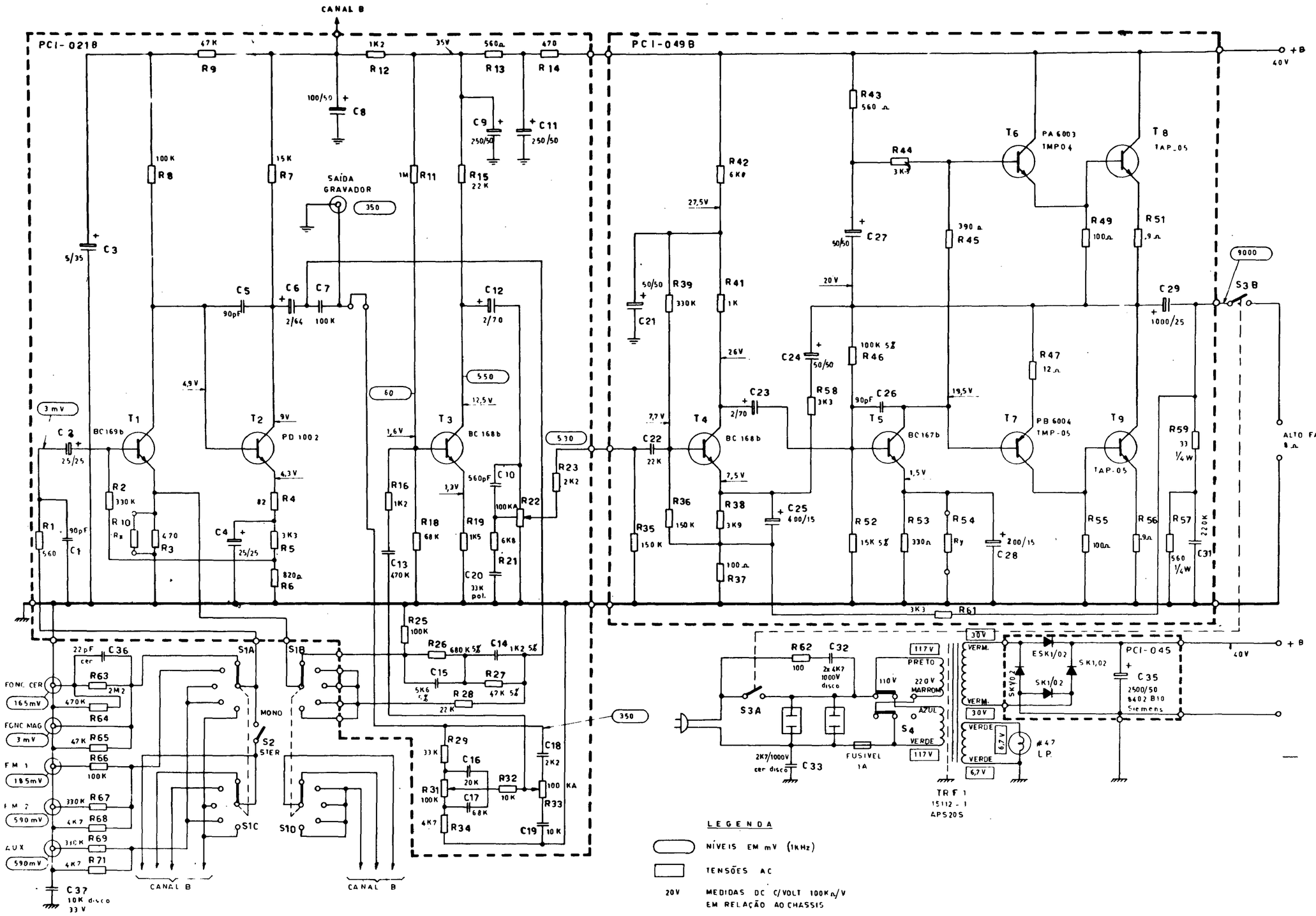


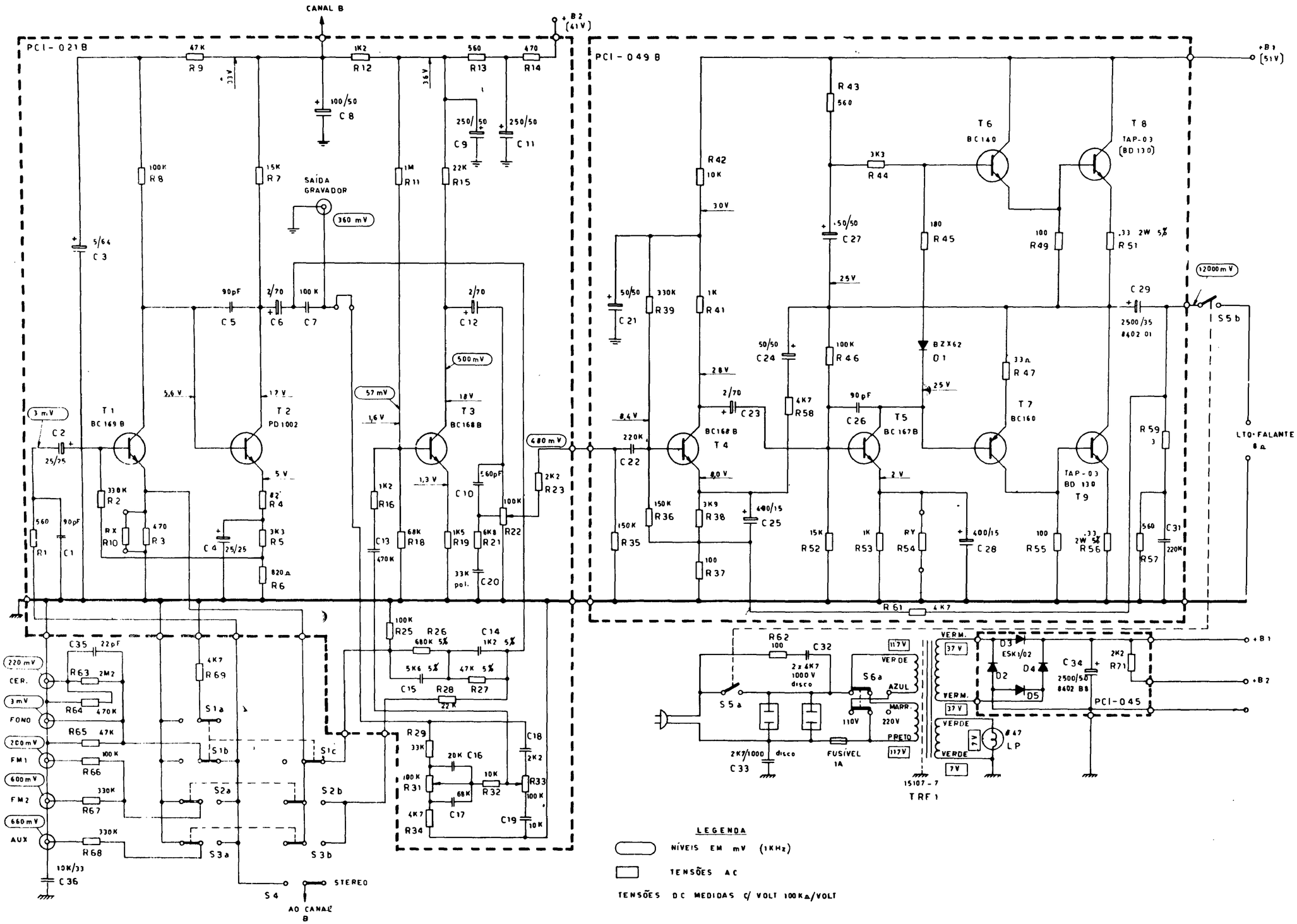
LEGENDA

200mV	NIVEIS A 1000 Hz
46V	TENSÕES C.A.
+25V	TENSÕES DC (100000 Ω/V)

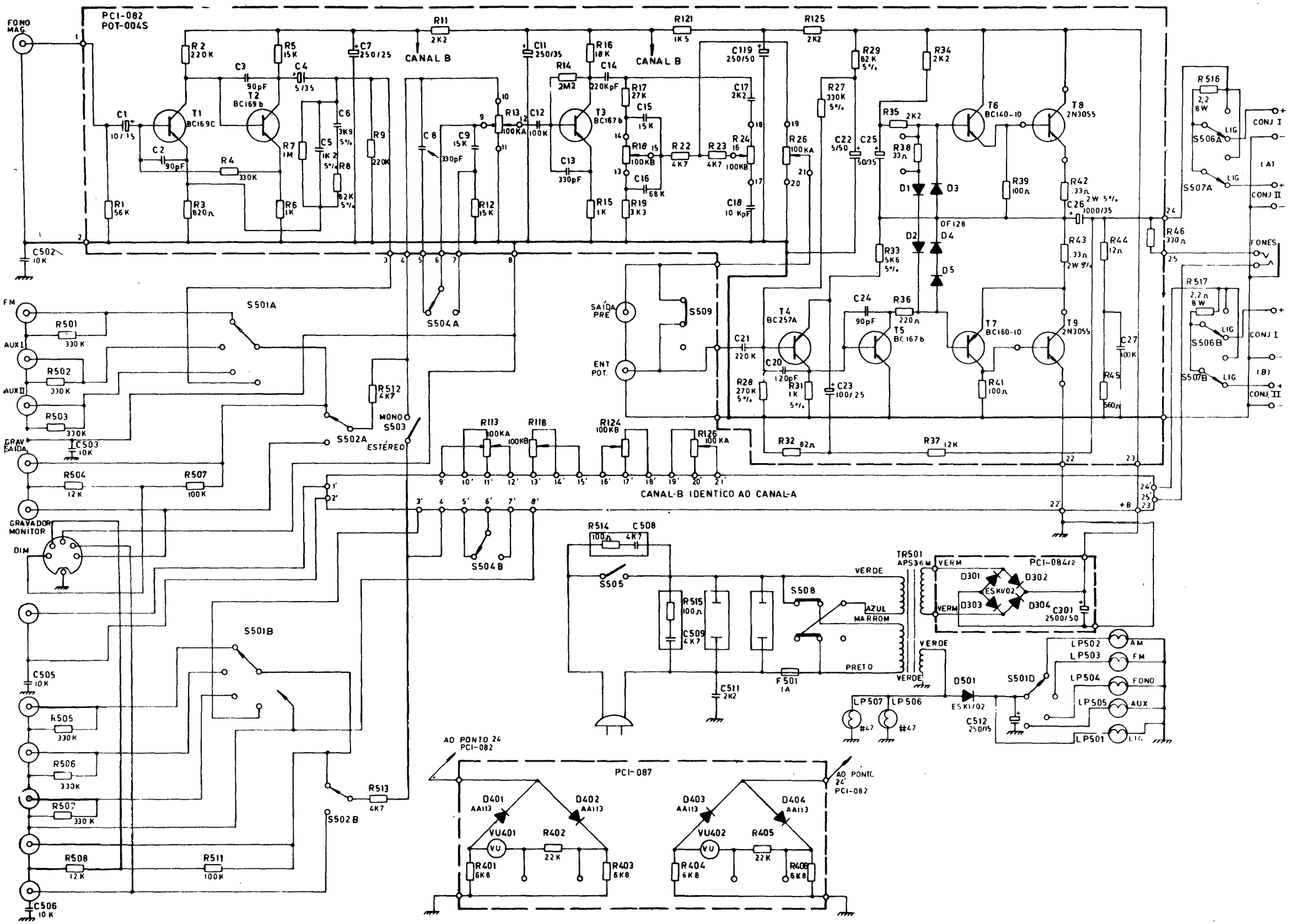

(SENS +)
2,5 mV
FONO 1
5 mV (-)
FONO 2
2,5 mV
(SENS +)
5 mV (-)
MIC
3,5 mV (+)
6 mV (-)
FM
140 mV
AUXILIAR
140 mV
SAÍDA PARA GRAVADOR
140 mV
ENTR. MONITOR
140 mV
GRAV/REPROD. DIN
SAÍDA PRÉ
600 mV
ENTR. AMPLIF.
TERRA
SELETOR
SENSIB.
S1
S2
S3
S4
FILTRO GRAVES
S5
FILTRO AGUDOS
S6
MONITOR
S7
DIR.
EXT.
S8
S9
MODO
S10
LOUDNESS
GRAVES
AGUDOS
BAL.
VOL.
IC - 01
T1
BC 167 B
T2
BC167 B
PCI - 052
PCI - 054
PCI - 053B
CANAL B
R1 100K
R2 560
R3 220K
R4 100
R5 3K9
R6 1K8
R7 33K 10% 1/4W
R8 3K3
R9 47
R10 RY
R11 470K
R12 330K
R13 470K
R14 10K
R15 100K
R16 33K
R17 100K
R18 33K
R19 33K
R21 10K
R22 470K
R23 470K
R24 10K
R25 18K
R26 560
R27 10K
R28 100K
R29 1K8 5%
R31 82
R32 33K
R33 15K
R34 1K2
R35 1K5
R36 150K
R37 5K6
R38 470
R39 RX
R41 10K 5%
R42 10K 5%
R43 390Ω 8W 5%
R44 6Ω
R45 390Ω 8W 5%
R46 100
R47 .45 2W
R48 100
R49 .33
R51 330
R52 10
R53 4K7
R54 10K
R55 47K log
R56 1K8
R57 4K7
R59 4K7
R59 100KA
R61 15K
R62 100KΩ
R63 820 2W
R64 330Ω 1/2W
R67 100Ω
R68 100KE
R69 4K7
R71 100K
R72 12K
R73 100K
R74 330K
R75 330K
R76 220K
R77 220K
R78 100
R79 560Ω 1/2 W
R80 560Ω
C1 90pF
C2 10/15
C3 25/25
C4 200/15
C5 100K
C6 33K
C7 200/15
C8 25/25
C9 2K2
C11 470K
C12 100K
C13 5/50
C14 100K
C15 22K
C16 330
C17 330
C18 68Kpf 10K
C19 2/70
C23 400/15
C24 200/15
C25 50/50
C26 90pF
C27 50/50
C28 50/50
C29 10K (disco)
C31 50/50
C32 100/15
C33 2500/25
C34 220K 50V
C35 22K
C36 1K8
C37 22K
C38 15K
C39 330pF
C41 2K2
C42 2500/35
C43 2500/100
C44 2500/100
C45
C46 3K3/1000V
C47
C48 1000/25
C49 1000/25
C51 10K/50V disco
C52 10K/50V disco
C53 10K/50V disco
C54 10K/50V disco
D1 Z6A
D2 Z6A
D3 SK1/02
D4 SK1/02
D5 SK1/02
D6 Z6A
D7 Z6A
T3 BC167B
T4 BC140
T5 BC161
T6 BC141
T7 TAP-01
T8 TAP-01
PCI - 055
ALTO F. II
ALTO F. I
CANAL B
FONES
S11
S12
S13
S14
S15
TRF 1
APS - 80
AZUL
VERDE
PRETO
MARROM
BRANCO
VERM.
PR1
PR2
F1 2A
F2 2A
F3 2A
LP # 47
PCI - 056
LEGENDA
NIVEIS A 1000 Hz
TENSÕES CA
+38V TENSÕES DC (100000 Ω/V)

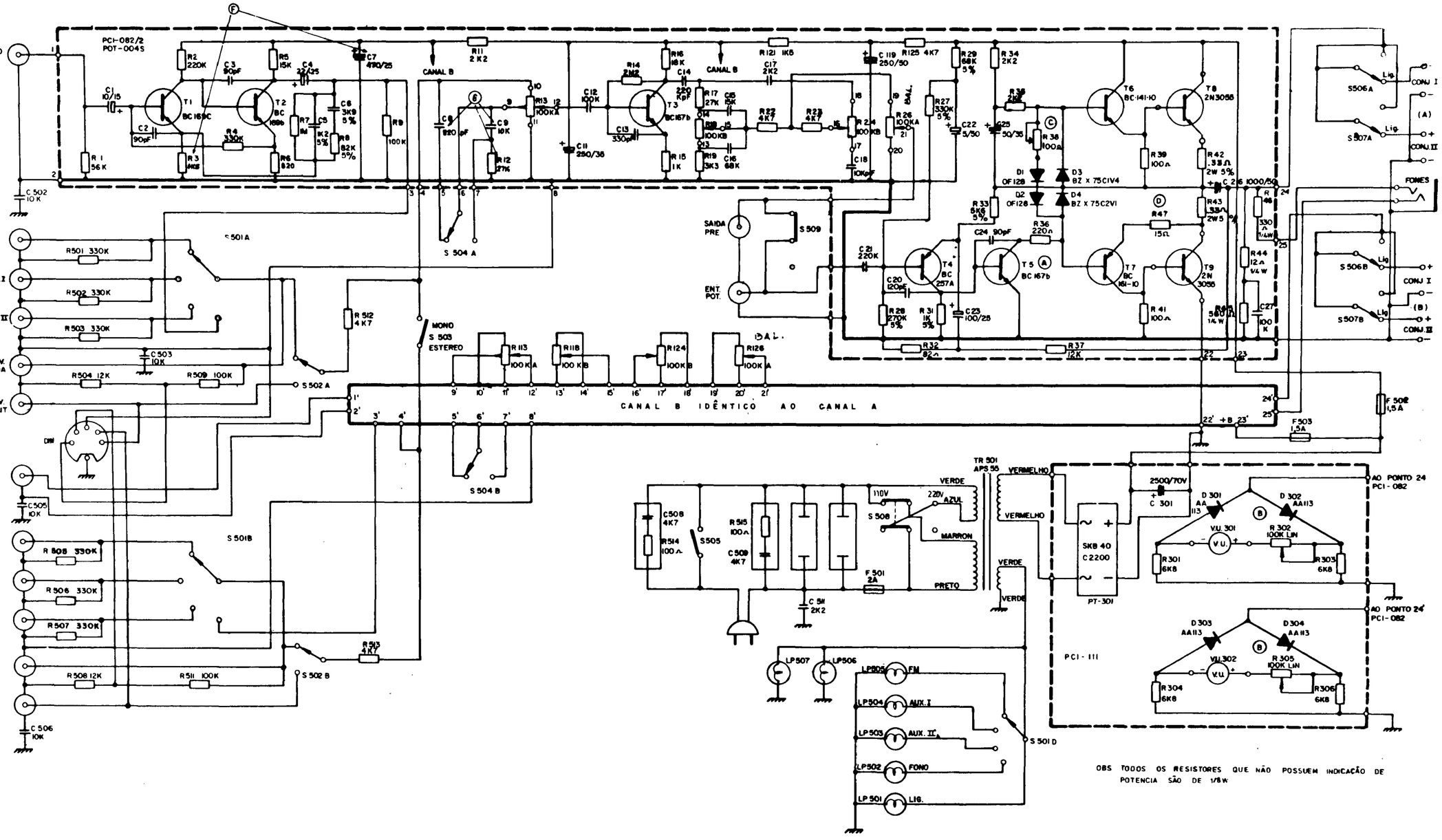
STÉREO ST - 20 - SÉRIE II



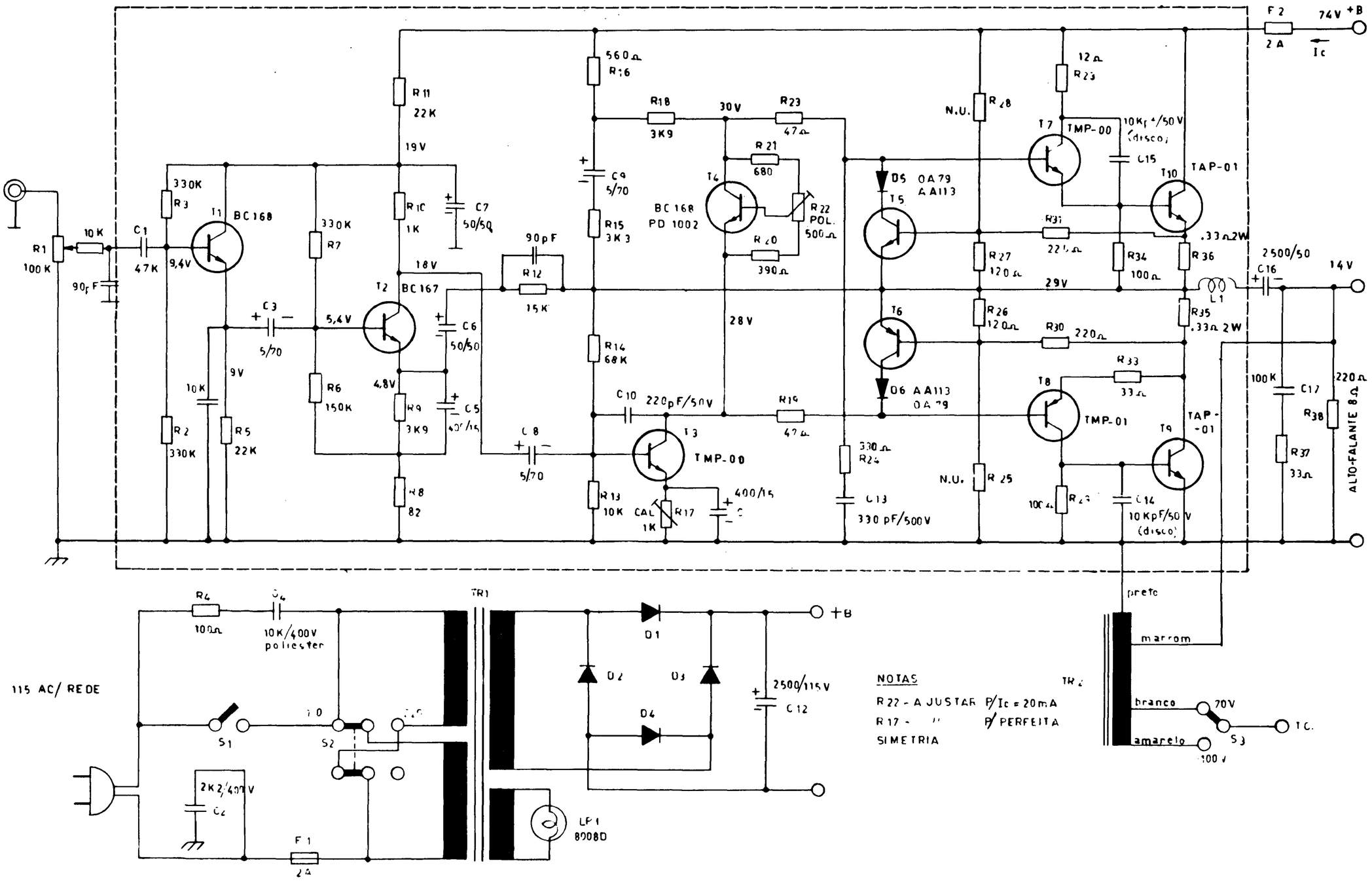

CANAL B
+B2 (41V)
PCI - 021 B
47K R9
1K2 R12
560 R13
470 R14
33V
36V
100/50 C8
250/50 C9
250/50 C11
100K R8
15K R7
1M R11
22K R15
SAÍDA GRAVADOR
360 mV
5/64 C3
90pF C5
2/70 C6
100 K C7
2/70 C12
500 mV
57 mV
1,6 V
18V T3 BC168B
480 mV
5,6 V
17 V T2 PD1002
5 V
3 mV
T1 BC 169 B
2/25/25 C2
560 R1
90pF C1
330K R2
RX R10
470 R3
C4 25/25
82 R4
3K3 R5
820Ω R6
1K2 R16
C13 470K
68K R18
1K5 R19
6K8 R21
100K R22
2K2 R23
560pF C10
1,3 V
33K pol. C20
+B1 (51V)
PCI - 049 B
R43 560
T6 BC140
T8 TAP-03 (BD 130)
3K3 R44
R42 10K
30V
50/50 C27
180 R45
100 R49
.33 2W 5% R51
25V
12000 mV
C29 2500/35 #402 01
S5b
50/50 C21
330K R39
1K R41
28V
2/70 C23
4K7 R58
8,4V
220K C22
BC168B T4
8,0V
150K R36
3K9 R38
400/15 C25
150K R35
100 R37
50/50 C24
100K R46
BZX62 O1
25V
90pF C26
T5 BC 167B
2V
33Ω R47
T7 BC160
15K R52
1K R53
RY R54
400/15 C28
100 R55
.33 2W 5% R56
TAP-03 BD 130 T9
R59 3
560 R57
C31 220K
LTO. FALANTE 8Ω
R61 4K7
R62 100
C32 2 x 4K7 1000 V disco
117V
VERDE
S6a
AZUL
MARR.
110V
220V
PRETO
S5a
2K7/1000 C33
disco
FUSÍVEL 1A
15107-7 TRF1
VERM. 37 V
VERM. 37 V
VERDE 7 V
D3 ESK1/02
D2
D4
D5
C34 2500/50 8402 88
2K2 R71
PCI-045
Ø47 LP
C35 22pF
220 mV CER.
3 mV FONO
200 mV FM1
600 mV FM2
660 mV AUX
R63 2M2
R64 470K
R65 47K
100K R66
330K R67
330K R68
10K/33 C36
4K7 R69
S1a
S1b
S1c
S2a
S2b
S3a
S3b
S4
STEREO
AO CANAL B
100K R25
R26 680K 5%
C14 1K2 5%
5K6 5%
47K 5%
C15
R28 22K
R27
R29 33K
20K C16
100K R31
10K R32
68K C17
4K7 R34
C18 2K2
R33 100K
C19 10K
LEGENDA
NÍVEIS EM mV (1KHz)
TENSÕES AC
TENSÕES DC MEDIDAS C/ VOLT 100KΩ/VOLT

STA - 900


PC1-082
POT-004S
FONO MAG
R1 56K
R2 220K
R3 820Ω
R4 330K
R5 15K
R6 1K
R7 1M
R8 62K 5%
R9 220K
C1 10/15
C2 90pF
C3 90pF
C4 5/35
C5 1K2 5%
C6 3K9 5%
C7 250/25
C502 10K
T1 BC169C
T2 BC169b
R11 2K2
CANAL B
C8
C9 15K
330pF
R12 15K
R13 100KA
C11 250/35
C12 100K
R14 2M2
R15 1K
T3 BC167b
C13 330pF
C14 220KpF
R16 18K
R17 27K
C15 15K
R18 100KB
C16 68K
R19 3K3
R121 1K5
R22 4K7
R23 4K7
R24 100KB
C17 2K2
C18 10 KpF
C119 250/50
R125 2K2
R26 100KA
R27 330K 5%
R29 82K 5%
R34 2K2
R35 2K2
T6 BC140-10
T8 2N3055
R38 33Ω
D1
D3
OF128
D2
D4
D5
R39 100Ω
R42 33Ω 2W 5%
C22 5/50
C25 50/35
C26 1000/35
R33 5K6 5%
R43 33Ω 2W 5%
R44 12Ω
R46 330Ω
R516 2,2 8W
S506A
S507A
LIG
CONJ I
(A)
CONJ II
FONES
R517 2,2Ω 8W
S506B
S507B
(B)
C24 90pF
R36 220Ω
T5 BC167b
T4 BC257A
C21 220K
C20 120pF
R28 270K 5%
R31 1K 5%
C23 100/25
T7 BC160-10
T9 2N3055
R41 100Ω
R45 560Ω
C27 100K
R32 82Ω
R37 12K
FM
AUX I
AUX II
GRAV SAÍDA
GRAVADOR MONITOR
DIM
R501 330K
R502 330K
R503 330K
C503 10K
R504 12K
R507 100K
S501A
S504A
S502A
S503
MONO
ESTÉREO
R512 4K7
SAÍDA PRE
ENT POT.
S509
R113 100KA
R118 100KB
R124 100KB
R126 100KA
CANAL-B IDENTICO AO CANAL-A
S504B
R514 100Ω
C508 4K7
S505
R515 100Ω
C509 4K7
C511 2K2
S508
VERDE
AZUL
MARROM
PRETO
F501 1A
TR501 APS36M
VERM
PC1-084/2
D301
D302
D303
D304
ESKI/02
C301 2500/50
VERDE
D501 ESKI/02
C512 250/15
S501D
LP502 AM
LP503 FM
LP504 FONO
LP505 AUX
LP501 LIG
LP507 #47
LP506 #47
S501B
C505 10K
R505 330K
R506 330K
R502 330K
R508 12K
R511 100K
C506 10K
R513 4K7
S502B
AO PONTO 24 PCI-082
PC1-087
D401 AA113
D402 AA113
VU401
R402 22K
R401 6K8
R403 6K8
D403 AA113
D404 AA113
VU402
R405 22K
R404 6K8
R406 6K8
AO PONTO 24' PCI-082
+B


PCI-082/2
POT-004S
FONO MAG
FM
AUX I
AUX II
GRAV. SAIDA
GRAV. MONIT
DIN
CANAL B
CANAL B
SAIDA PRE
ENT. POT.
S 509
S 501 A
S 502 A
S 502 B
S 503 MONO ESTEREO
S 504 A
S 504 B
S 505
S 501 B
S 501 D
S 506 A
S 507 A
S 506 B
S 507 B
CONJ I
CONJ II
FONES
CANAL B IDÊNTICO AO CANAL A
BAL.
TR 501 APS 55
VERMELHO
VERDE
AZUL
MARRON
PRETO
110V
220V
S 508
F 501 2A
F 502 1,5A
F 503 1,5A
SKB 40 C2200
PT-301
2500/70V
C 301
D 301 AA 113
D 302 AA113
D 303 AA113
D 304 AA113
V.U. 301
V.U. 302
R 302 100K LIN
R 305 100K LIN
R301 6K8
R303 6K8
R304 6K8
R306 6K8
AO PONTO 24 PCI-082
AO PONTO 24' PCI-082
PCI - 111
LP501 LIG.
LP502 FONO
LP503 AUX. II
LP504 AUX. I
LP505 FM
LP506
LP507
T1 BC 169C
T2 BC 169b
T3 BC167b
T4 BC 257A
T5 BC 167b
T6 BC 141-10
T7 BC 161-10
T8 2N3055
T9 2N 3055
D1 OF128
D2 OF128
D3 BZ X 75C1V4
D4 BZ X 75C2V1
C502 10K
C503 10K
C505 10K
C506 10K
C508 4K7
C509 4K7
C511 2K2
R 1 56K
R 808 330K
R 506 330K
R 507 330K
R501 330K
R502 330K
R503 330K
R504 12K
R509 100K
R508 12K
R511 100K
R512 4K7
R513 4K7
R514 100Ω
R515 100Ω
OBS TODOS OS RESISTORES QUE NÃO POSSUEM INDICAÇÃO DE POTENCIA SÃO DE 1/8W

STC - 100/MTC - 50

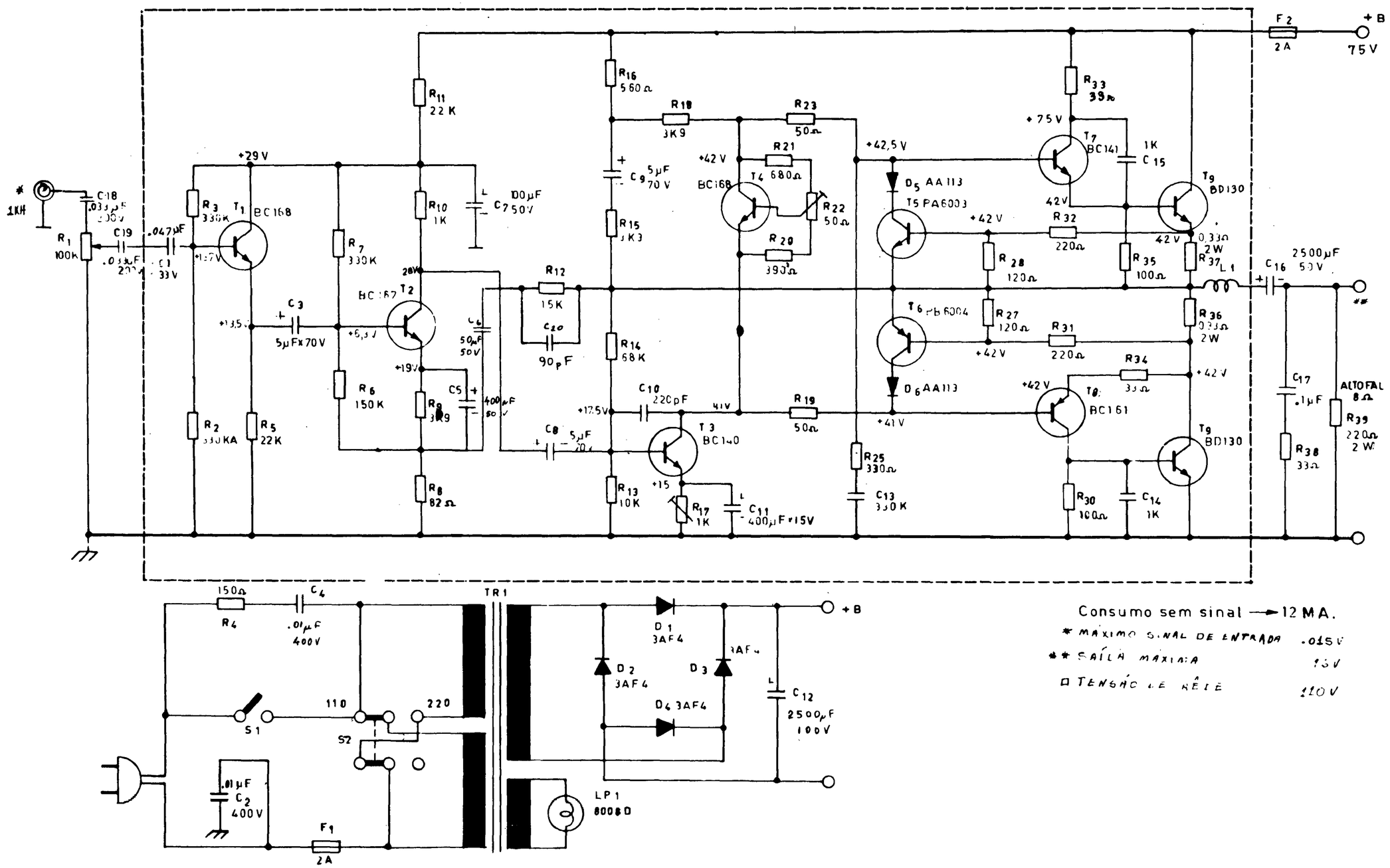


NOTAS

R 22 - A JUSTAR P/ Ic = 20 mA

R 17 - " P/ PERFEITA SIMETRIA

DEVIDO AO FATO DE SEREM OS NOSSOS PRODUTOS SUJEITOS A CONSTANTES APERFEIÇOAMENTOS, NOS RESERVAMOS O DIREITO DE INTRODUZÍR MODIFICAÇÕE EM CIRCUITOS E ESPECIFICAÇÕES, SEM AVISO PRÉVIO E SEM INCORRER EM QUALQUER OBRIGAÇÃO.



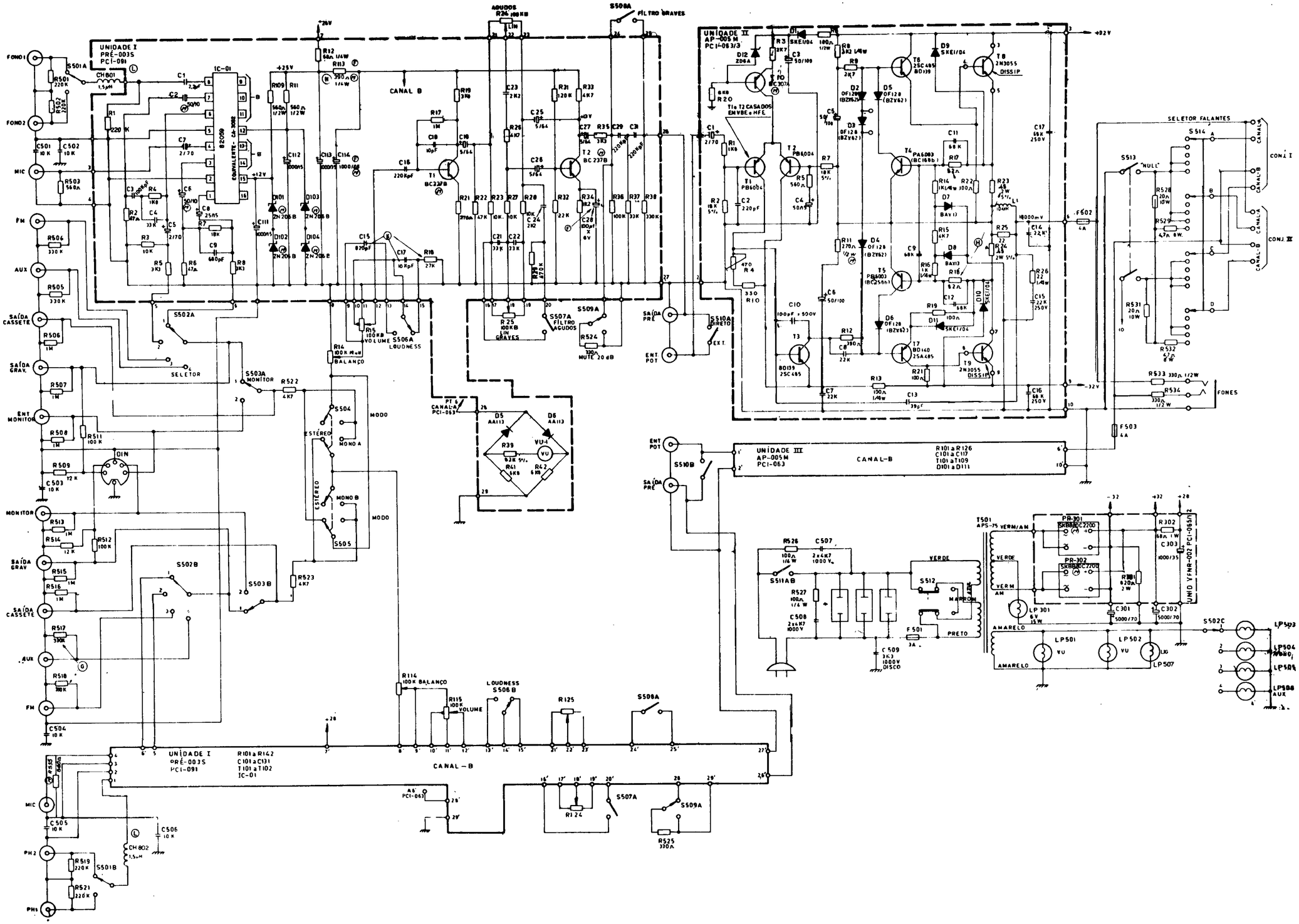
Consumo sem sinal → 12 MA.

* MÁXIMO SINAL DE ENTRADA .015V

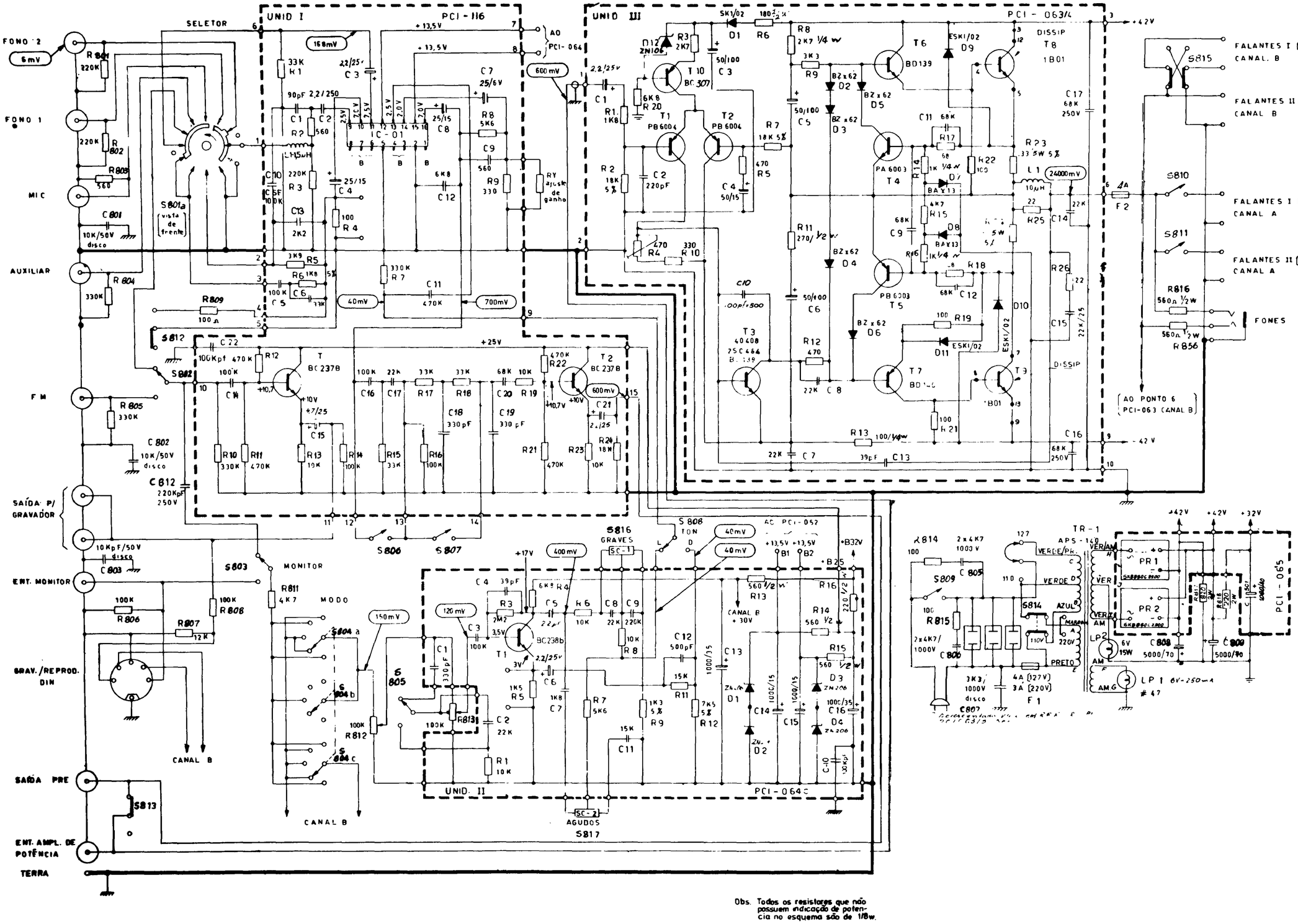
** SAÍDA MÁXIMA 15V

□ TENSÃO DE REDE 110V

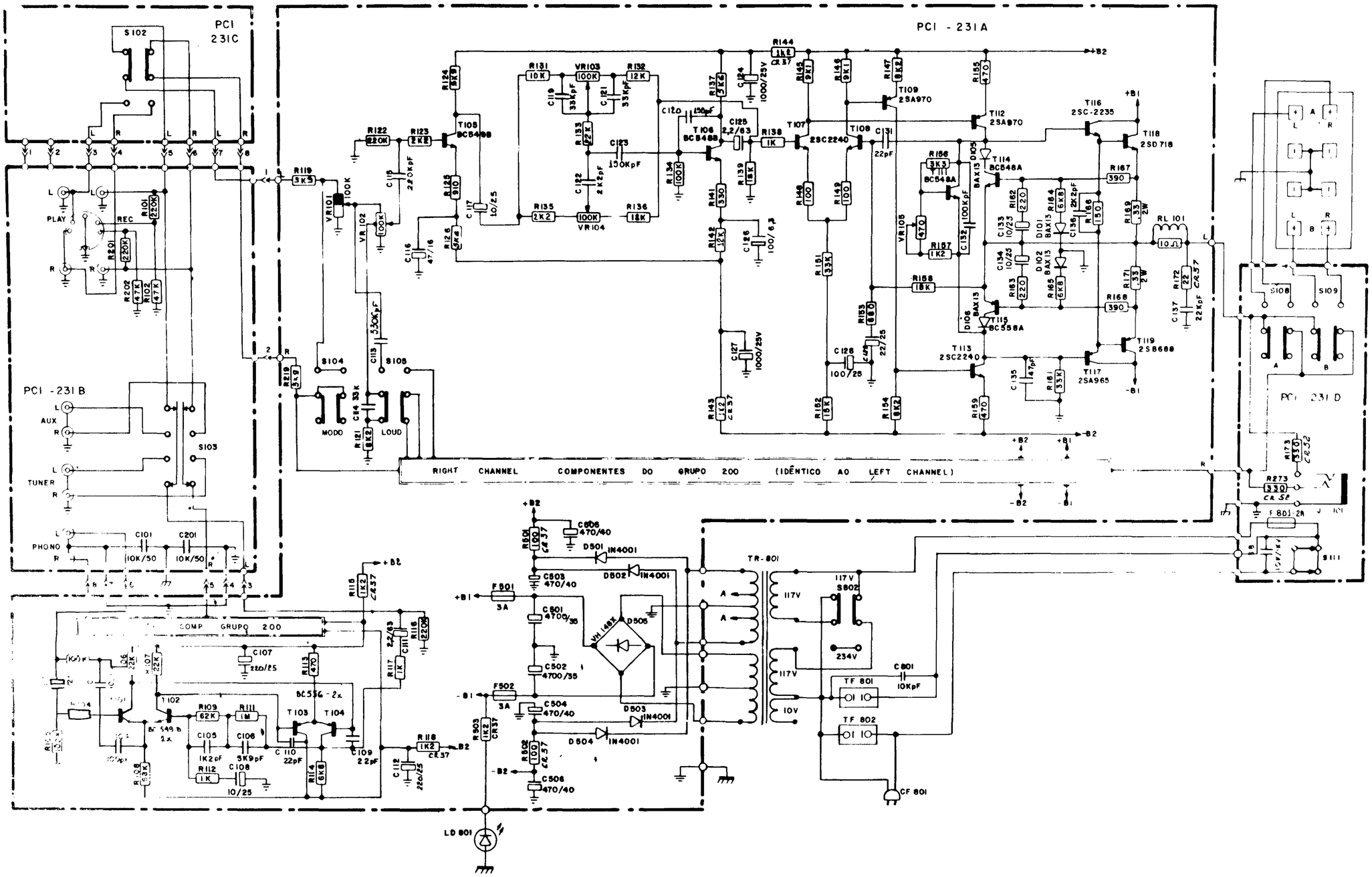
PRO - 1200 S

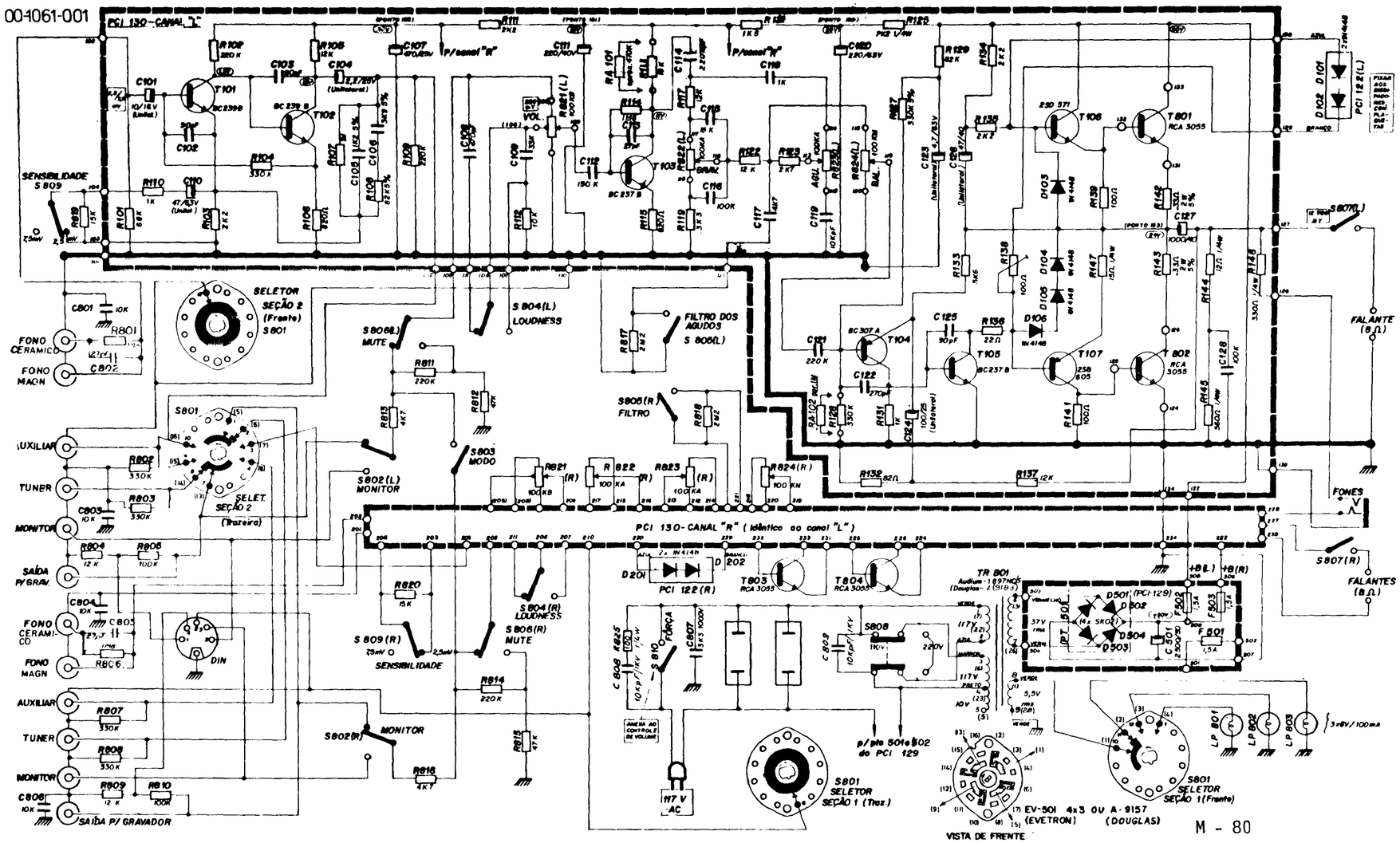

UNIDADE I
PRÉ-003S
PCI-091
UNIDADE II
AP-005 N
PCI-063/3
UNIDADE III
AP-005N
PCI-063
CANAL B
AGUDOS
R34 100KB LIN
S508A FILTRO GRAVES
S509A
S507A FILTRO AGUDOS
S506A LOUDNESS
S506B
R15 100KB VOLUME
R14 100K BALANÇO
R25 100KB LIN GRAVES
R524 330Ω MUTE 20 dB
S510A DIRETO EXT.
S510B
SAÍDA PRÉ
ENT POT
FONO 1
FONO 2
MIC
FM
AUX
SAÍDA CASSETE
SAÍDA GRAV.
ENT MONITOR
MONITOR
PH 2
PH 1
S501A
S501B
CH801
CH802
S502A
S502B
SELETOR
S503A MONITOR
S503B
S504
S505
MODO
ESTÉREO
MONO A
MONO B
R522 4K7
R523 4K7
DIN
IC-01
EQUIVALENTE - CA-3082
PT 4 CANAL-A PCI-063
A5 PCI-063
D5 AA113
D6 AA113
VU-4
R39
R41 6K8
R42 6K8
R124
R525 330Ω
+32V
-32V
+28V
+25V
+12V
SELETOR FALANTES
S514
S513 "NULL"
CONJ I
CONJ II
CANAL-A
CANAL-B
R528 20Ω 10W
R529 4,7Ω 8W
R531 20Ω 10W
R532 4,7Ω 8W
R533 330Ω 1/2W
R534 330Ω 1/2W
FONES
F502 4A
F503 4A
F501 3A
S511A B
S512
R526 100Ω 1/4W
R527 100Ω 1/4W
C507 2x4K7 1000V
C508 2x4K7 1000V
C509 3K3 1000V DISCO
VERDE
MARROM
PRETO
VERM
AM
AMARELO
T501 APS-75 VERM/AM
PR-301 SKB80C2200
PR-302 SKB80C2200
R302 68Ω 1W
R301 620Ω 2W
C303 1000/35
C301 5000/70
C302 5000/70
LP 301 6V 15W
LP501 VU
LP502 VU
LP507 LUZ
S502C
LP503
LP504 MODO
LP505
LP508 AUX
UNID VFNR-002 PCI-065/2
UNIDADE I PRÉ-003S PCI-091 R101 a R142 C101 a C131 T101 a T102 IC-01
CANAL-B
UNIDADE III AP-005N PCI-063 CANAL-B R101 a R126 C101 a C117 T101 a T109 D101 a D111

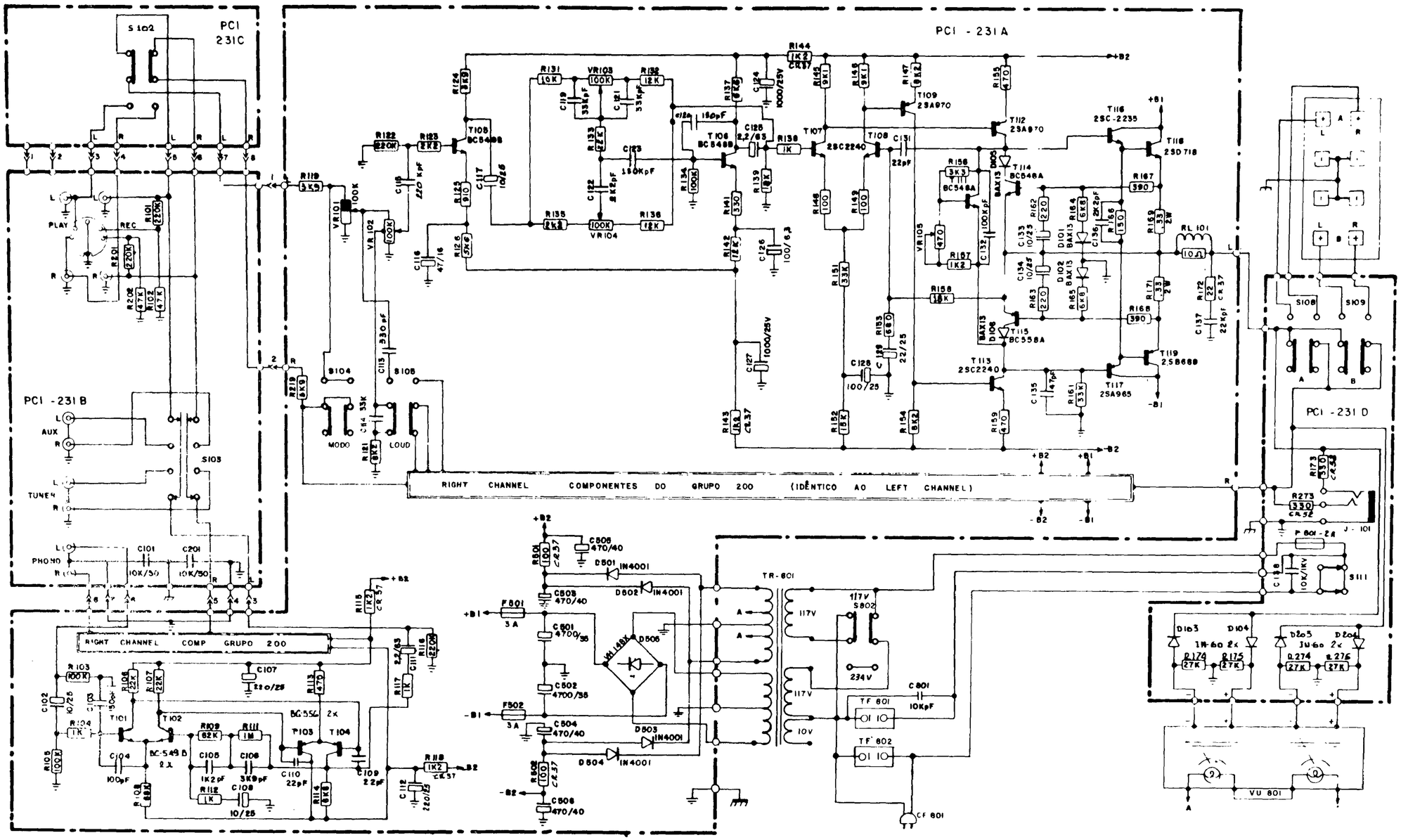
PRO - 2000 MK II

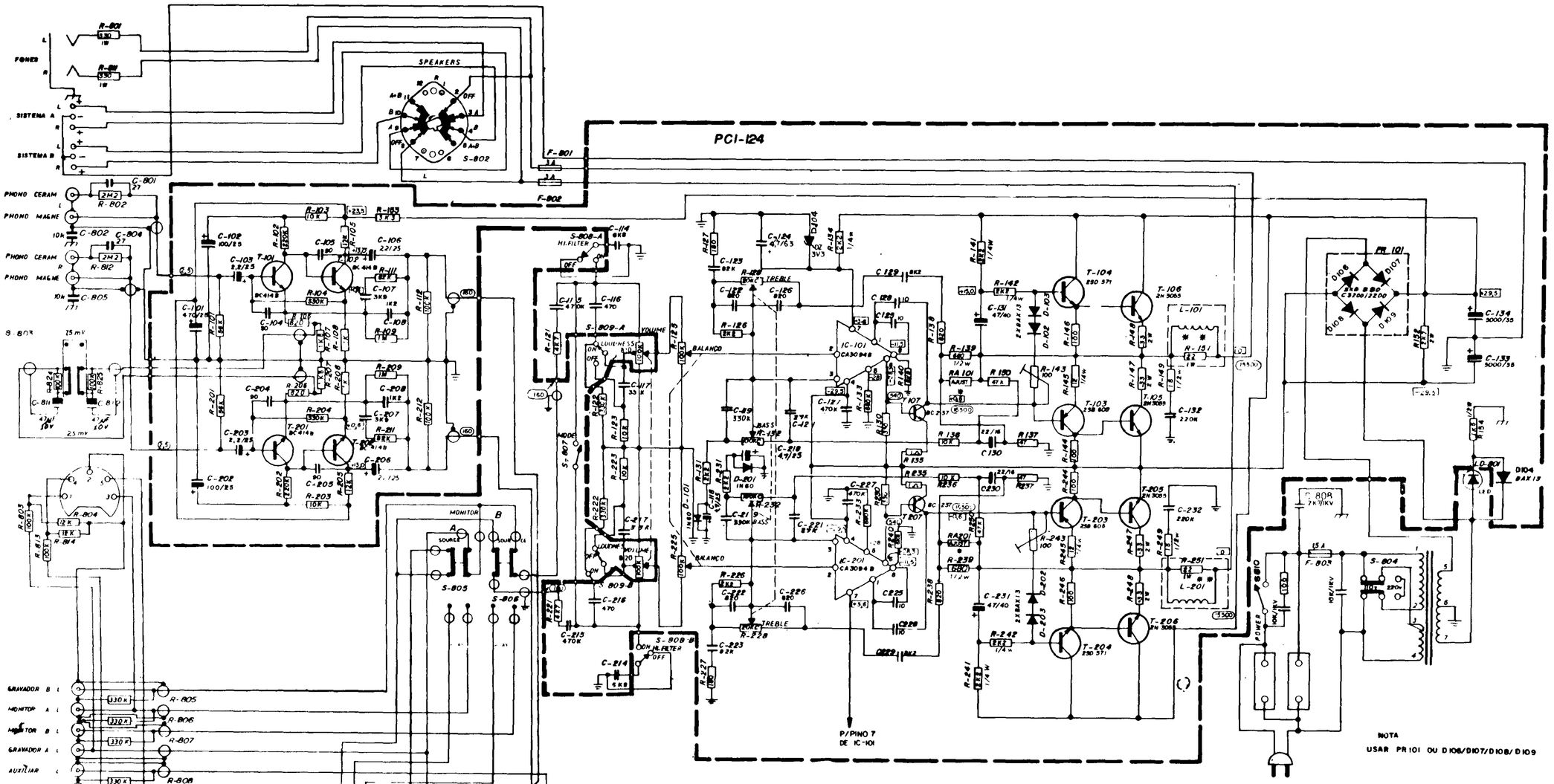


Obs. Todos os resistores que não possuem indicação de potencia no esquema são de 1/8w.


PCI 231C
PCI - 231A
PCI - 231B
PCI 231D
RIGHT CHANNEL COMPONENTES DO GRUPO 200 (IDÊNTICO AO LEFT CHANNEL)
COMP GRUPO 200
S102
S103
S104
S105
S108
S109
S111
MODO
LOUD
PLAY
REC
AUX
TUNER
PHONO
T101 BC548B 2x
T102 BF 549 B 2x
T103 T104
T105 BC548B
T106 BC548B
T107 2SC2240
T108 BC548B
T109 2SA970
T110 2SA970
T111 2SC2240
T112 2SA970
T113 2SC2240
T114 BC548A
T115 BC558A
T116 2SC-2235
T117 2SA965
T118 2SD718
T119 2SB668
D101 BAX13
D102 BAX13
D103 BAX13
D104 IN4001
D105 BAX13
D106 BAX13
D501 IN4001
D502 IN4001
D503 IN4001
D504 IN4001
D505 VM1.5KX
TR-801
117V
234V
10V
RL 101
10Ω
LD 801
F 801-2A
F801 3A
F502 3A
CF 801
TF 801
TF 802
+B2
+B1
-B2
-B1


004061-001
PCI 130-CANAL "L"
SENSIBILIDADE S 809
SELETOR SEÇÃO 2 (Frente) S 801
S 804(L) LOUDNESS
S 806(L) MUTE
FILTRO DOS AGUDOS S 805(L)
S805(R) FILTRO
S803 MODO
S802(L) MONITOR
SELET. SEÇÃO 2 (Traseira)
FONO CERAMICO
FONO MAGN
AUXILIAR
TUNER
MONITOR
SAÍDA P/GRAV.
DIN
S802(R) MONITOR
S 809(R) SENSIBILIDADE
S 804(R) LOUDNESS
S 806(R) MUTE
PCI 130-CANAL "R" (idêntico ao canal "L")
PCI 122(R)
TR 801
Audium-1837NCK (Douglas-Z1918)
S801 SELETOR SEÇÃO 1 (Traz.)
S801 SELETOR SEÇÃO 1 (Frente)
p/ pts 501 e 502 do PCI 129
117 V AC
EV-501 4x3 OU A-9157 (EVETRON) (DOUGLAS)
VISTA DE FRENTE
FALANTE (8 Ω)
FONES
FALANTES (8 Ω)
M - 80


PCI - 231 A
PCI 231C
PCI - 231 B
PCI - 231 D
RIGHT CHANNEL COMPONENTES DO GRUPO 200 (IDÊNTICO AO LEFT CHANNEL)
RIGHT CHANNEL COMP GRUPO 200
TR-601
VU 601
MODO
LOUD
PLAY
REC
AUX
TUNER
PHONO



NOTA
USAR PR 101 OU D106/D107/D108/D109

* - AJUSTADO NA PRODUÇÃO

[*] - VIDE DES. CÓD 90403005001

OBS DOS COMPONENTES

(1) CAPACITORES ELETROLITICOS EM µF (10^{-6}F), OUTROS EM pF (10^{-12}F)

(2) RESISTORES EM ohm (Ω) KΩ = 10^{3}Ω MΩ = 10^{6}Ω

(3) RESISTORES são 1/8w - 5% SALVO INDICAÇÕES

OBS DOS TERRAS

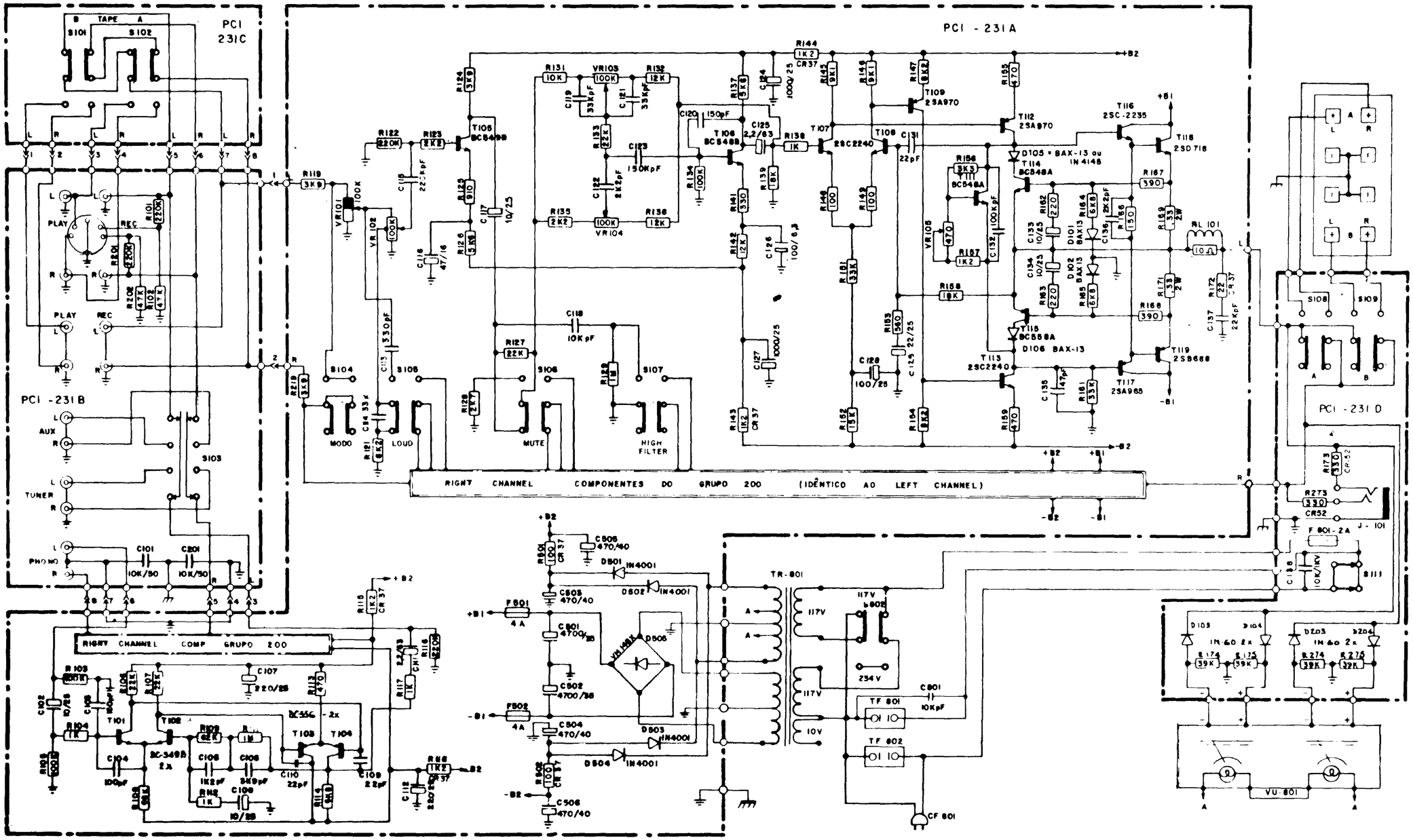
(1) ⏚ TERRA DE CHASSI

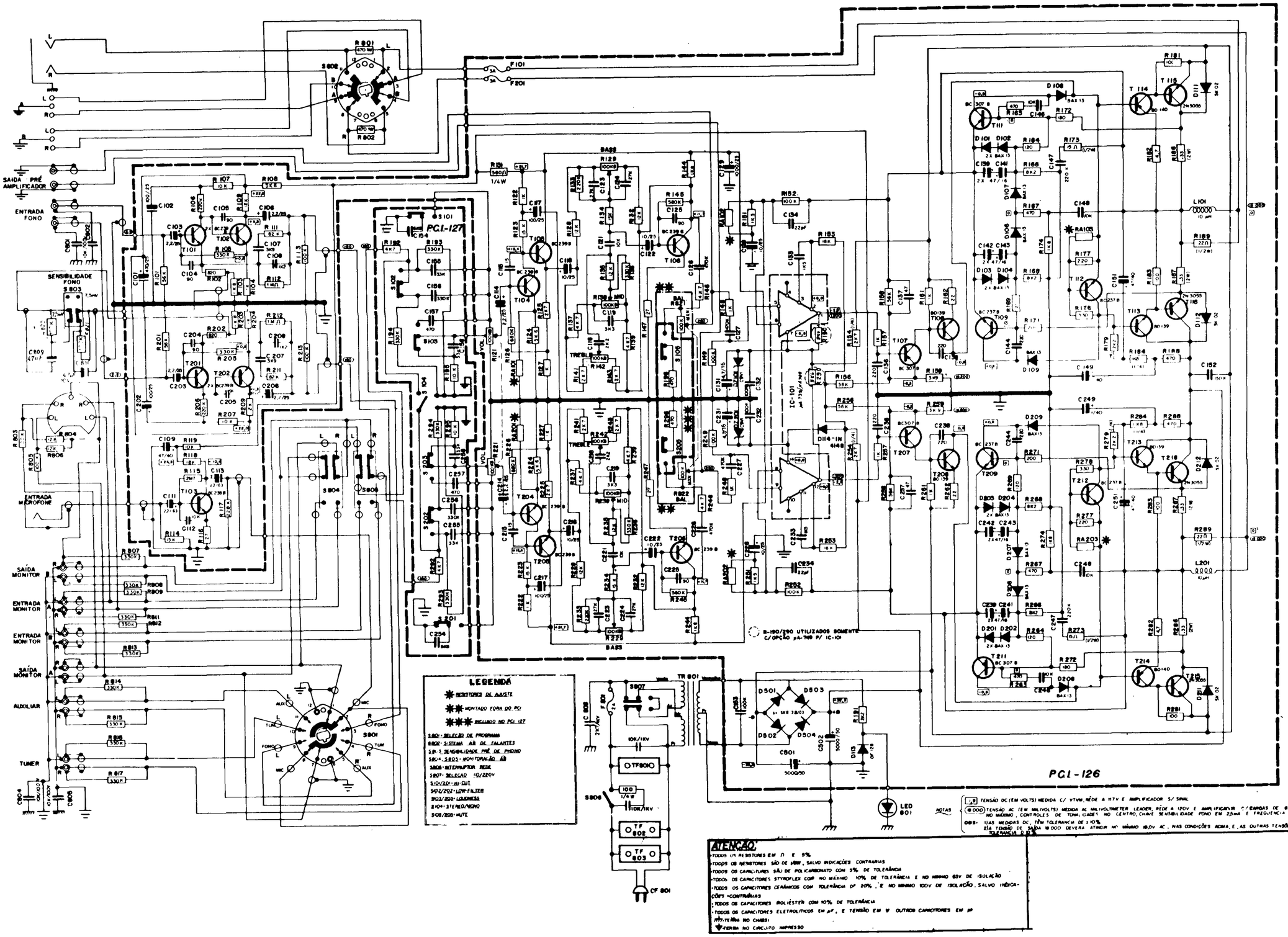
(2) ⏚ TERRA IMPRESSO

+3,6 TENSÃO DC (EM VOLTS) MEDIDA COM VTVM, RÊDE A 117v E AMPLIFICADOR S/ SINAL

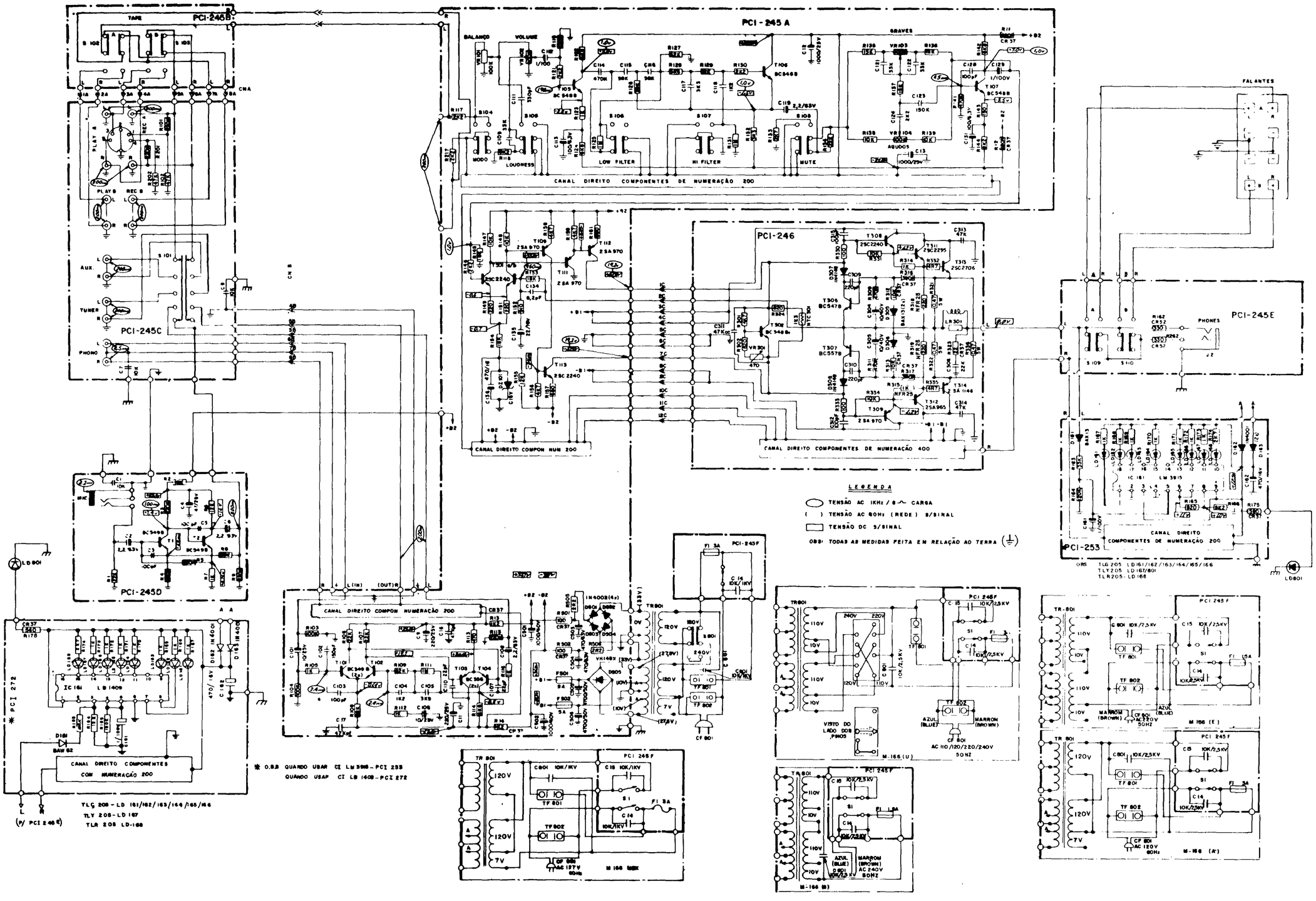
(15500) TENSÃO AC (EM MILIVOLTS) MEDIDA AC MILIVOLTMETER LEADER, RÊDE A 120v E AMPLIFICADOR COM CARGAS DE 8Ω, VOLUME NO MÁXIMO E CONTROLES DE TONALIDADE NO CENTRO CHAVE SENSIBILIDADE FONO EM 2,5 mV. FREQUÊNCIA 1000Hz

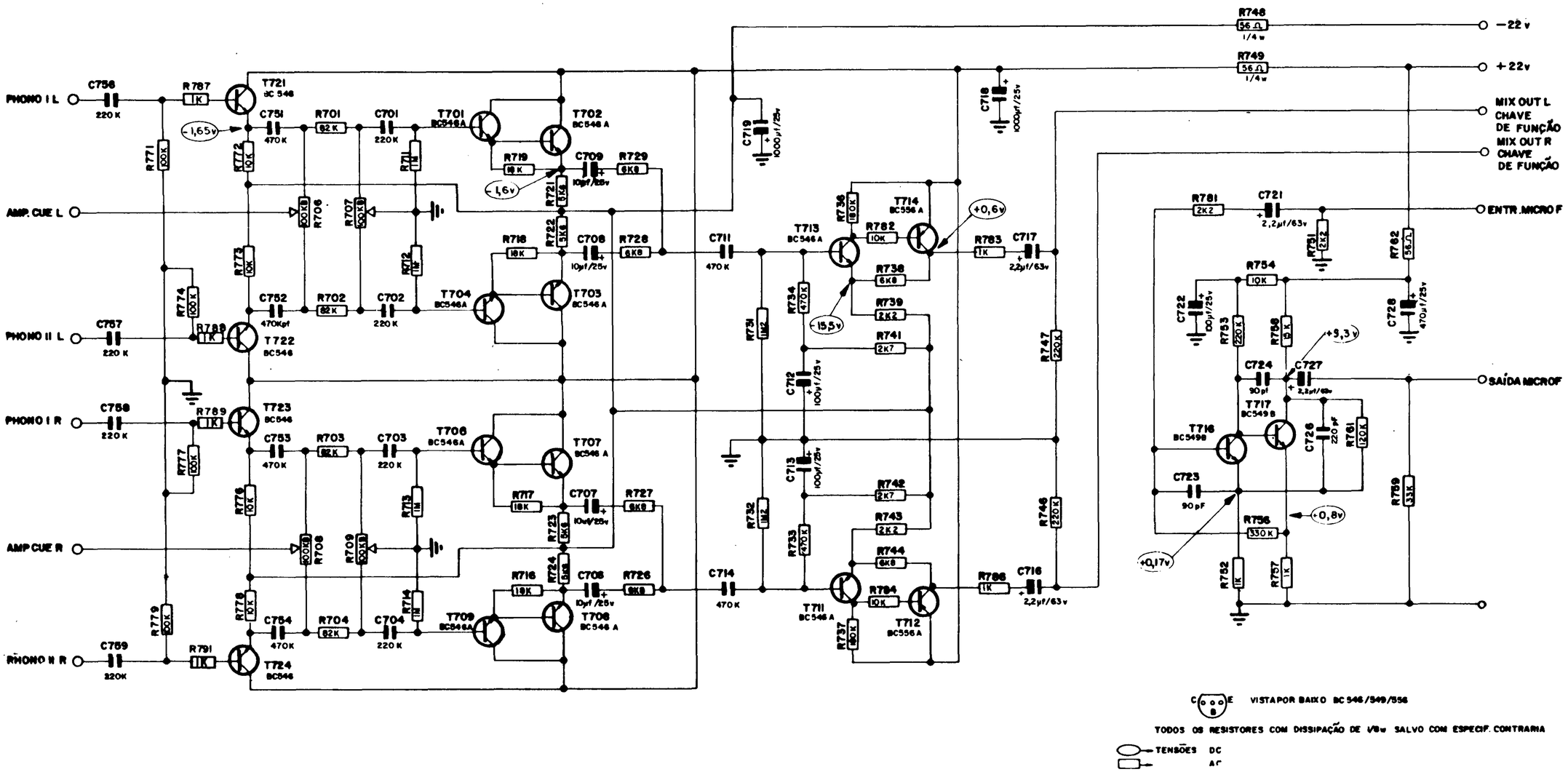
OBS-1- AS MEDIDAS DC TÊM TOLERÂNCIA DE ±10%.
2- A TENSÃO DE SAIDA (15500) DEVERÁ ATINGIR NO MINIMO 15,5 VAC, NAS CONDIÇÕES ACIMA E AS OUTRAS TENSÕES AC TEM TOLERÂNCIA DE ±10%

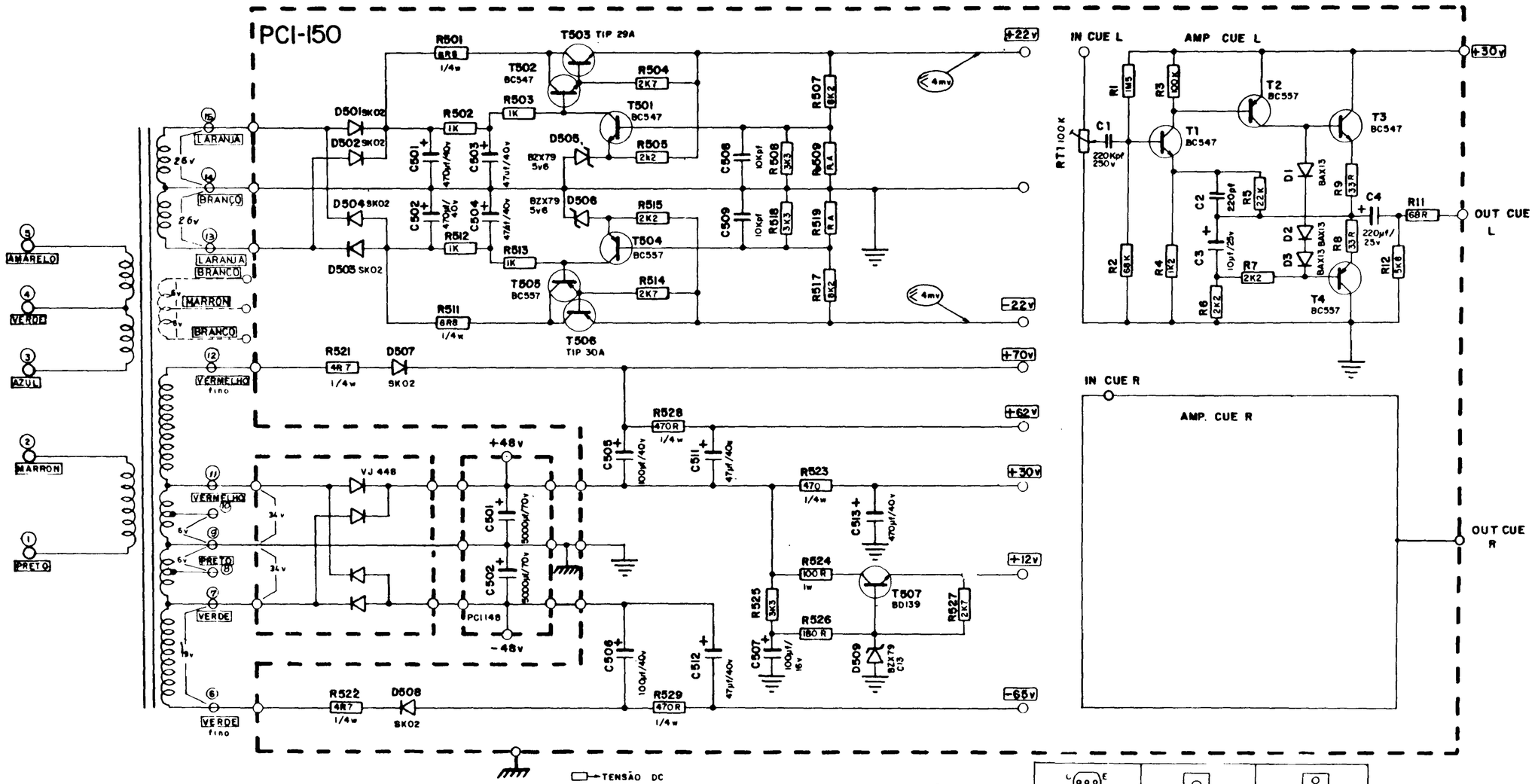

PCI 231C
PCI - 231A
PCI - 231B
PCI - 231D
TAPE
S101
S102
PLAY
REC
AUX
TUNER
PHONO
MODO
LOUD
MUTE
HIGH FILTER
RIGHT CHANNEL COMPONENTES DO GRUPO 200 (IDÊNTICO AO LEFT CHANNEL)
RIGHT CHANNEL COMP GRUPO 200
TR-801
F801 4A
F802 4A
TF 801
TF 802
CF 801
VU-801
J - 101
F 801 - 2A
RL 101
D105 = BAX-13 ou IN 4148
D106 BAX-13
IN4001
IN60 2x
BC-549B 2x
BC-556 - 2x


PCI-127
PCI-126
SAIDA PRÉ AMPLIFICADOR
ENTRADA FONO
SENSIBILIDADE FONO
ENTRADA MICROFONE
SAÍDA MONITOR
ENTRADA MONITOR
ENTRADA MONITOR
SAÍDA MONITOR
AUXILIAR
TUNER
BASS
TREBLE
BAL
VOL
IC-101
TR 801
LED 801
CF 801
LEGENDA
* RESISTORES DE AJUSTE
** MONTADO FORA DO PCI
*** INCLUIDO NO PCI 127
S801 - SELEÇÃO DE PROGRAMA
S802 - SISTEMA A/B DE FALANTES
S803 - SENSIBILIDADE PRÉ DE FONO
S804, S805 - MONITORAÇÃO A/B
S806 - INTERRUPTOR REDE
S807 - SELEÇÃO 110/220V
S101/201 - IN-OUT
S402/202 - LOW FILTER
S403/203 - LOUDNESS
S404 - STEREO/MONO
S405/205 - MUTE
R-190/290 UTILIZADOS SOMENTE C/OPÇÃO µA-748 P/ IC-101
ATENÇÃO
NOTAS

M - 166/E/G/U/A/MEX




PHONO I L
PHONO II L
PHONO I R
PHONO II R
AMP. CUE L
AMP CUE R
C756 220 K
C757 220 K
C758 220 K
C759 220K
R787 1K
R789 1K
R788 1K
R791 1K
T721 BC 548
T722 BC546
T723 BC546
T724 BC546
C751 470 K
C752 470Kpf
C753 470 K
C754 470K
R701 82 K
R702 82K
R703 82K
R704 82K
C701 220 K
C702 220 K
C703 220 K
C704 220 K
R771 100K
R772 10K
R773 10K
R774 100 K
R776 10K
R777 100K
R778 10K
R779 50K
R706 100KB
R707 100KB
R708 100KB
R709 100KB
R712 1M
R713 1M
R714 1M
T701 BC546A
T704 BC546A
T706 BC546A
T709 BC546A
T702 BC546 A
T703 BC546 A
T707 BC546 A
T708 BC546 A
R719 18 K
R721 15K
R722 3K9
R723 15K
R724 3K9
R716 18K
R717 18K
R718 18K
C709 10pf/25v
C708 10pf/25v
C707 10pf/25v
C706 10pf/25v
R729 6K8
R728 6K8
R727 6K8
R726 6K8
C719 1000µf/25v
C711 470 K
C714 470 K
R731 1M2
R732 1M2
R734 470K
R733 470K
T713 BC546 A
T711 BC546 A
R736 180K
R737 180K
T714 BC556 A
T712 BC556 A
R782 10K
R738 6K8
R739 2K2
R741 2K7
R742 2K7
R743 2K2
R744 6K8
R784 10K
C712 100µf/25v
C713 100µf/25v
C716 1000µf/25v
R783 1K
R786 1K
C717 2,2µf/63v
C718 2,2µf/63v
R747 220K
R746 220K
R748 56Ω 1/4w
R749 56Ω 1/4w
-1,65v
-1,6v
-15,5v
+0,6v
-22 v
+22v
MIX OUT L CHAVE DE FUNÇÃO
MIX OUT R CHAVE DE FUNÇÃO
ENTR.MICRO F
SAÍDA MICROF
R781 2K2
C721 2,2µf/63v
R731 2K2
R762 56Ω
R754 10K
C722 100µf/25v
R753 220K
R755 5K
C728 470µf/25v
+3,3v
C724 90pf
C727 2,2µf/63v
T717 BC549B
T716 BC549B
C726 220 pF
R761 120K
C723 90pF
R756 330K
+0,8v
+0,17v
R759 33K
R752 1K
R757 1K
C E B
VISTA POR BAIXO BC 546/549/556
TODOS OS RESISTORES COM DISSIPAÇÃO DE 1/8w SALVO COM ESPECIF. CONTRARIA
TENSÕES DC
AC

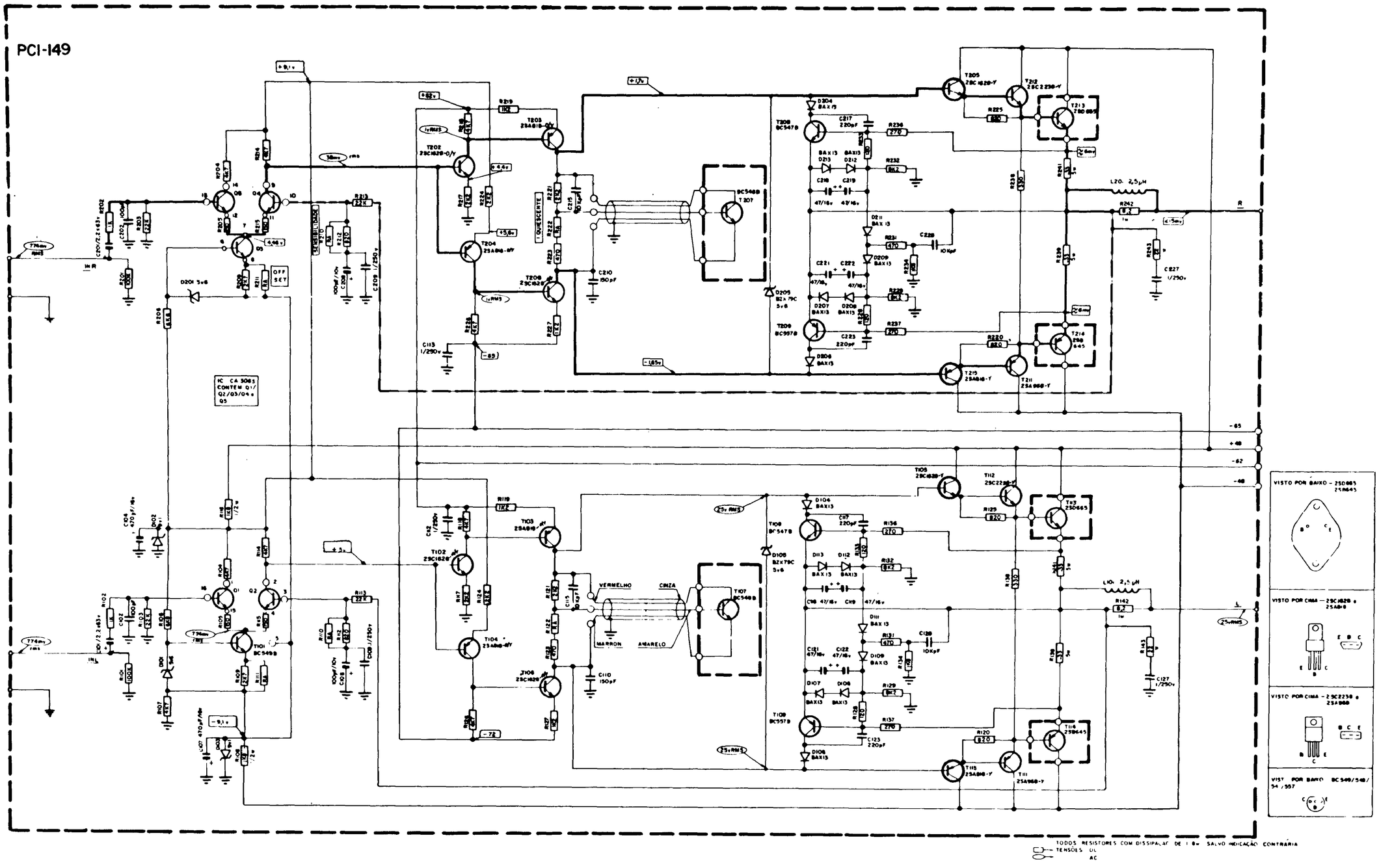


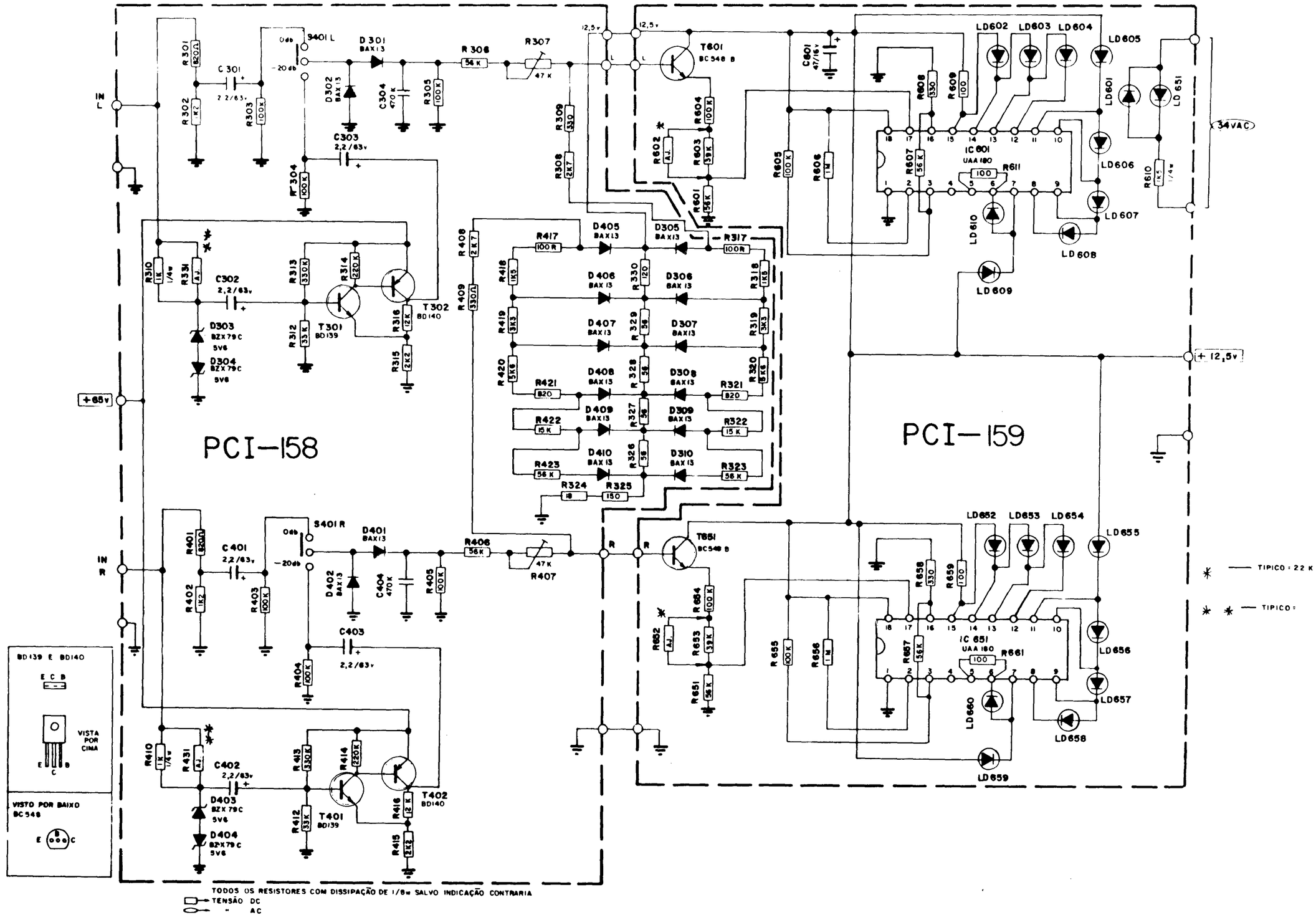
Observações:
1- Todos os resistores em Ω, e resistores sem indicação de dissipação são ⅛w - 5%.
2- Capacitores eletrolítico em μF/v e os outros em pF.
3- Indicação dos terminais do transformador são os seguintes:
○ Avdium 4078/4a3 ▭ Neodifer, Douglas, AP3, (Tipo E-I)
4- Os fios de enrolamento 6v+6v (Branco-Marron, Branco) serão usados nos VU's c/ os PCI's 181/182 e 193, portanto p/o VU atual c/ os PCI's 138/153 estes fios deverão ser isolados entre si com espaguete nas pontas de cada fio e depois enrolados c/ fita isolante (p/ transf. tipo E-I)
5- P/ transf. tipo Avdium 4078/4a3 deixar os terminais 8 e 10 em aberto.
6- O fio Amarelo do primário deve ser isolado com espaguete, quando usado o transformador tipo E-I. Quando usado o transformador tipo Avdium 4078/4a3 deixar em aberto.

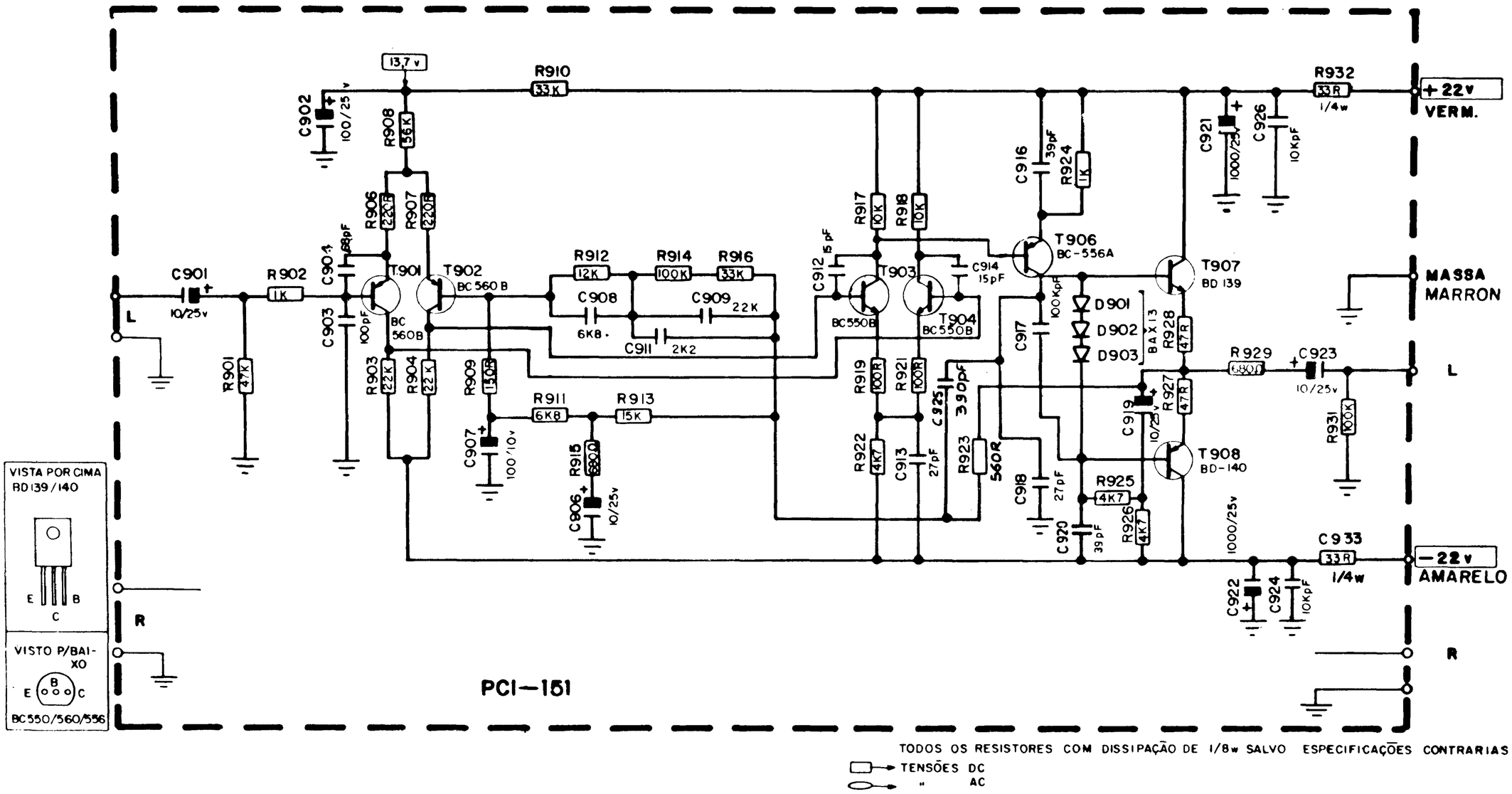
TENSÃO DC
" AC

VISTO POR BAIXO BC547/557
VISTA POR CIMA BD139
VISTA POR CIMA TIP29/30

PCI-149


+9,1v
+6,2v
+1,7v
+5,6v
+4,6v
-9,1v
-8,9v
-7,8v
-6,5v
-16,5v
774mv rms
IN R
IN L
30mv rms
1v RMS
25v RMS
+5v
-8,9v
FC CA 5083 CONTEM Q1/ Q2/Q3/Q4 e Q5
D201 5v6
D202 5v6
D203 5v6
D204 BAX13
D205 BZX79C 5v6
D206 BAX13
D207 BAX13
D208 BAX13
D209 BAX13
D210 BAX13
D211 BAX13
D212 BAX13
D213 BAX13
D101 BAX13
D102 BAX13
D103 BAX13
D104 BAX13
D105 BAX13
D106 BAX13
D107 BAX13
D108 BAX13
D109 BZX79C 5v6
T201 BC548B
T202 2SC1628-O/Y
T203 2SA816-O/Y
T204 2SA816-GR
T205 2SC1628-Y
T206 2SC1628
T207 BC548B
T208 BC557B
T209 BC557B
T212 2SC2238-Y
T213 2SB605
T214 2SB645
T215 2SA816-Y
T211 2SA968-Y
T101 BC548B
T102 2SC1628-O/Y
T103 2SA816-O/Y
T104 2SA816-GY
T105 2SC1628-Y
T106 BC548B
T107 BC548B
T108 BC557B
T109 BC557B
T112 2SC2238-Y
T113 2SB605
T114 2SB645
T115 2SA816-Y
T111 2SA968-Y
L201: 2,5µH
L101: 2,5µH
VERMELHO
CINZA
MARROM
AMARELO
- 65
+ 48
- 62
- 48
VISTO POR BAIXO - 2SD665 2SB645
VISTO POR CIMA - 2SC1628 e 2SA816
VISTO POR CIMA - 2SC2238 e 2SA968
VIST. POR BAIXO BC548/548/ 54 /557
TODOS RESISTORES COM DISSIPAÇÃO DE 1 8w SALVO INDICAÇÃO CONTRÁRIA
TENSÕES DC
AC

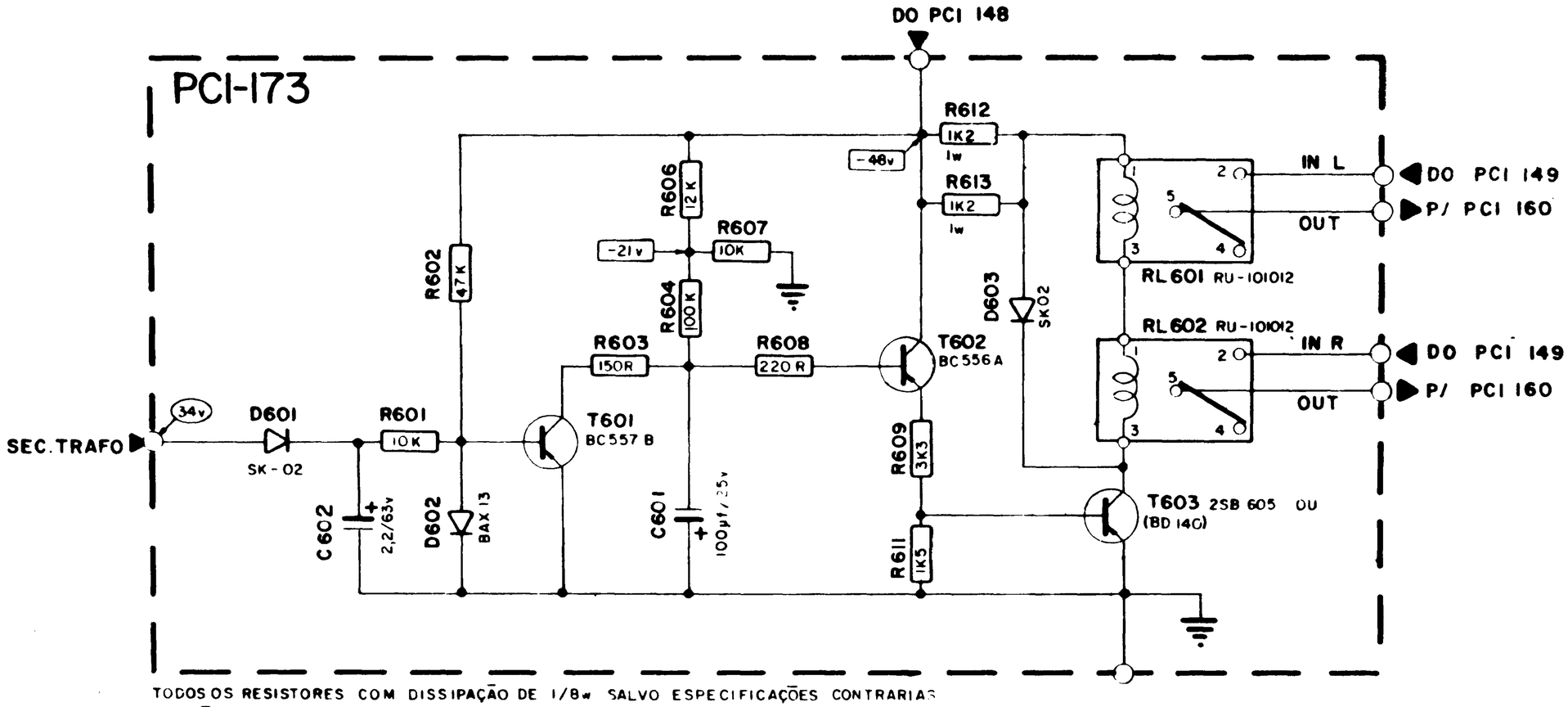

PCI-158
PCI-159
IN L
IN R
+65v
+12,5v
34VAC
12,5v
S401 L
S401 R
0db
-20db
D301 BAX13
D401 BAX13
D302 BAX13
D402 BAX13
R306 56K
R307 47K
R406 56K
R407 47K
C301 2,2/63v
C401 2,2/63v
C303 2,2/63v
C403 2,2/63v
C304 470K
C404 470K
R301 820Ω
R401 820Ω
R302 1K2
R402 1K2
R303 100K
R403 100K
R304 100K
R404 100K
R305 100K
R405 100K
R309 330
R308 2K7
R408 2K7
R409 330Ω
R602 A.J.
R603 39K
R604 100K
R601 56K
R652 A.J.
R653 33K
R654 100K
R651 56K
T601 BC548 B
T651 BC548 B
C601 47/16v
R605 100K
R606 1M
R655 100K
R656 1M
R608 330
R609 100
R658 330
R659 100
R607 56K
R657 56K
IC 601 UAA 180
IC 651 UAA 180
R611 100
R661 100
R610 1K5 1/4w
LD601
LD602
LD603
LD604
LD605
LD606
LD607
LD608
LD609
LD610
LD651
LD652
LD653
LD654
LD655
LD656
LD657
LD658
LD659
LD660
C302 2,2/63v
C402 2,2/63v
R310 1K 1/4w
R331 A.J.
R410 1K 1/4w
R431 A.J.
R313 330K
R413 330K
R314 220K
R414 220K
R312 33K
R412 33K
R316 12K
R416 12K
R315 2K2
R415 2K2
T302 BD140
T301 BD139
T402 BD140
T401 BD139
D303 BZX79C 5V6
D304 BZX79C 5V6
D403 BZX79C 5V6
D404 BZX79C 5V6
R417 100R
R317 100R
D405 BAX13
D305 BAX13
D406 BAX13
D306 BAX13
D407 BAX13
D307 BAX13
D408 BAX13
D308 BAX13
D409 BAX13
D309 BAX13
D410 BAX13
D310 BAX13
R418 1K5
R318 1K5
R419 3K3
R319 3K3
R420 5K6
R320 5K6
R421 820
R321 820
R422 15K
R322 15K
R423 56K
R323 56K
R324 18
R325 150
R330 120
R329 56
R328 56
R327 56
R326 56
BD139 E BD140
E C B
VISTA POR CIMA
VISTO POR BAIXO BC548
TODOS OS RESISTORES COM DISSIPAÇÃO DE 1/8w SALVO INDICAÇÃO CONTRARIA
TENSÃO DC
" AC
TIPICO = 22 K
TIPICO =

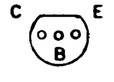
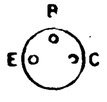
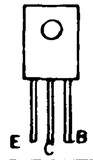
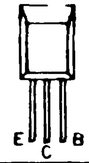


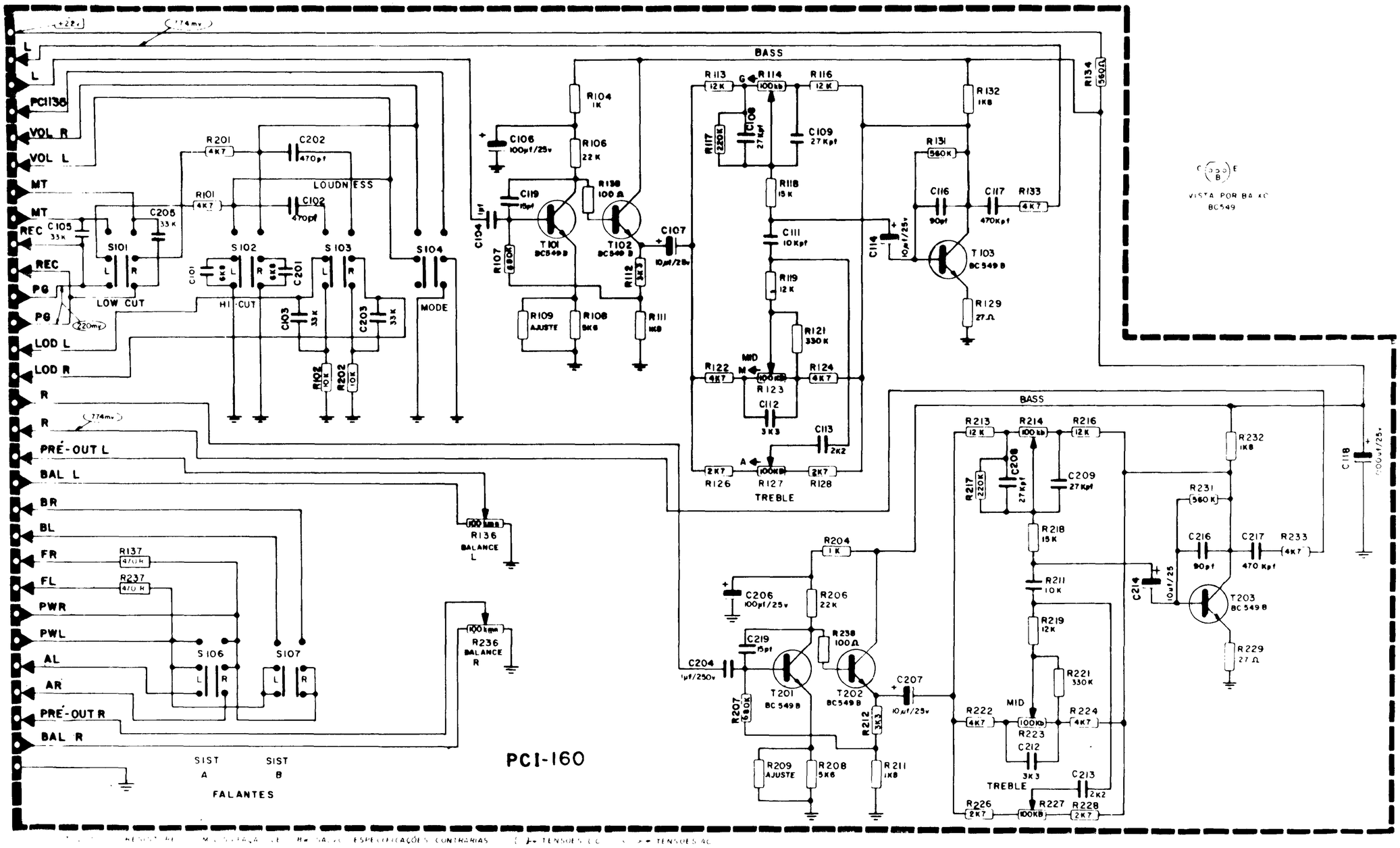
TODOS OS RESISTORES COM DISSIPAÇÃO DE 1/8w SALVO ESPECIFICAÇÕES CONTRARIAS

TENSÕES DC

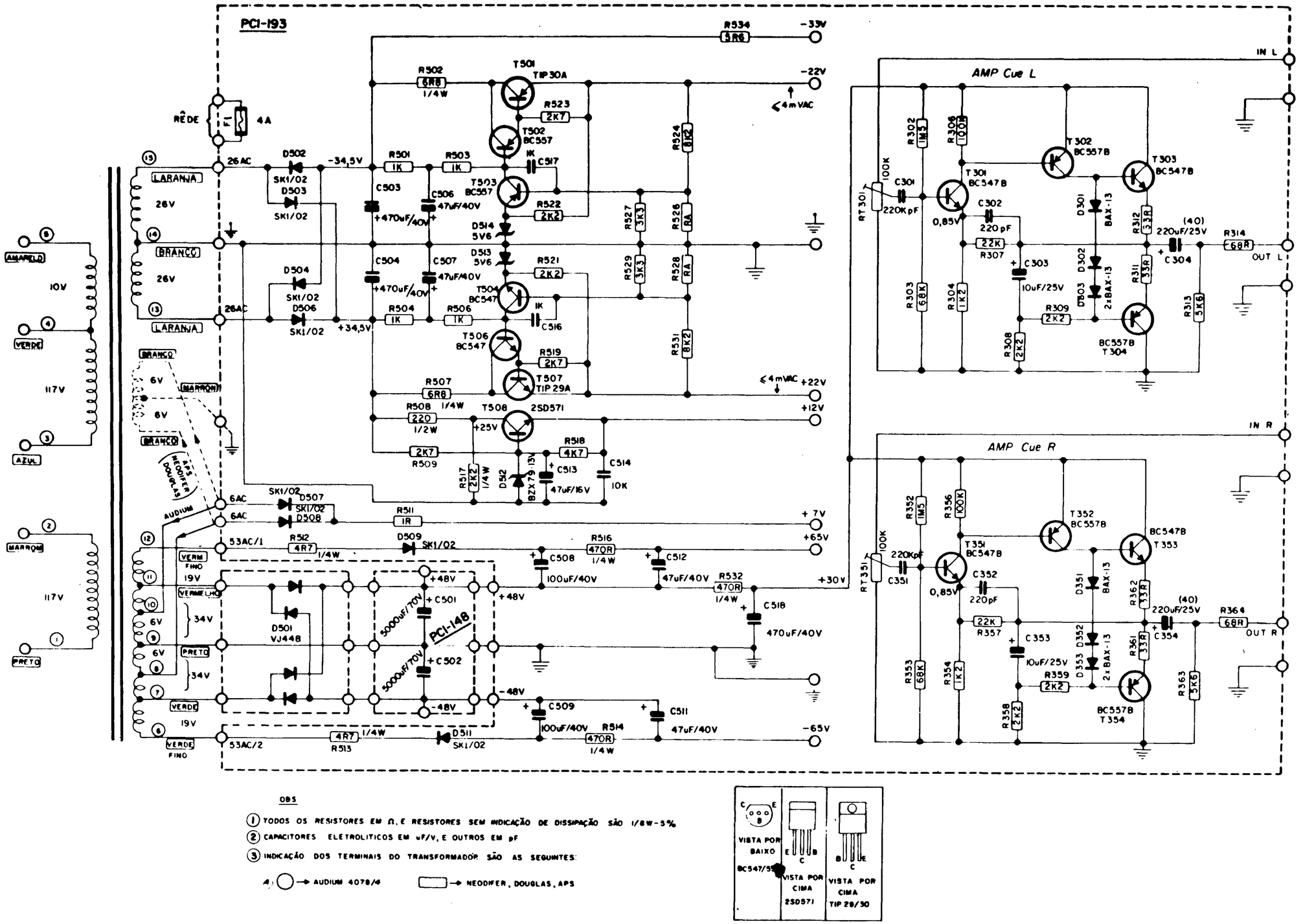
" AC



VISTO POR BAIXO BC556/557	VISTO POR BAIXO PB 6004	VISTA POR CIMA BD140	VISTA POR CIMA 2SB 605
			


L
L
PCI136
VOL R
VOL L
MT
MT
REC
REC
PG
PG
LOD L
LOD R
R
R
PRÉ-OUT L
BAL L
BR
BL
FR
FL
PWR
PWL
AL
AR
PRÉ-OUT R
BAL R
+22v
774mv
220mv
R201 4K7
C202 470pf
LOUDNESS
R101 4K7
C102 470pf
C105 33K
C205 33K
S101
LOW CUT
S102
HI-CUT
S103
S104
MODE
C101 6K8
C201 6K8
C103 33K
C203 33K
R102 10K
R202 10K
R104 1K
R106 22K
C106 100pf/25v
C119 15pf
C104 1pf
R107 680K
R138 100Ω
T101 BC549B
T102 BC549B
C107 10µf/25v
R112 3K3
R109 AJUSTE
R108 5K6
R111 1K8
BASS
R113 12K
R114 100kb
R116 12K
G
C108 27Kpf
C109 27Kpf
R117 220K
R118 15K
C111 10Kpf
R119 12K
R121 330K
MID
M
R122 4K7
R123
R124 4K7
C112 3K3
C113 2K2
A
R126 2K7
R127 100KB
R128 2K7
TREBLE
R132 1K8
R131 560K
C116 90pf
C117 470Kpf
R133 4K7
T103 BC549B
R129 27Ω
C114 10µf/25v
R134 560Ω
C118 100µf/25v
R136 100kohm
BALANCE L
R236 100kohm
BALANCE R
R137 470R
R237 470R
S106
S107
SIST A
SIST B
FALANTES
PCI-160
R204 1K
C206 100pf/25v
R206 22K
C219 15pf
R238 100Ω
C204 1µf/250v
T201 BC549B
T202 BC549B
C207 10µf/25v
R207 680K
R212 3K3
R209 AJUSTE
R208 5K6
R211 1K8
R213 12K
R214 100kb
R216 12K
C208 27Kpf
C209 27Kpf
R217 220K
R218 15K
R211 10K
R219 12K
R221 330K
MID
R222 4K7
R223 100Kb
R224 4K7
C212 3K3
C213 2K2
TREBLE
R226 2K7
R227 100KB
R228 2K7
R232 1K8
R231 560K
C216 90pf
C217 470 Kpf
R233 4K7
T203 BC549B
R229 27Ω
C214 10µf/25
C118 100µf/25v
VISTA POR BAIXO
BC549
ESPECIFICAÇÕES CONTRÁRIAS
TENSÕES DC
TENSÕES AC

M - 360 - MONTADO C/ PCI 181/182 NO VU



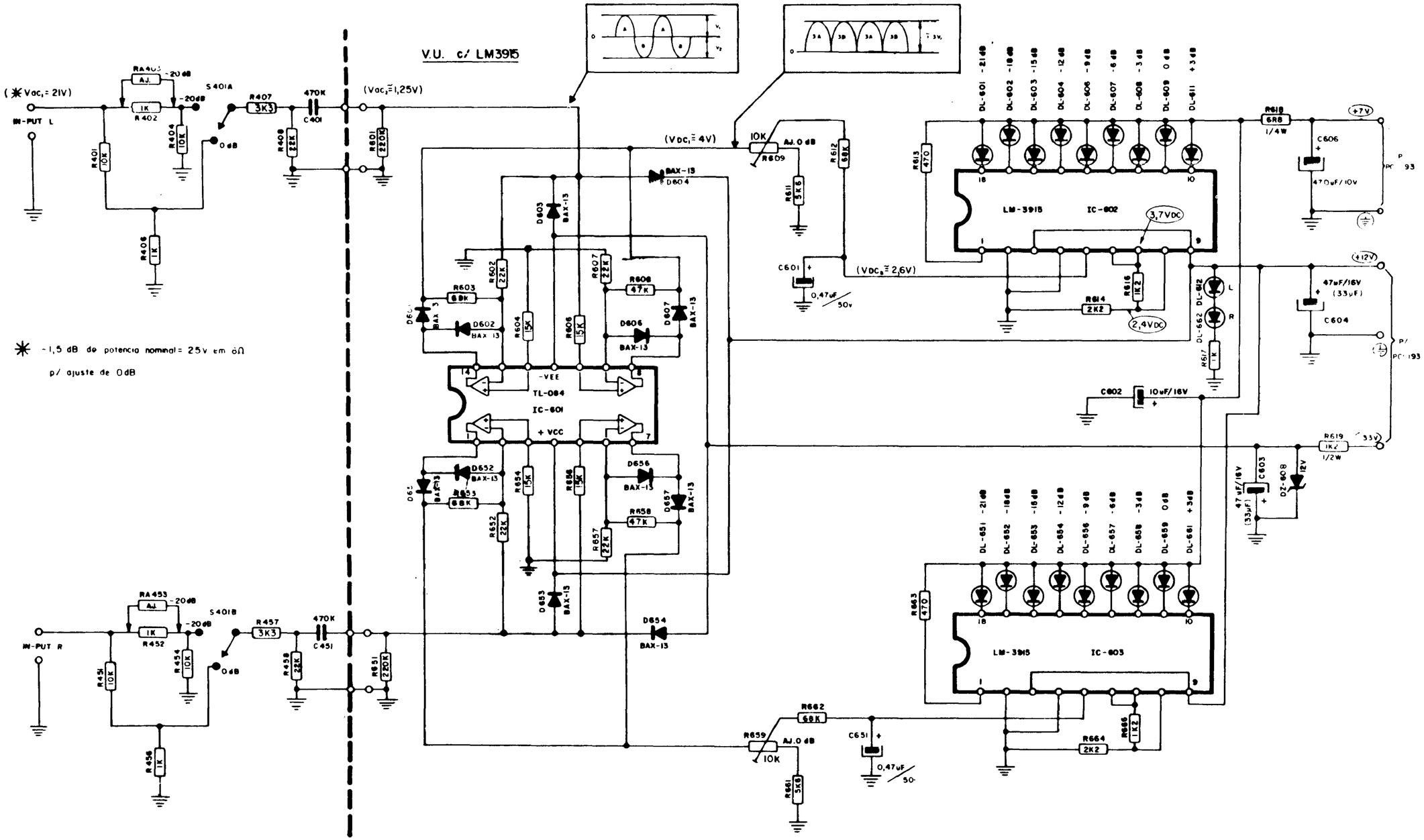
OBS

(1) TODOS OS RESISTORES EM Ω, E RESISTORES SEM INDICAÇÃO DE DISSIPAÇÃO SÃO 1/8W-5%

(2) CAPACITORES ELETROLITICOS EM uF/V, E OUTROS EM pF

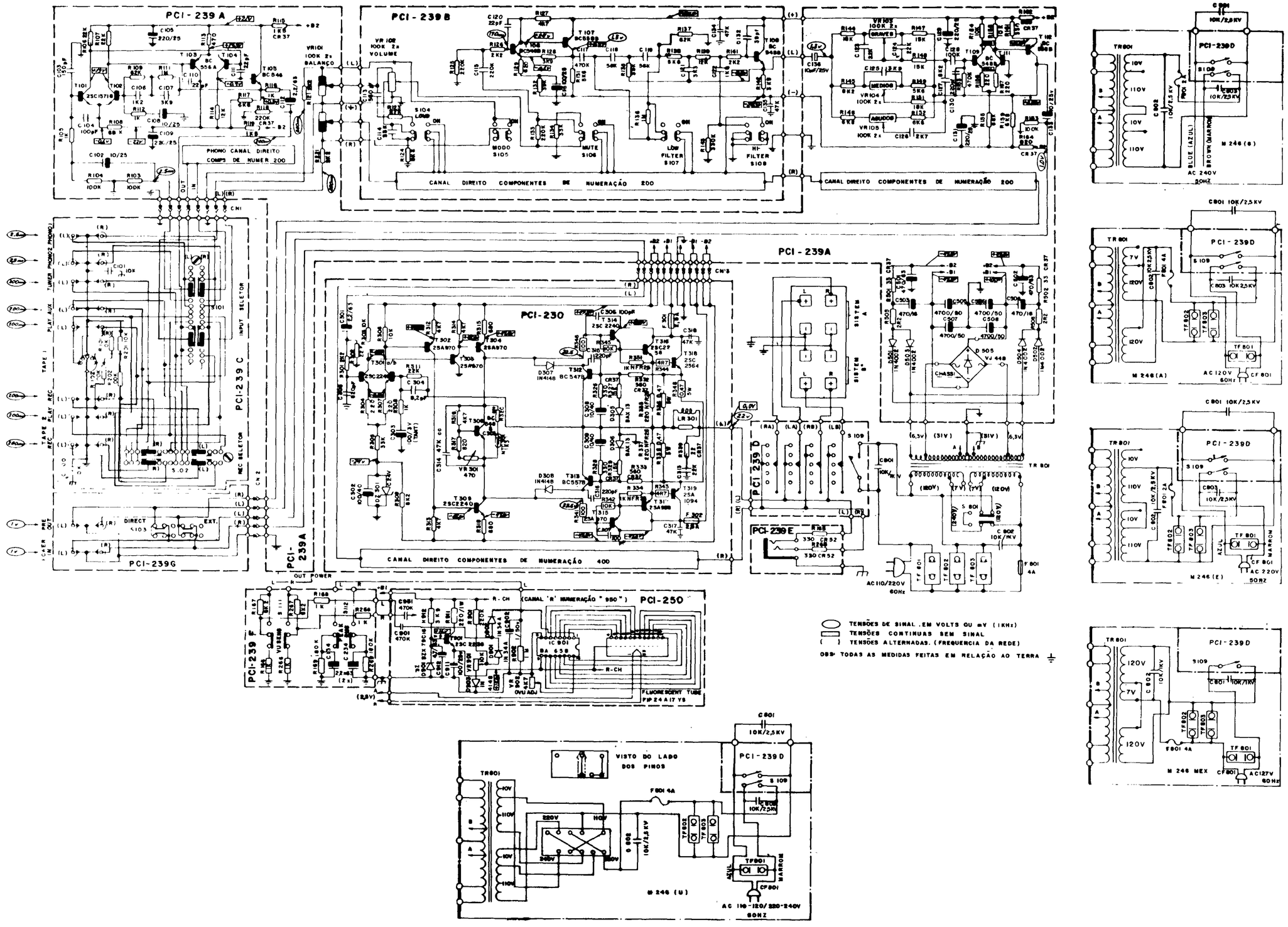
(3) INDICAÇÃO DOS TERMINAIS DO TRANSFORMADOR SÃO AS SEGUINTES:

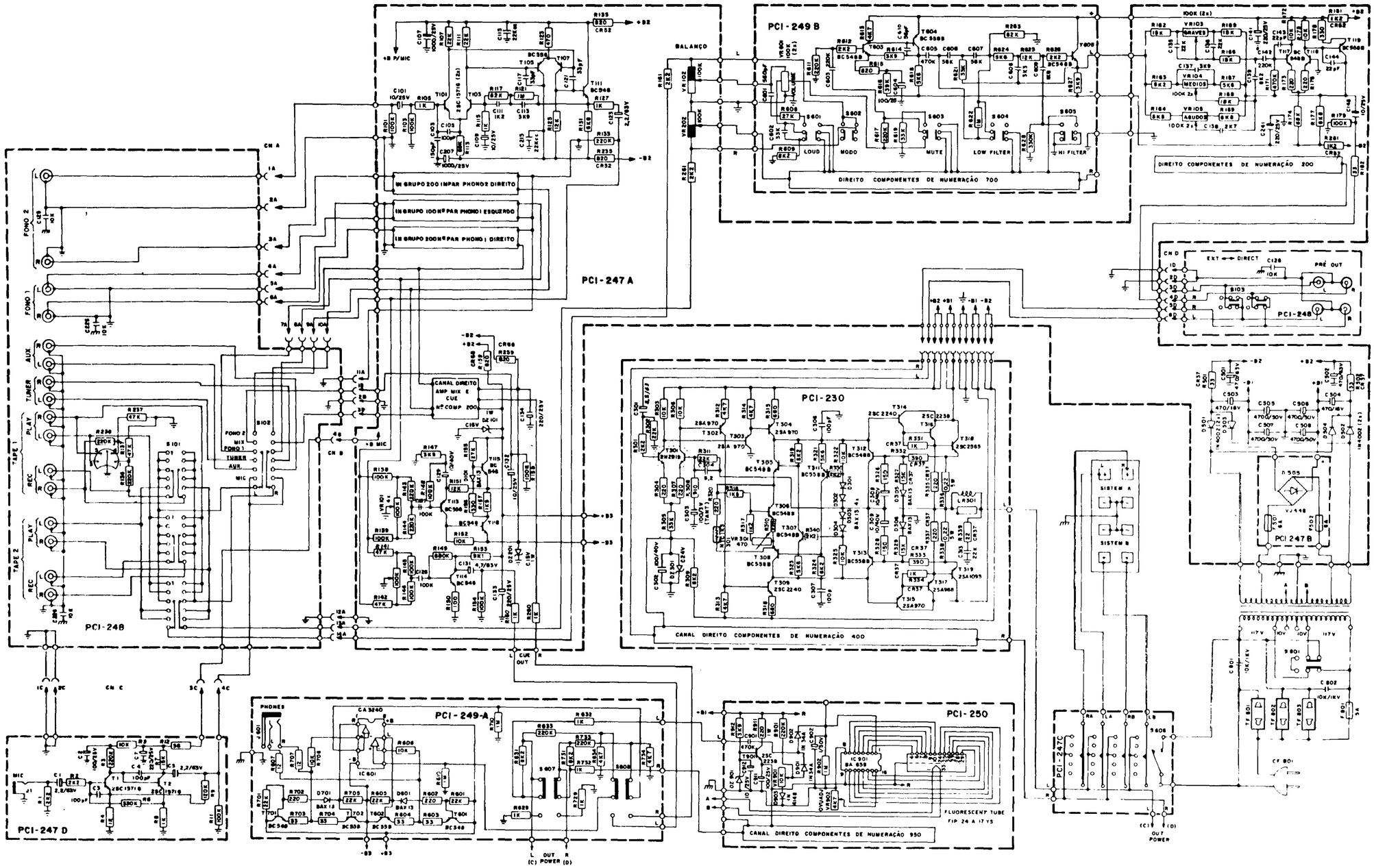
(4) ◯ → AUDIUM 4078/4 ▭ → NEODIFER, DOUGLAS, APS



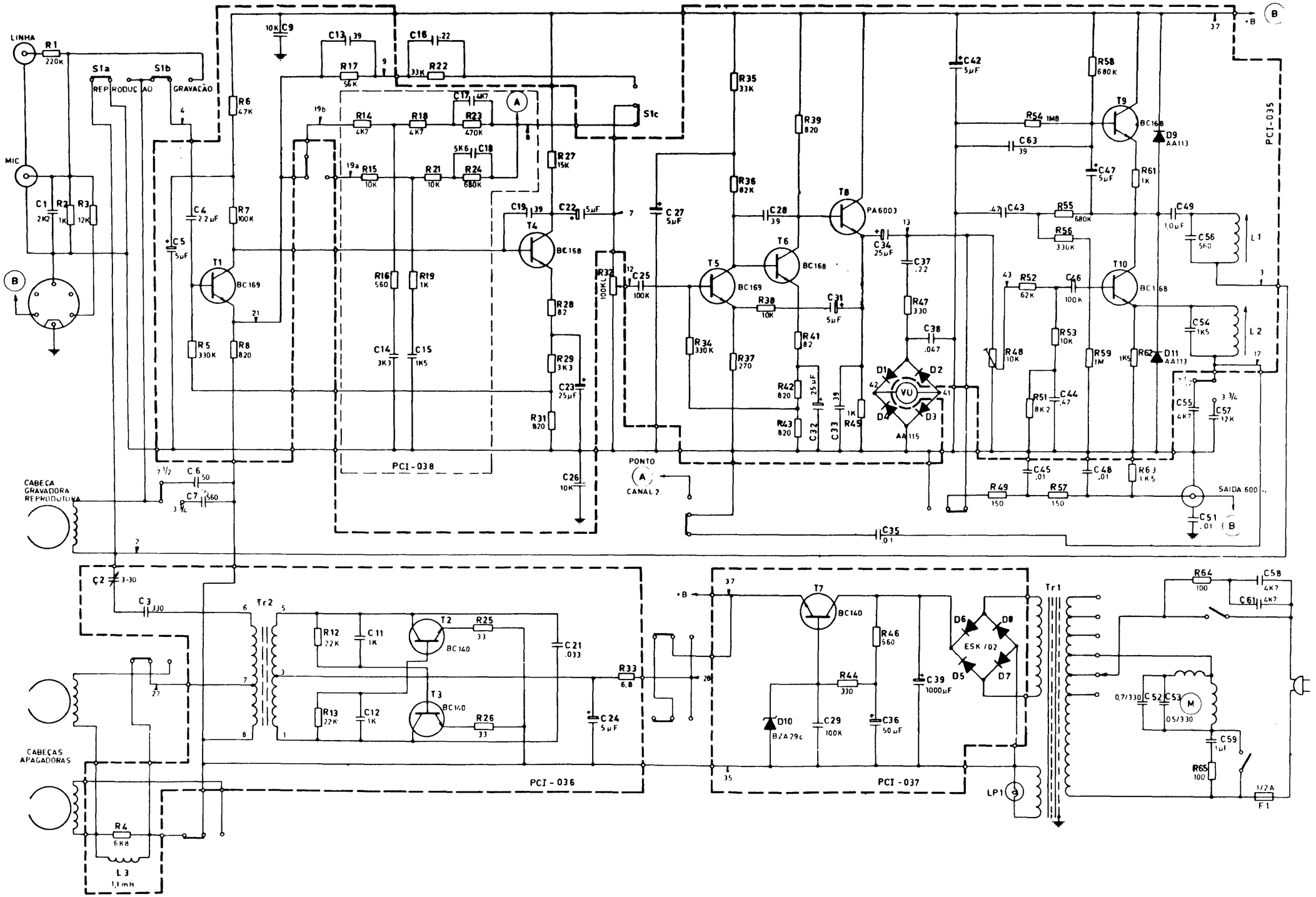
✱ -1,5 dB de potencia nominal = 25V em 6Ω
p/ ajuste de 0dB

M - 246/E/G/U/A/MEX

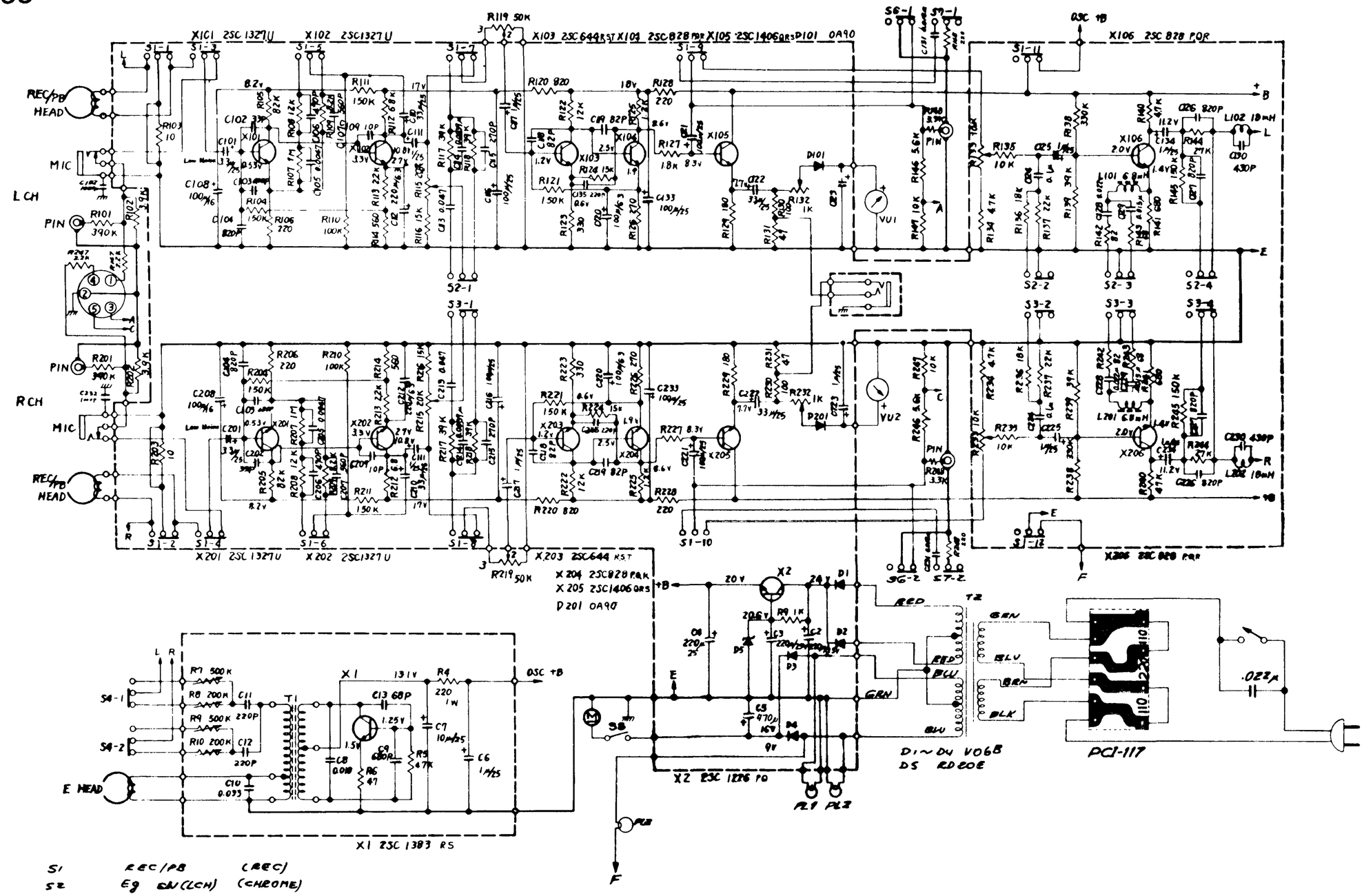


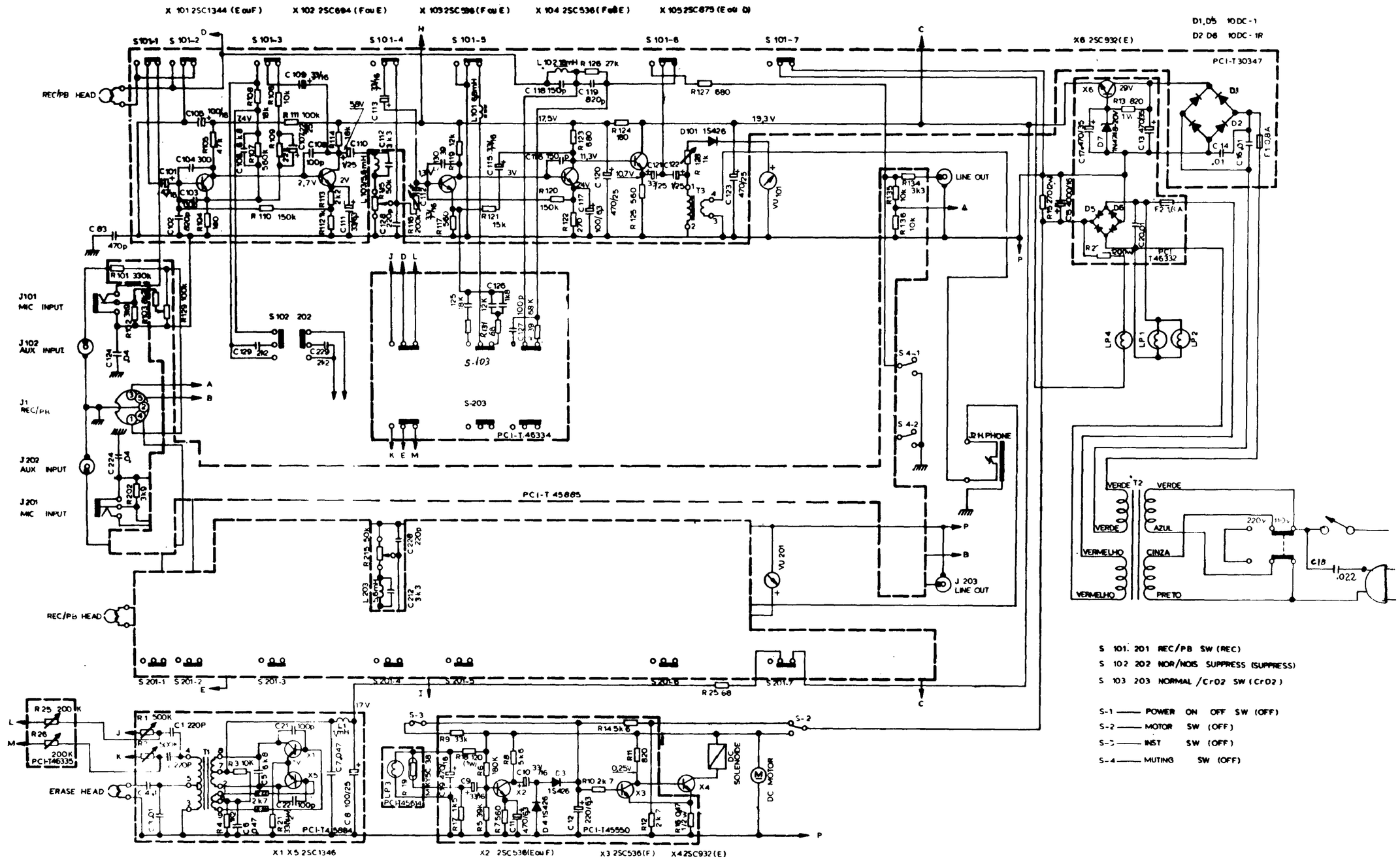

PCI-247 A
PCI-249 B
PCI-248
PCI-247 D
PCI-249-A
PCI-230
PCI-250
PCI-247C
PCI-247B
BALANÇO
LOUD
MODO
MUTE
LOW FILTER
HI FILTER
DIREITO COMPONENTES DE NUMERAÇÃO 700
DIREITO COMPONENTES DE NUMERAÇÃO 200
CANAL DIREITO COMPONENTES DE NUMERAÇÃO 400
CANAL DIREITO COMPONENTES DE NUMERAÇÃO 950
FLUORESCENT TUBE
FIP 24 A 17 YS
SISTEM A
SISTEM B
PRÉ OUT
EXT DIRECT
PHONES
FONO 2
FONO 1
AUX
TUNER
PLAY
REC
TAPE 1
TAPE 2
MIC
CN A
CN B
CN C
CN D
OUT POWER

TAPE DECKS


LINHA
R1 220K
S1a
S1b
REPRODUÇÃO
GRAVAÇÃO
S1c
MIC
C1 2K2
R2 1K
R3 12K
B
R6 47K
C4 22µF
C5 5µF
R7 100K
T1 BC169
R5 330K
R8 820
10K C9
C13 39
C16 .22
R17 56K
R22 33K
C17 4K7
R14 4K7
R18 4K7
R23 470K
R15 10K
R21 10K
5K6 C18
R24 680K
R27 15K
C19 39
C22 5µF
T4 BC168
R16 560
R19 1K
C14 3K3
C15 1K5
R28 82
R29 3K3
C23 25µF
R31 820
PCI-038
C26 10K
R32 100K
C25 100K
C 27 5µF
R35 33K
R39 820
R36 82K
C28 39
T8 PA6003
T5 BC169
T6 BC168
R38 10K
C31 5µF
R34 330K
R37 270
R41 82
R42 820
R43 820
C32 25µF
C33 39
R45 1K
C34 25µF
C37 .22
R47 330
C38 .047
D1
D2
D3
D4
VU
AA115
C42 5µF
R58 680K
R54 1MB
T9 BC168
D9 AA113
C63 39
C47 5µF
R61 1K
C43 .47
R55 680K
R56 330K
C49 10µF
C56 560
L1
T10 BC168
R52 62K
C46 100K
R53 10K
R48 10K
R59 1M
R62 1K5
D11 AA113
C54 1K5
L2
C55 4K7
C57 12K
R51 8K2
C44 .47
C45 .01
C48 .01
R63 1K5
R49 150
R57 150
SAIDA 600Ω
C51 .01
C35 .01
PONTO A
CANAL 2
PCI-035
CABEÇA GRAVADORA REPRODUTORA
C6 50
C7 560
C2 3-30
C3 330
Tr2
R12 22K
C11 1K
T2 BC140
R25 33
R13 22K
C12 1K
T3 BC140
R26 33
C21 .033
R33 6,8
C24 5µF
CABEÇAS APAGADORAS
R4 6K8
L3 1,1mH
PCI-036
T7 BC140
R46 560
R44 330
C39 1000µF
D10 BZA29c
C29 100K
C36 50µF
D6
D8
D5
D7
ESK 102
PCI-037
Tr1
LP1
R64 100
C58 4K7
C61 4K7
C52 0,7/330
C53 0,5/330
M
C59 1µF
R65 100
1/2A
F1

CD - 1655

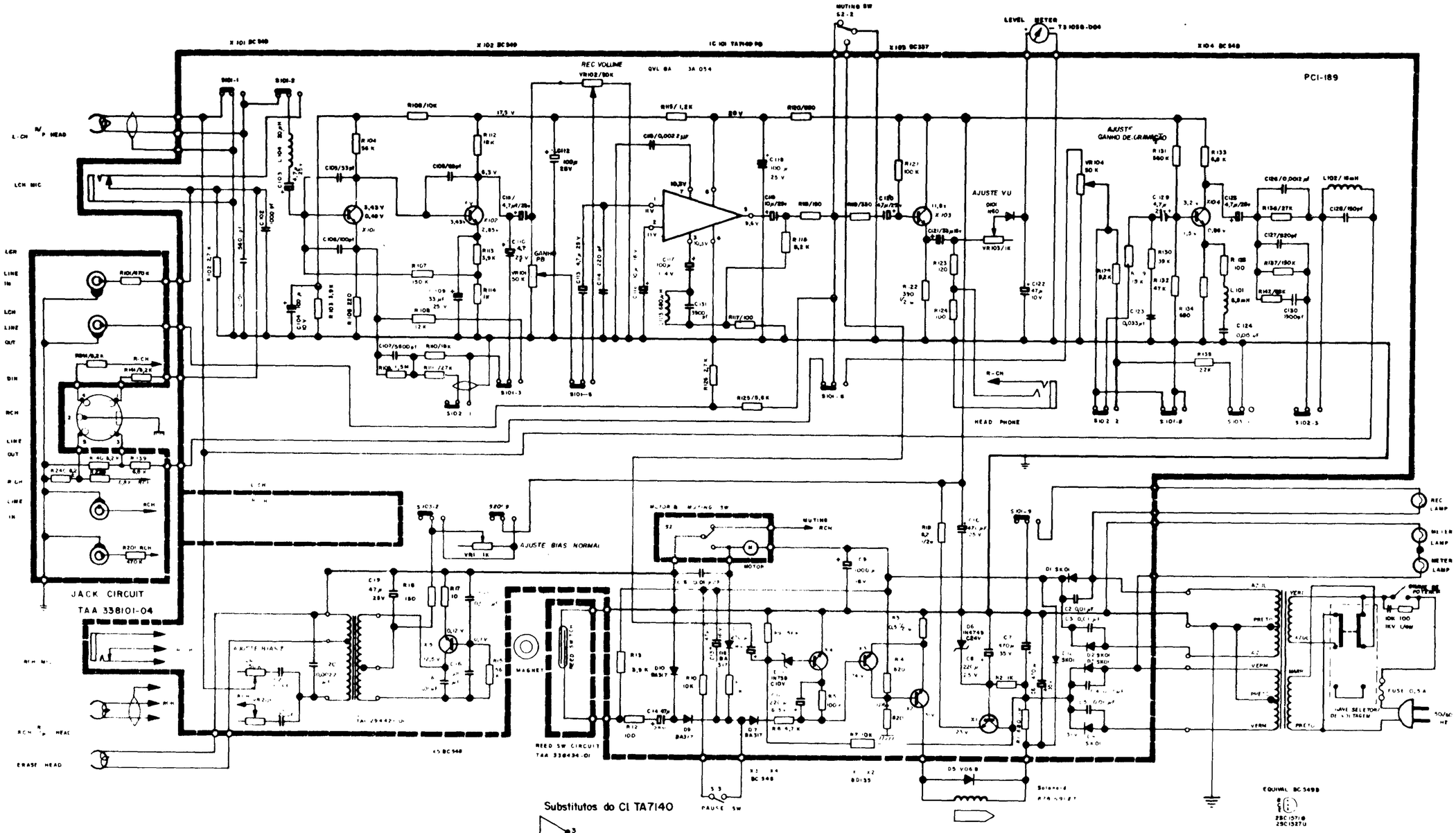

REC/PB HEAD
MIC
L CH
PIN
R CH
X101 2SC1327U
X102 2SC1327U
X103 2SC644 RST
X104 2SC828 PQR
X105 2SC1406 QRS
D101 0A90
X106 2SC828 PQR
X201 2SC1327U
X202 2SC1327U
X203 2SC644 RST
X204 2SC828 PQR
X205 2SC1406 QRS
D201 0A90
X206 2SC828 PQR
VU1
VU2
+B
B
E
F
S1-1
S1-2
S1-3
S1-4
S1-5
S1-6
S1-7
S1-8
S1-9
S1-10
S1-11
S1-12
S2-1
S2-2
S2-3
S2-4
S3-1
S3-2
S3-3
S3-4
S6-1
S6-2
S7-1
S7-2
S8
X1 2SC1383 RS
X2 2SC1226 PQ
T1
T2
E HEAD
SA-1
SA-2
OSC +B
D1~D4 V06B
D5 RD20E
PCI-117
.022μ
S1 REC/PB (REC)
S2 Eq SW (LCH) (CHROME)
S3 Eq SW (RCH) (CHROME)
S4 BIAS SW (CHROME)
S5 POWER SW (ON)
S6 MUTING SW (MUTING)
S7 NOISE SUPPRESSOR (OFF)
S8 Motor SW (OFF)



S 101. 201 REC/PB SW (REC)
S 102 202 NOR/NOIS SUPPRESS (SUPPRESS)
S 103 203 NORMAL /CrO2 SW (CrO2)

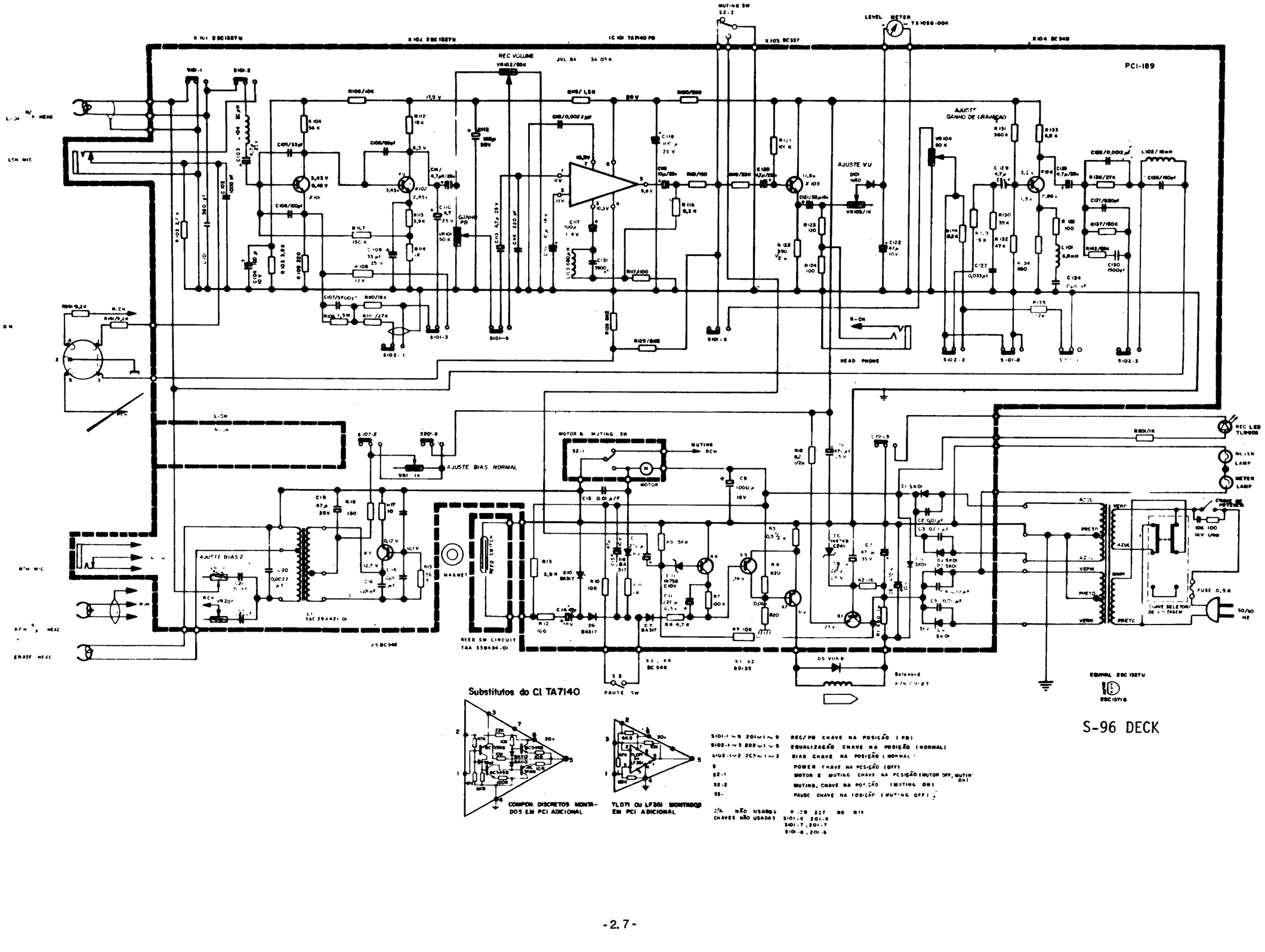
S-1 —— POWER ON OFF SW (OFF)
S-2 —— MOTOR SW (OFF)
S-3 —— INST SW (OFF)
S-4 —— MUTING SW (OFF)

CD - 2000/S95



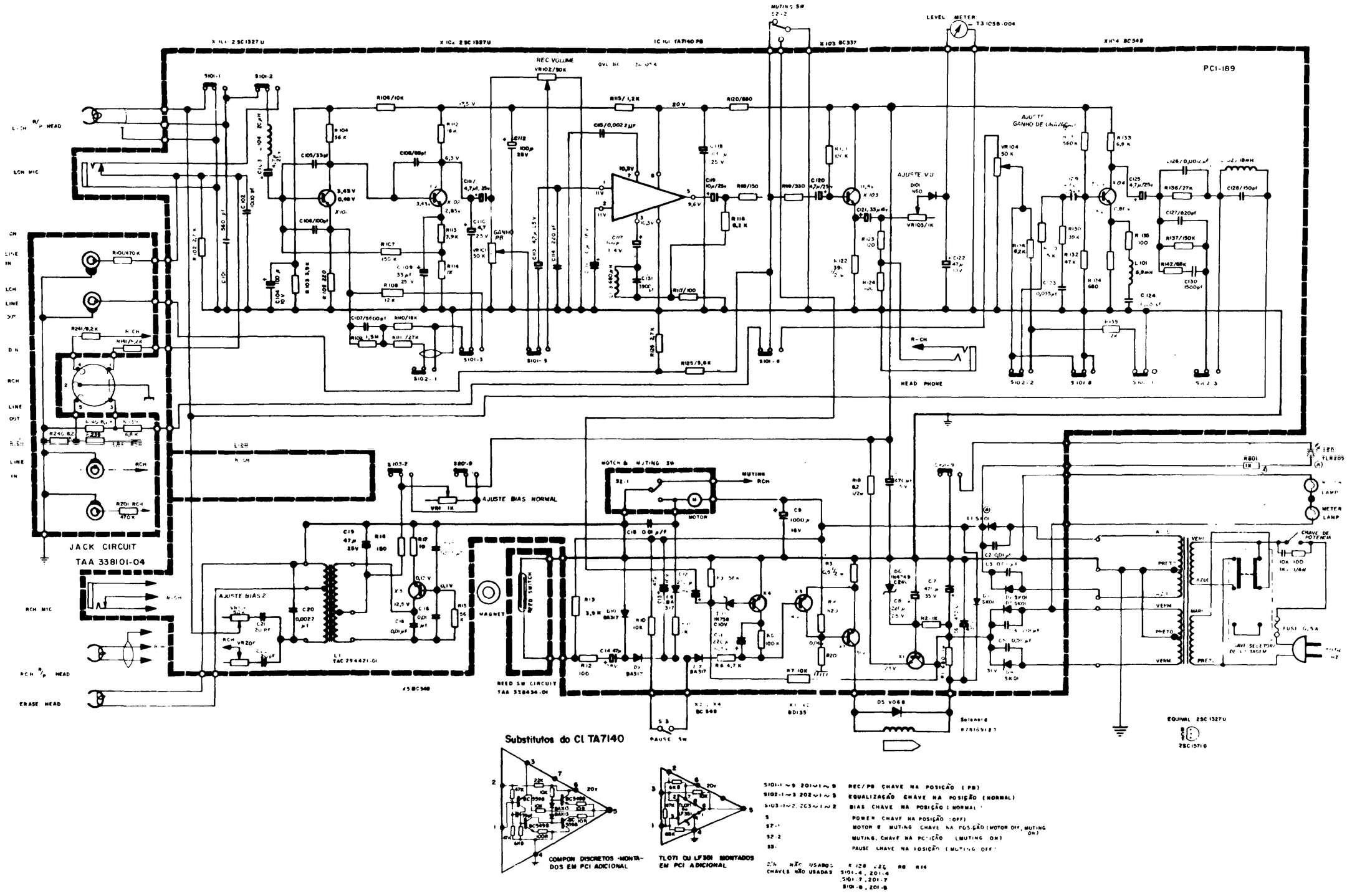
S101-1 ~ 9, 201-1 ~ 9 — REC/PB CHAVE NA POSIÇÃO (PB)
S102-1 ~ 5, 202-1 ~ 3 — EQUALIZAÇÃO CHAVE NA POSIÇÃO (NORMAL)
S103-1 e 2, 203-1 e 2 — BIAS CHAVE NA POSIÇÃO (NORMAL
S — POWER CHAVE NA POSIÇÃO (OFF)
S2-1 — MOTOR E MUTING CHAVE NA POSIÇÃO : MOTOR OFF, MUTING ON
S2-2 — MUTING, CHAVE NA POSIÇÃO (MUTING ON)
S3 — PAUSE CHAVE NA POSIÇÃO (MUTING OFF)

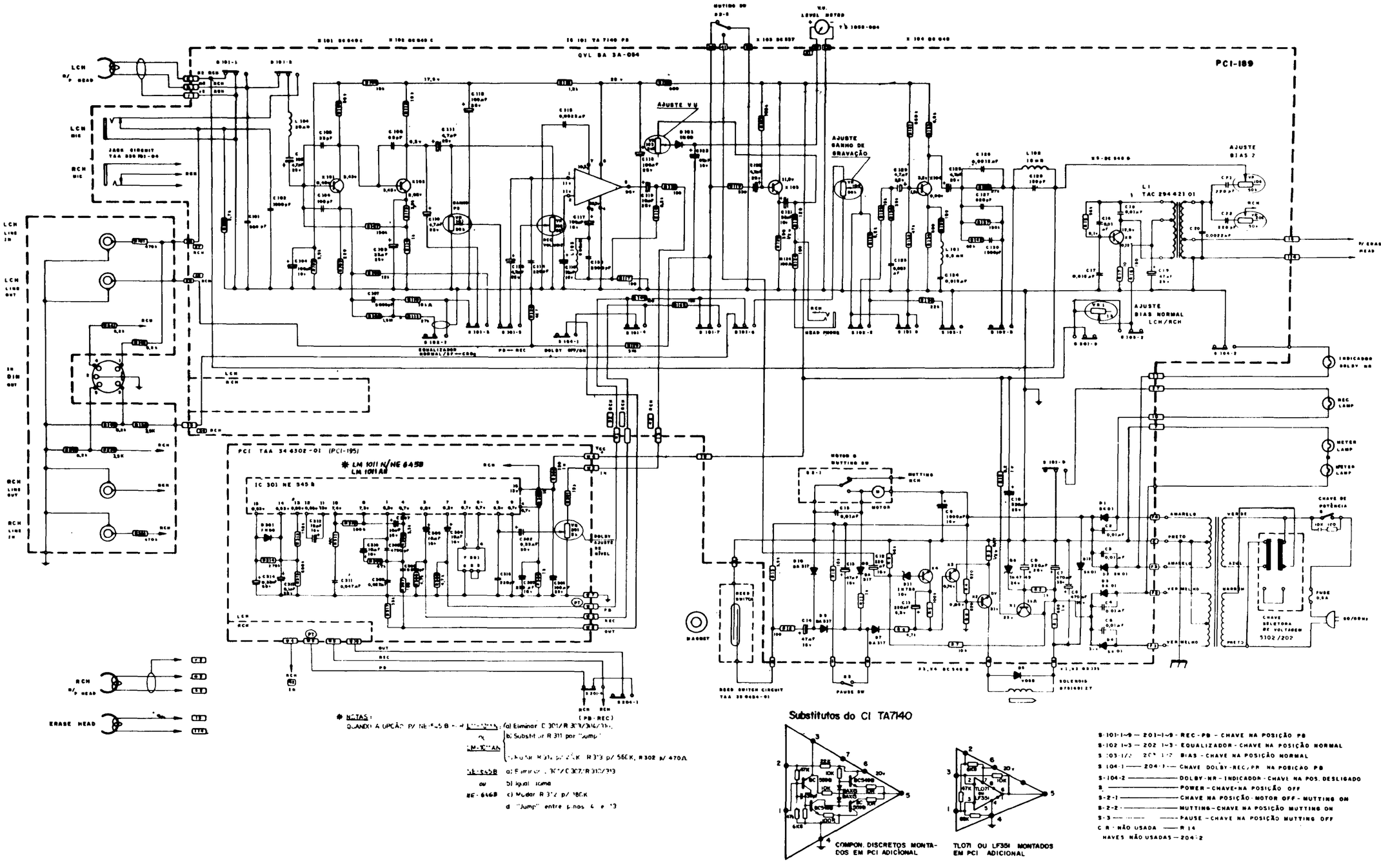
R ... NÃO USADOS R 28, 227, R8, R16
CHAVES NÃO USADAS S101-6, 201-6
S101-7, 201-7
S101-8, 201-8


PCI-189
REC VOLUME
VR102/50K
MUTING SW
S2-2
LEVEL METER
AJUSTE GANHO DE GRAVAÇÃO
AJUSTE VU
AJUSTE BIAS NORMAL
AJUSTE BIAS 2
MOTOR & MUTING SW
MUTING RCH
MOTOR
REED SW CIRCUIT
TAA 338434-01
MAGNET
REC LED
METER LAMP
FUSE 0,5A
50/60 HZ
PAUSE SW
HEAD PHONE
R-CH
L-CH
ERASE HEAD
Substitutos do CI TA7140
COMPON. DISCRETOS MONTADOS EM PCI ADICIONAL
TL071 OU LF351 MONTADOS EM PCI ADICIONAL
S101-1~9 201-1~9 REC/PB CHAVE NA POSIÇÃO (PB)
S102-1~3 202-1~3 EQUALIZAÇÃO CHAVE NA POSIÇÃO (NORMAL)
S103-1~2 203-1~2 BIAS CHAVE NA POSIÇÃO (NORMAL)
S1 POWER CHAVE NA POSIÇÃO (OFF)
S2-1 MOTOR E MUTING CHAVE NA POSIÇÃO (MUTOR OFF, MUTING ON)
S2-2 MUTING CHAVE NA POSIÇÃO (MUTING ON)
S3 PAUSE CHAVE NA POSIÇÃO (MUTING OFF)
c/h NÃO USADOS R 128 227 R8 R18
CHAVES NÃO USADAS S101-4 201-4
S101-7, 201-7
S101-8, 201-8

S-96 DECK

CD - 2100


PC1-189
MUTING SW
LEVEL METER
REC VOLUME
VR102/50K
AJUSTE VU
AJUSTE BIAS NORMAL
AJUSTE BIAS 2
JACK CIRCUIT
TAA 338101-04
REED SW CIRCUIT
TAA 338434-01
MOTOR & MUTING SW
PAUSE SW
HEAD PHONE
L-CH
R-CH
L-CH MIC
R-CH MIC
L-CH R/P HEAD
R-CH R/P HEAD
ERASE HEAD
MUTING R-CH
MOTOR
LED
LAMP
METER LAMP
CHAVE DE POTÊNCIA
EQUIVAL 2SC1327U
Substitutos do CI TA7140
COMPON DISCRETOS MONTADOS EM PCI ADICIONAL
TL071 OU LF351 MONTADOS EM PCI ADICIONAL
S101-1 ~ 9 201-1 ~ 9 REC/PB CHAVE NA POSIÇÃO (PB)
S102-1 ~ 3 202-1 ~ 3 EQUALIZAÇÃO CHAVE NA POSIÇÃO (NORMAL)
S103-1 ~ 2, 203-1 ~ 2 BIAS CHAVE NA POSIÇÃO (NORMAL)
S POWER CHAVE NA POSIÇÃO (OFF)
S2-1 MOTOR & MUTING CHAVE NA POSIÇÃO (MOTOR OFF, MUTING ON)
S2-2 MUTING CHAVE NA POSIÇÃO (MUTING ON)
S3 PAUSE CHAVE NA POSIÇÃO (MUTING OFF)
C/R NÃO USADOS R 128 , 226 R8 R14
CHAVES NÃO USADAS S101-4 , 201-4
S101-7 , 201-7
S101-8 , 201-8



* NOTAS:

QUANDO A OPÇÃO P/ NE-5458 FOR UTILIZADA:

LM-1011AN	a) Eliminar C 307/R 307/3M14/3M15.
	ou
	b) Substituir R 311 por "Jump"
	c) Substituir R 311 por 56K, R 312 p/ 56K, R 313 p/ 56K, R 302 p/ 470Ω
NE-5458	a) Eliminar C 307/C 307/R 312/313
ou	ou
NE-6458	b) Igual acima
	c) Mudar R 312 p/ 18K
	d) "Jump" entre pinos 4 e 13

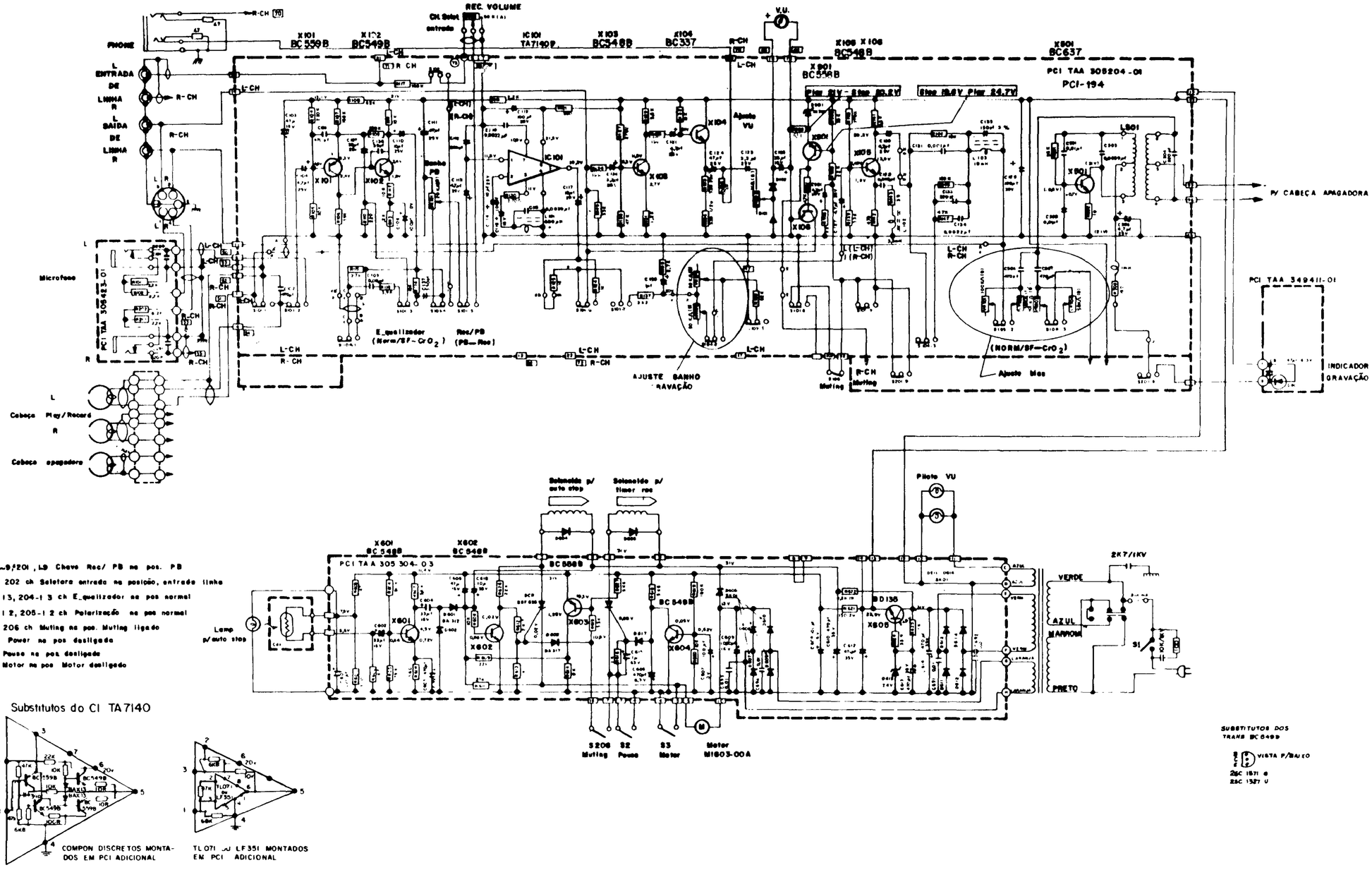
Substitutos do CI TA7140

COMPON. DISCRETOS MONTADOS EM PCI ADICIONAL

TL071 OU LF351 MONTADOS EM PCI ADICIONAL

S-101-1~9 — 201-1~9 - REC-PB - CHAVE NA POSIÇÃO PB
S-102 1~3 — 202 1~3 - EQUALIZADOR - CHAVE NA POSIÇÃO NORMAL
S-103-1/2 — 203-1/2 - BIAS - CHAVE NA POSIÇÃO NORMAL
S-104-1 — 204-1 — CHAVE DOLBY-REC/PB NA POSIÇÃO PB
S-104-2 — DOLBY-NR-INDICADOR - CHAVE NA POS. DESLIGADO
S — POWER - CHAVE NA POSIÇÃO OFF
S-2-1 — CHAVE NA POSIÇÃO MOTOR OFF - MUTTING ON
S-2-2 — MUTTING - CHAVE NA POSIÇÃO MUTTING ON
S-3 — PAUSE - CHAVE NA POSIÇÃO MUTTING OFF
C R - NÃO USADA — R 14
NAVES NÃO USADAS — 204-2

CD - 2500

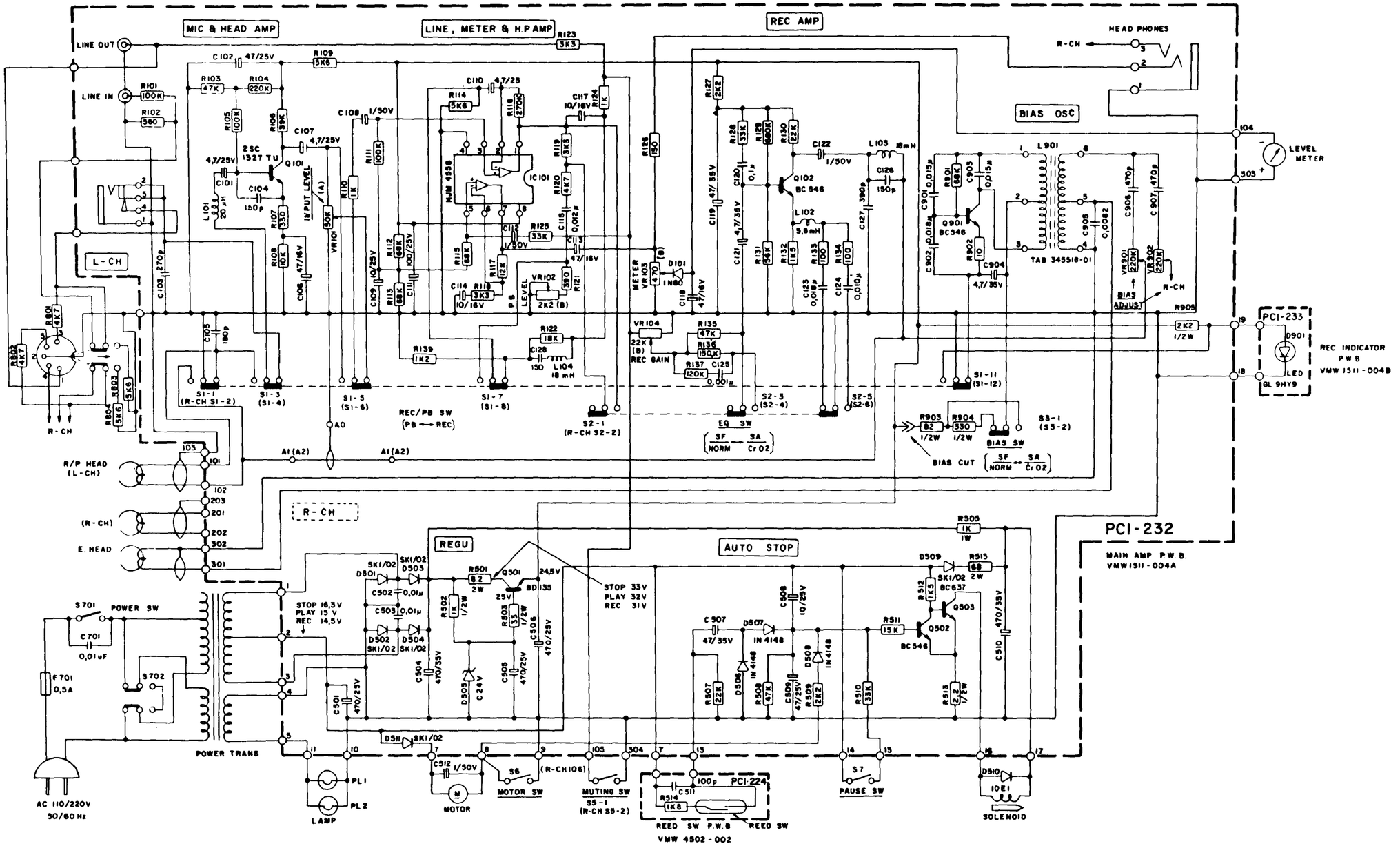


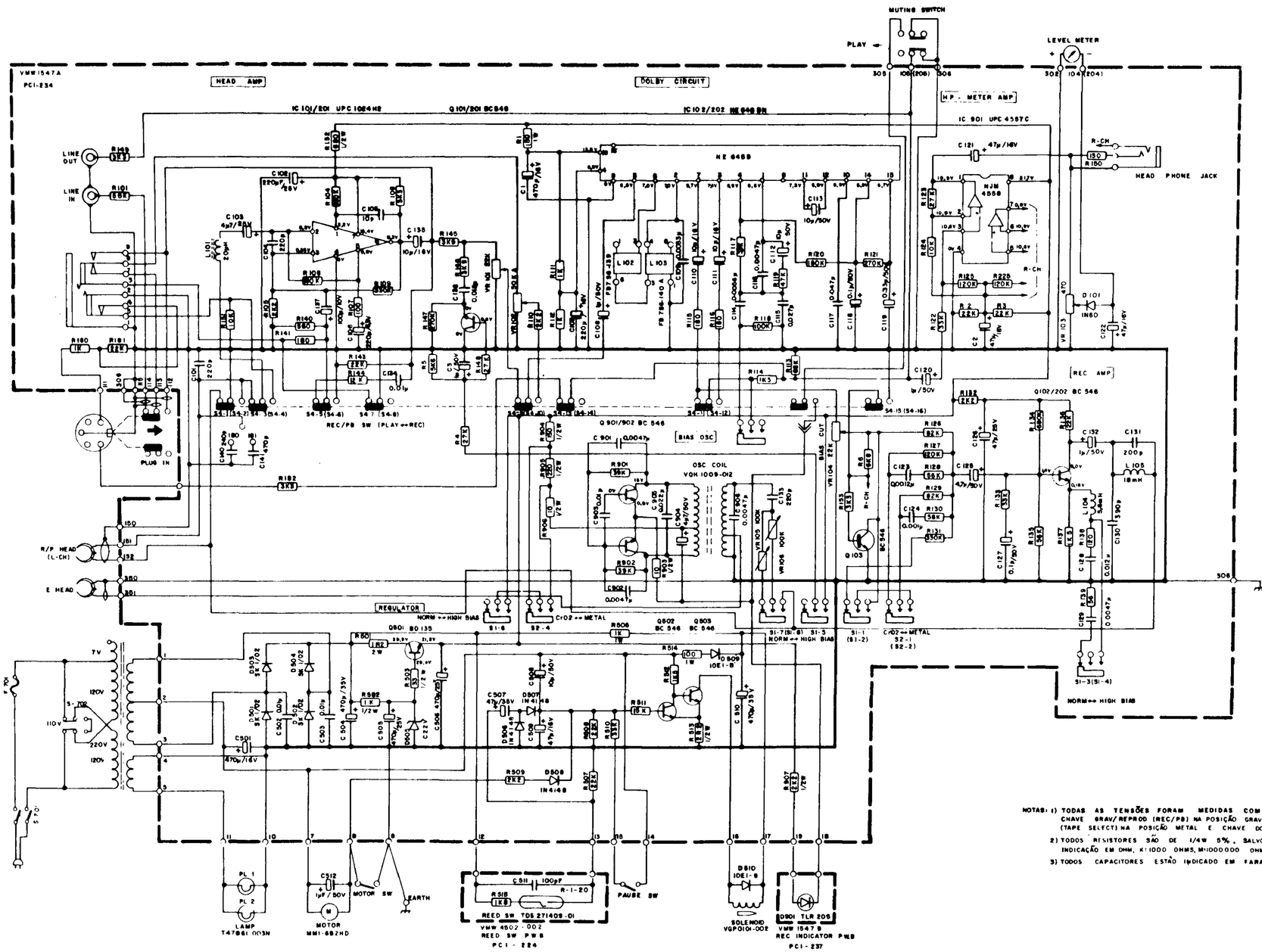
S101 L-9/201, L9 Chave Rec/ PB na pos. PB
S102 - 202 ch Seletora entrada na posição, entrada linha
S104 - 13, 204-13 ch E_qualizador na pos normal
S105 - 12, 205-12 ch Polarização na pos normal
S106 - 206 ch Muting na pos. Muting ligado
S1 ch Power na pos desligada
S2 ch Pause na pos desligada
S3 ch Motor na pos Motor desligado

Substitutos do CI TA7140

COMPON DISCRETOS MONTADOS EM PCI ADICIONAL

TL071 ou LF351 MONTADOS EM PCI ADICIONAL

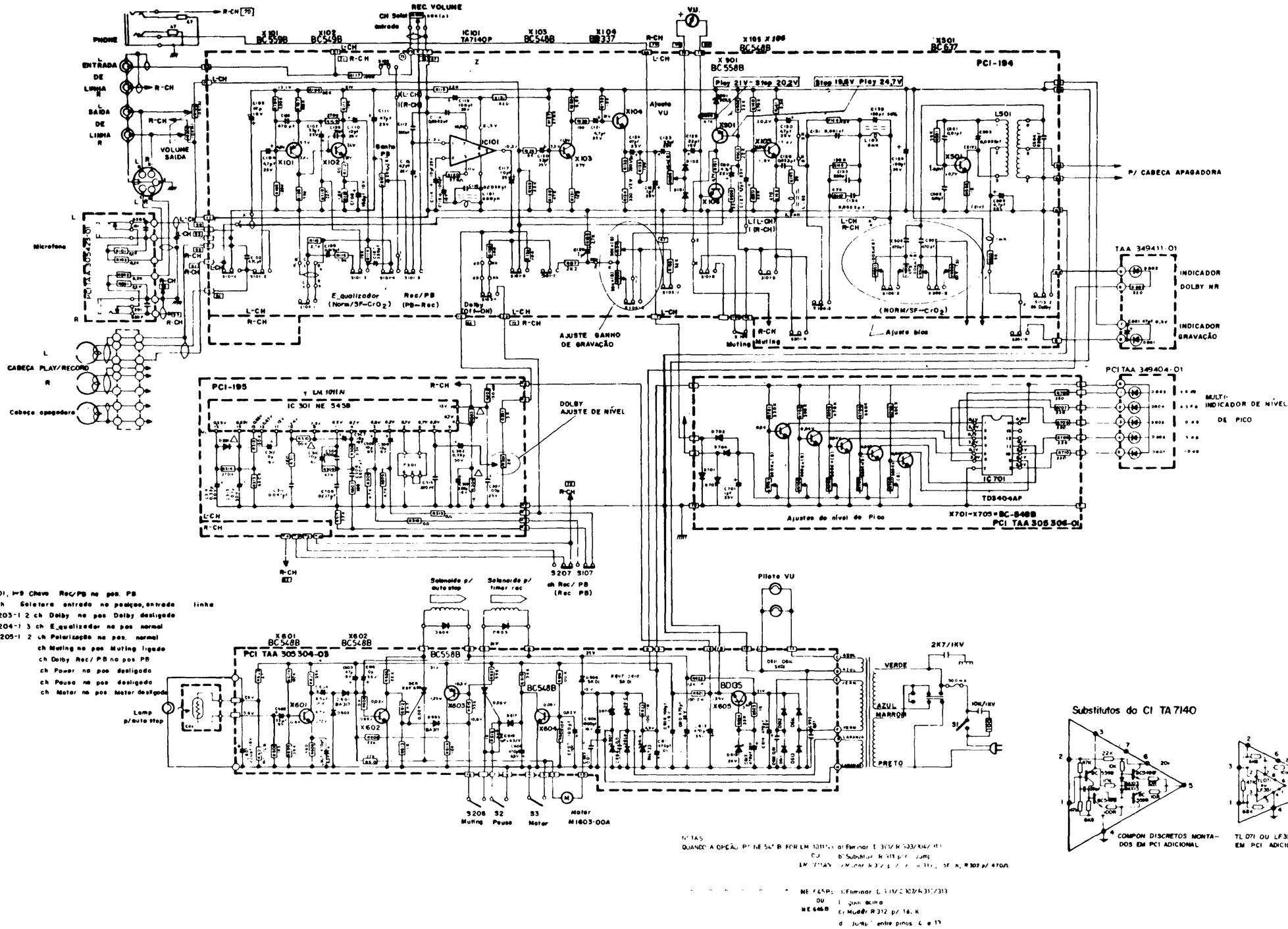

MIC & HEAD AMP
LINE, METER & H.P AMP
REC AMP
BIAS OSC
REGU
AUTO STOP
L-CH
R-CH
LINE OUT
LINE IN
HEAD PHONES
LEVEL METER
INPUT LEVEL (A)
BIAS ADJUST
REC GAIN
REC/PB SW (PB ⟷ REC)
EQ SW (SF NORM ⟷ SA CrO2)
BIAS SW (SF NORM ⟷ SA CrO2)
BIAS CUT
TAB 345518-01
PCI-233
REC INDICATOR P.W.B VMW 1511-004B
PCI-232
MAIN AMP P.W.B. VMW1511-004A
R/P HEAD (L-CH)
(R-CH)
E. HEAD
POWER SW
POWER TRANS
AC 110/220V 50/60 Hz
F 701 0,5A
STOP 16,3 V PLAY 15 V REC 14,5 V
STOP 33 V PLAY 32 V REC 31 V
MOTOR SW
MUTING SW
PAUSE SW
REED SW P.W.B VMW 4502-002
REED SW
SOLENOID
LAMP
MOTOR



NOTAS: 1) TODAS AS TENSÕES FORAM MEDIDAS COM VTVM, SEM SINAL DE ENTRADA, CHAVE GRAV/REPROD (REC/PB) NA POSIÇÃO GRAV (REC), CHAVE SELETORA DE FITAS (TAPE SELECT) NA POSIÇÃO METAL E CHAVE DOLBY NR NA POSIÇÃO DESLIGADO (OFF)

2) TODOS RESISTORES SÃO DE 1/4W 5%, SALVO ESPECIFICAÇÃO EM CONTRARIO INDICAÇÃO EM OHM, K=1000 OHMS, M=1000000 OHMS

3) TODOS CAPACITORES ESTÃO INDICADO EM FARADS (F) P= 10^{-12}F, µ= 10^{-6} F

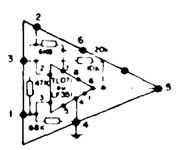


S101 1=9,A201, 1=9 Chave Rec/PB na pos. PB
S102-202 ch Seletora entrada na posição, entrada linha
S103-1 2, 203-1 2 ch Dolby na pos Dolby desligado
S104-1 3, 204-1 3 ch E_qualizador na pos normal
S105-1 2, 205-1 2 ch Polarização na pos. normal
S106,206 ch Muting na pos Muting ligado
S107,207 ch Dolby Rec/PB na pos PB
S1 ch Power na pos desligado
S2 ch Pause na pos desligado
S3 ch Motor na pos Motor desligado

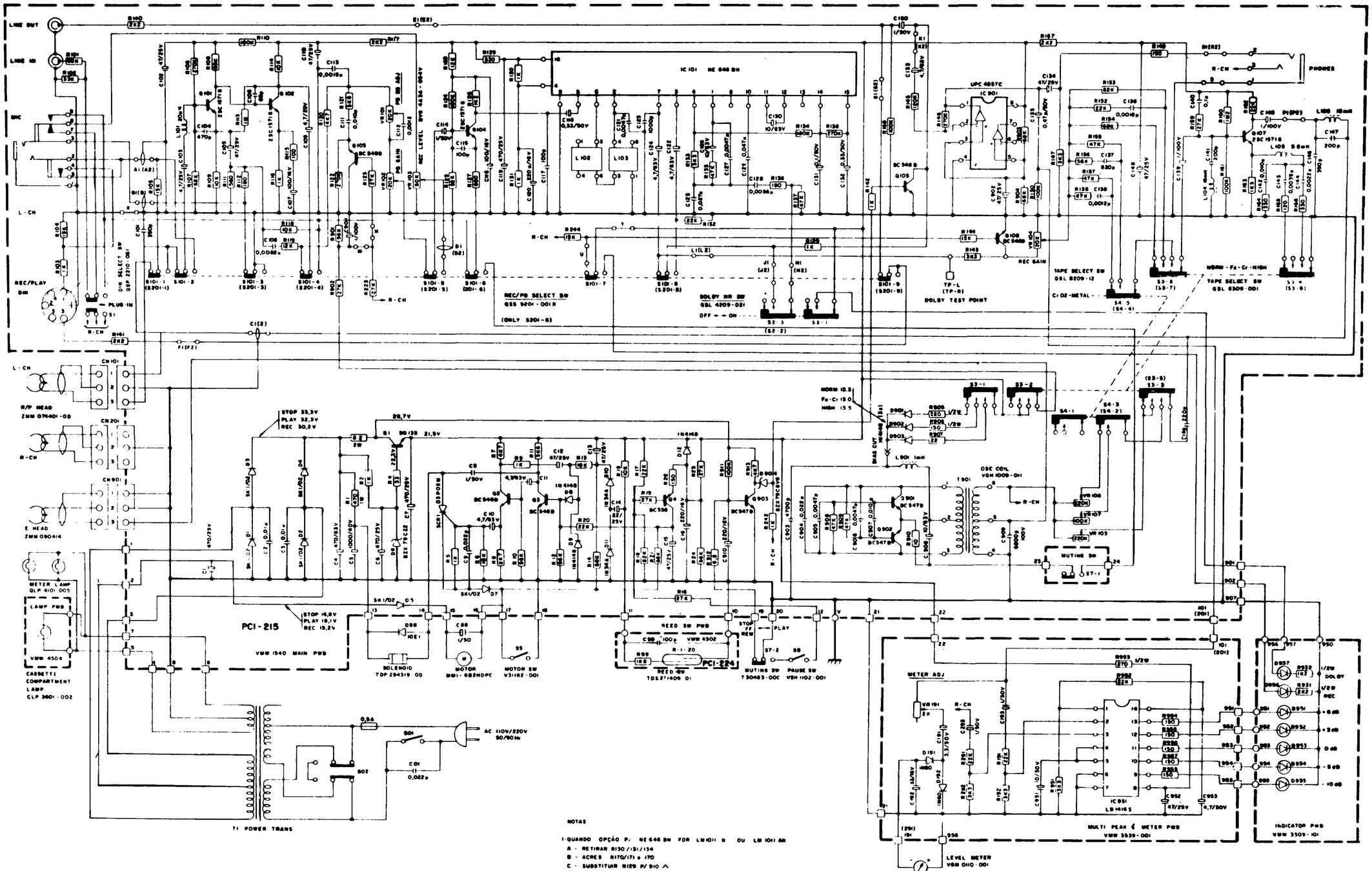
NOTAS
QUANDO A OPÇÃO P/ NE 548 B FOR LM 1011 N: a) Eliminar D 311/C 303/R 311/313
OU b) Substituir R 311 p/ jumper
LM 1011 N: a) Eliminar R 312 p/ 47 Ω, SF in, R 302 p/ 470 Ω

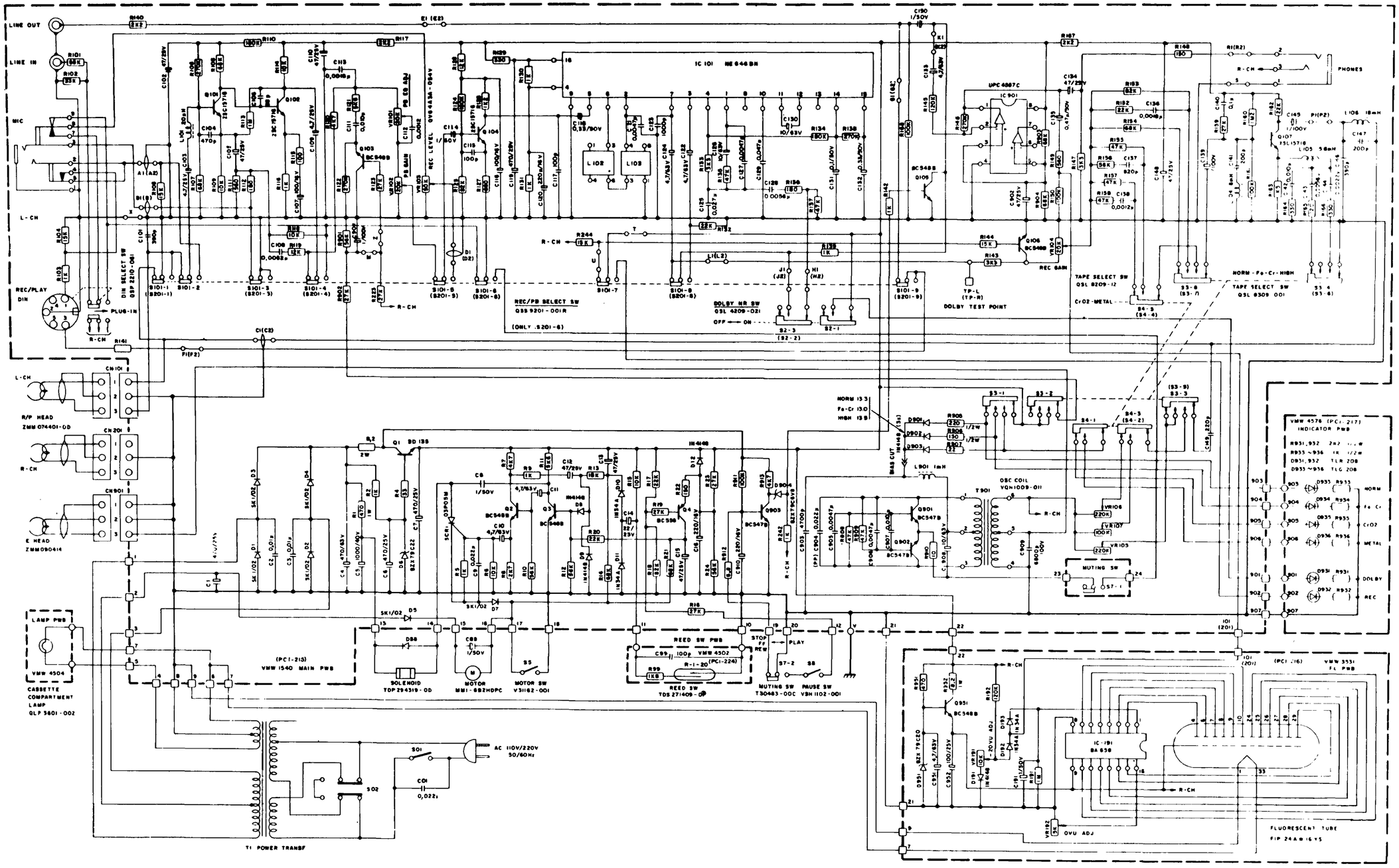
NE 645B: a) Eliminar D 311/C 303/R 311/313
OU b) Jumper acima
c) Mudar R 312 p/ 18 K
d) Jumper entre pinos 6 e 13

Substitutos do CI TA 7140

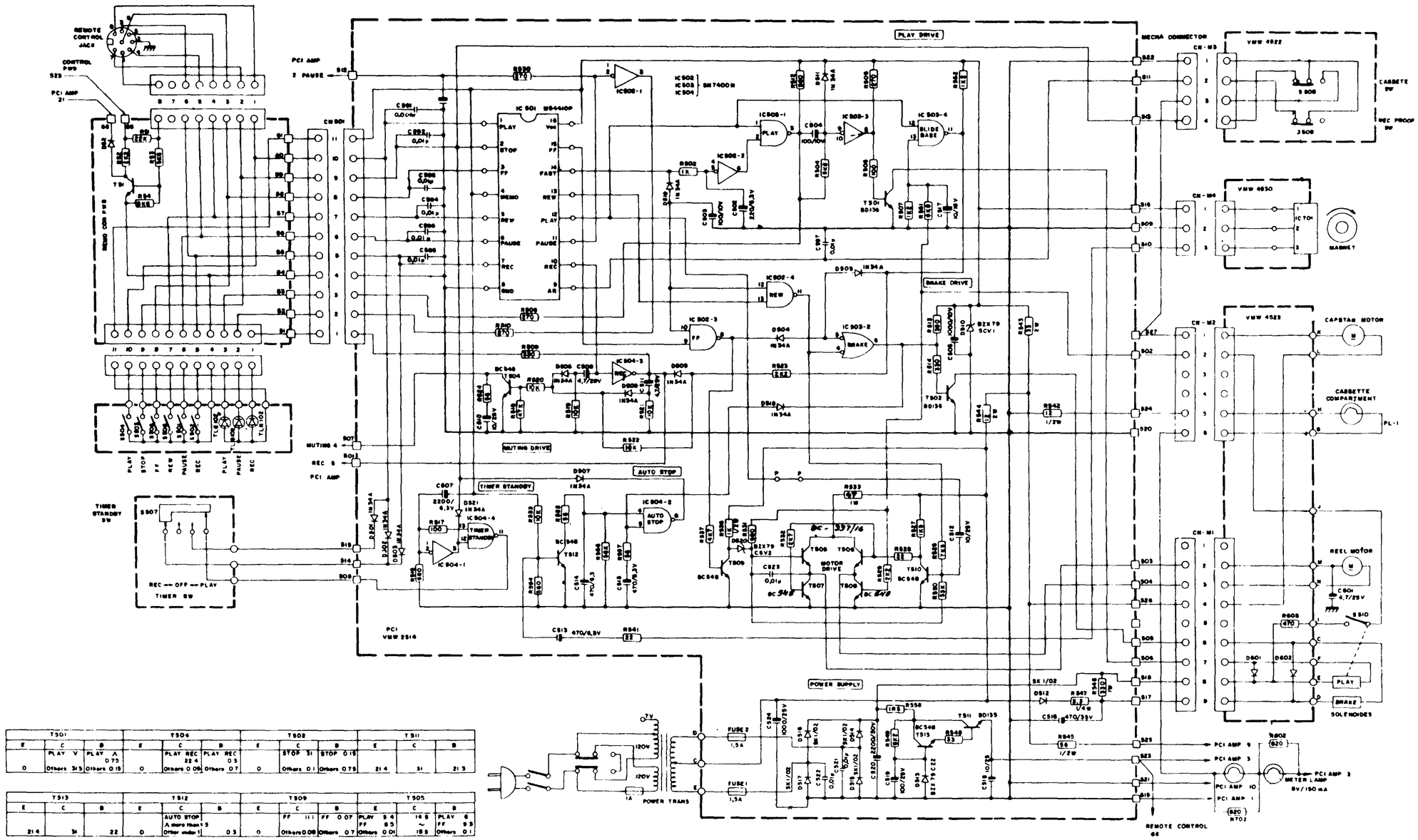


CD - 3700


LINE OUT
LINE IN
MIC
L-CH
R-CH
REC/PLAY SW
PLUG-IN
R/P HEAD
ZMM 079401-00
E HEAD
ZMM 080414
METER LAMP
GLP 6101-005
LAMP PWB
VMW 4504
CASSETTE COMPARTMENT LAMP
CLP 3601-002
PHONES
IC 101 NE 646 BN
UPC 4557C
IC 901
BC 548 B
REC GAIN
TAPE SELECT SW
GSL 8209-12
TAPE SELECT SW
GSL 8309-001
REC/PB SELECT SW
GSS 9201-001 R
DOLBY NR SW
GSL 4209-001
DOLBY TEST POINT
REC LEVEL
PB GAIN
PB HI ADJ
BIAS CUT
OSC COIL
VGH 1009-011
MUTING SW
METER ADJ
PC1-215
VMW 1540 MAIN PWB
PC1-224
REED SW PWB
REED SW
TDS 271409-01
SOLENOID
TDP 294519-00
MOTOR
MOTOR SW
V31162-001
MUTING SW
T30483-000
PAUSE SW
VSH 1102-001
T1 POWER TRANS
AC 110V/220V
50/60Hz
MULTI PEAK METER PWB
VMW 3539-001
LEVEL METER
VSW 0110-001
INDICATOR PWB
VMW 3509-101
LB 1416 S
NOTAS
1-QUANDO OPÇÃO P/ NE 646 BN FOR LM1011 N OU LB 1011 AN
A - RETIRAR R130/131/134
B - ACRES R170/171 e 170
C - SUBSTITUIR R129 P/ 910 Ω
2-TODAS AS TENSÕES FORAM MEDIDAS COM VTVM SEM SINAL DE ENTRADA, CHAVE GRAV/REPROD (REC/PB) NA POS GRAV(REC), CHAVE SELETORA DE FITAS (TAPE SELECT) NA POSIÇÃO METAL E CHAVE DOLBY NR NA POSIÇÃO DESLIGADO (OFF)
3-TODOS RESISTORES SÃO DE 1/4W 5% SALVO ESPECIFICAÇÃO EM CONTRARIO
INDICAÇÃO EM OHM, K = 1000 OHMS, M = 1000 000 OHMS
4-TODOS CAPACITORES ESTÃO INDICADOS EM FARADS (F) P = 10⁻¹²F, μ = 10⁻⁶F


LINE OUT
LINE IN
MIC
L-CH
REC/PLAY DIN
DIN SELECT SW GSP 8220-041
PLUG-IN
R-CH
L-CH
R/P HEAD ZMM 074401-OD
R-CH
E HEAD ZMM 090414
LAMP PWB
VMW 4504
CASSETTE COMPARTMENT LAMP QLP 5601-002
(PCI-215) VMW 1540 MAIN PWB
IC 101 ME 644 BR
REC/PB SELECT SW GSS 9201-001R
(ONLY .S201-6)
DOLBY NR SW QSL 4209-021
REC LEVEL
REC BIAS
R-CH
L-CH
TP-L (TP-R)
DOLBY TEST POINT
UPC 4087C
REC BIAS
TAPE SELECT SW QSL 8209-12
TAPE SELECT SW QSL 8309 001
NORM - Fe-Cr - HIGH
CrO2 - METAL
PHONES
R-CH
L101 18mH
L105 58mH
NORM 133
Fe-Cr 130
HIGH 139
BIAS CUT
L801 1mH
OSC COIL VQH1009-011
T801
MUTING SW
VMW 4576 (PCI-217) INDICATOR PWB
R931,932 2K2 1/4W
R933~936 1K 1/2W
D931,932 TLR 208
D933~936 TLG 208
NORM
Fe-Cr
CrO2
METAL
DOLBY
REC
REED SW PWB
VMW 4502
(PCI-224)
REED SW TDS 271409-OD
SOLENOID TDP 294319-OD
MOTOR MMI-6B2HDPC
MOTOR SW V3H162-001
MUTING SW T30483-000
PAUSE SW VSH 1102-001
STOP FF REW
PLAY
S01
C01 0,022µ
AC 110V/220V 50/60Hz
T1 POWER TRANSF
(PCI-216) VMW 3531 FL PWB
IC-191 BA 658
FLUORESCENT TUBE FIP 24A W 16 YS
OVU ADJ

CD - 5500

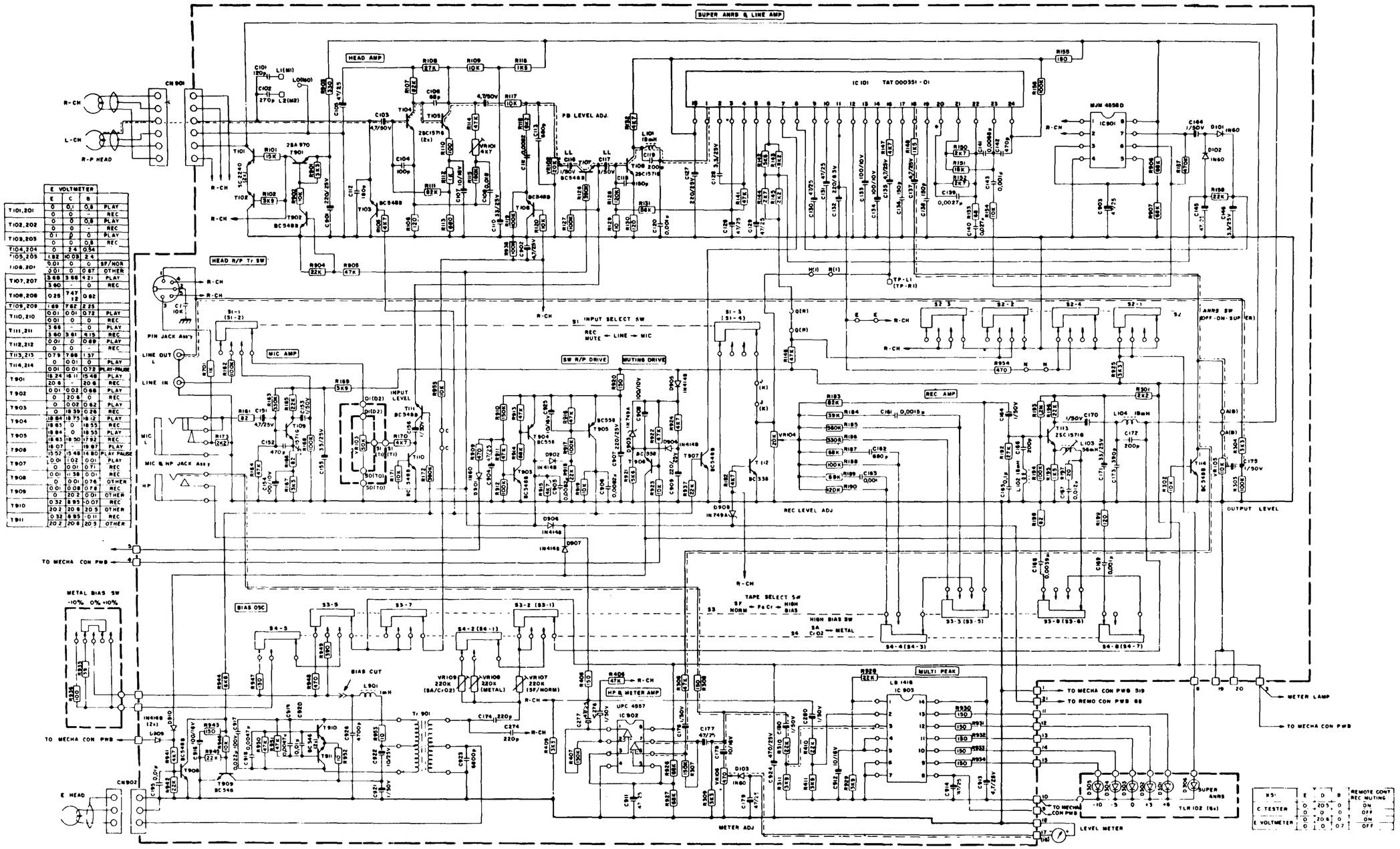


T501			T504			T508			T511		
E	C	B	E	C	B	E	C	B	E	C	B
	PLAY V ~ Others 3.5	PLAY 0.75 ~ Others 0.15		PLAY REC 22.4 ~ Others 0.06	PLAY REC 0.5 ~ Others 0.7		STOP 3.1 ~ Others 0.1	STOP 0.15 ~ Others 0.79			
0			0			0			21.4	3.1	21.3

T513			T512			T509			T505		
E	C	B	E	C	B	E	C	B	E	C	B
				AUTO STOP A more than 1.3 Other under 1	0.3		FF 1.1 ~ Others 0.08	FF 0.07 ~ Others 0.7	PLAY 3.4 FF 8.5 ~ Others 0.01	16.5 ~ 18.9	PLAY 8 FF 9.3 ~ Others 0.1
21.4	3.4	2.2	0			0					

T507			T506			T508			T510		
E	C	B	E	C	B	E	C	B	E	C	B
	PLAY 5.4 FF 8.7 ~ Others 0.01	REW 0.79 ~ Others 0.07	REW 9.2 ~ Others 0.07	16.9 ~ 18.9	REW 9.1 ~ Others 0.07		REW 9.1 ~ Others 0.07	PLAY FF 0.79 ~ Others 0.1		REW 8.9 ~ Others 0.07	REW 0.07 ~ Others 0.7
0						0			0		

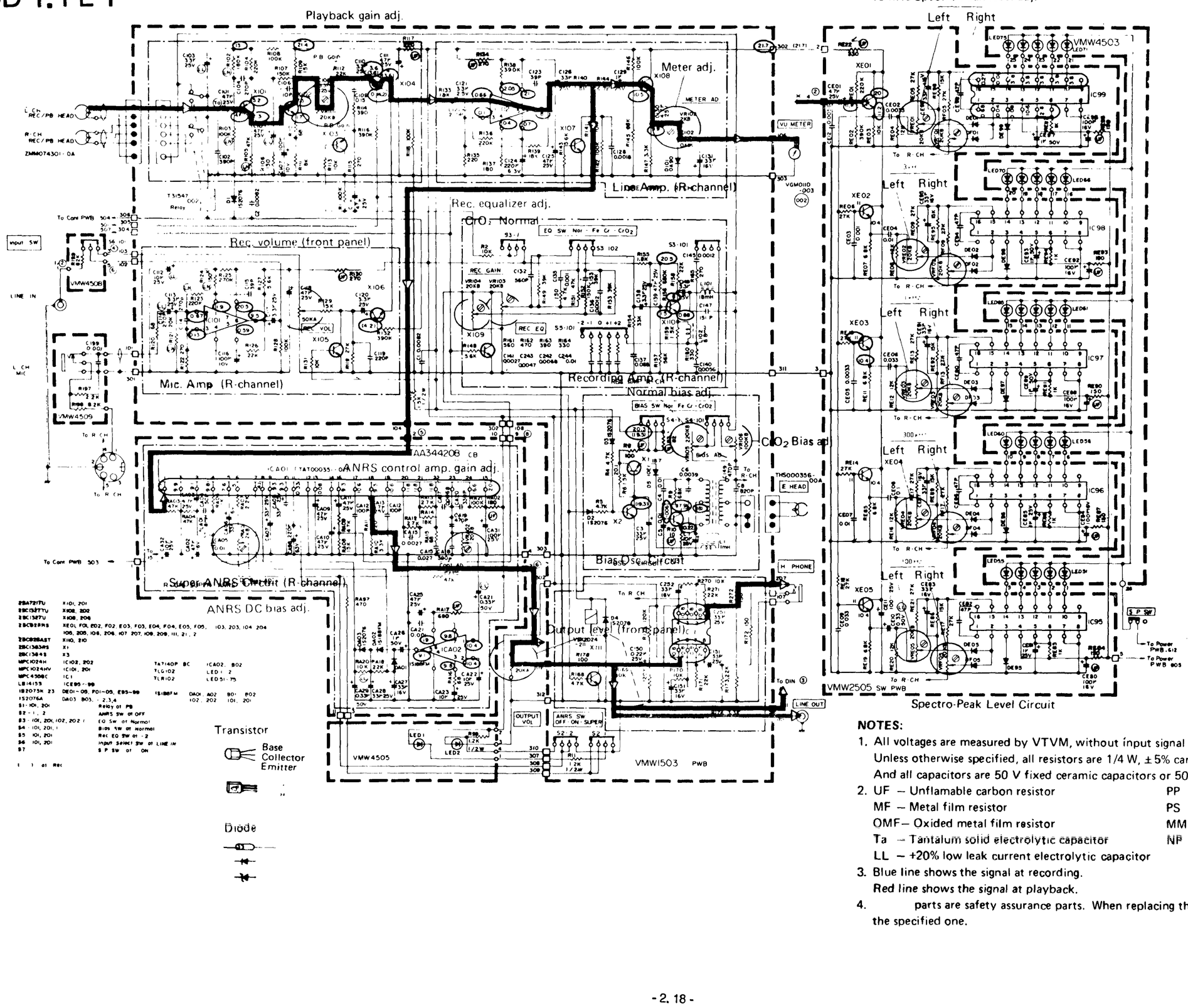
IC 501	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	At PLAY operation 0 ~ Others 5	At STOP operation 0 ~ Others 3	At FF operation 0 ~ Others 5	5	At REW operation 0 ~ Others 5	At PAUSE operation 0 ~ Others 5	At REC operation 0 ~ Others 5	0	Playback cassette 0 Recording cassette 0	REC 5 ~ Others 0.1	PAUSE 5 ~ Others 0.1	PLAY 5 ~ Others 0.1	REW 5 ~ Others 0.1	FF and REW 3.9 ~ Others 0.1	PLAY ~ Others	8
IC 502	PAUSE 5 ~ Others 0.15		PAUSE 0.15 ~ Others 4.5	FF REW 5 ~ Others 1		FF REW 0.07 ~ Others 3.9	0	FF 0.07 ~ Others 3.8	FF 5 ~ Others 0.15	FF REW 1.7 ~ Others 0.25	REW 0.07 ~ Others 3.8	REW 1.8 ~ Others 0.25	REW 5 ~ Others 0.15	5		
IC 503	PLAY 5 ~ Others 0.1	FF and REW 0 ~ Others 4	PLAY 0.2 ~ Others 5	REW 0 ~ Others 3.8	PLAY and FF 0.4 ~ Others 1.7	PLAY FF REW 3.5 ~ Others 0.15	0	PLAY 4.3 ~ Others 0.1	PLAY 1.8 ~ Others 8		PLAY 0.1 ~ Others 8	PLAY 2.1 ~ Others 0.2	PLAY 5 ~ Others 0.1	5		
IC 504	0.9	0.9	5.4	AUTO STOP 1.8 ~ Others 0.9	AUTO STOP 1.4 ~ Others 0.8	AUTO STOP V ~ Others 5	0	REC 0.1 ~ Others 5	REC 5 ~ Others 0.11		5	5.4	1.0	5		



	E	VOLTMETER C	B	
T101,201	0	0.1	0.8	PLAY
	0	0	-	REC
T102,202	0	0	0.8	PLAY
	0	0	-	REC
T103,203	0.1	0	0	PLAY
	0	0	0.8	REC
T104,204	0	2.4	0.54	
T105,205	6.82	10.03	2.4	
T106,206	0.01	0	0	SP/NOR
	2.01	0	0.67	OTHER
T107,207	5.68	5.66	4.21	PLAY
	3.90	-	0	REC
T108,208	0.28	7.47 ±2	0.82	
T109,209	1.69	7.62	2.25	
T110,210	0.01	0.01	0.72	PLAY
	0.01	0	0	REC
T111,211	3.66	-	0	PLAY
	5.60	3.61	4.15	REC
T112,212	0.01	0	0.69	PLAY
	0	0	-	REC
T113,213	0.79	7.86	1.37	
T114,214	0	0.01	0	PLAY
	0.01	0.01	0.72	PLAY-PAUSE
T901	15.24	16.11	15.48	PLAY
	20.6	-	20.6	REC
T902	0.01	0.02	0.66	PLAY
	0	20.6	0	REC
T903	0	0.02	0.62	PLAY
	0	18.39	0.26	REC
T904	18.84	18.75	18.12	PLAY
	18.85	0	18.55	REC
T905	18.84	0	18.55	PLAY
	18.85	18.50	17.92	REC
T906	18.07	-	19.87	PLAY
	15.52	15.48	14.80	PLAY-PAUSE
T907	0.01	1.02	0.01	PLAY
	0	0.01	0.71	REC
T908	0.01	11.38	0.01	REC
	0	0.01	0.74	OTHER
T909	0.01	10.08	0.76	REC
	0	20.2	0.01	OTHER
T910	0.32	8.95	0.07	REC
	20.2	20.8	20.3	OTHER
T911	0.32	8.95	0.11	REC
	20.2	20.6	20.3	OTHER

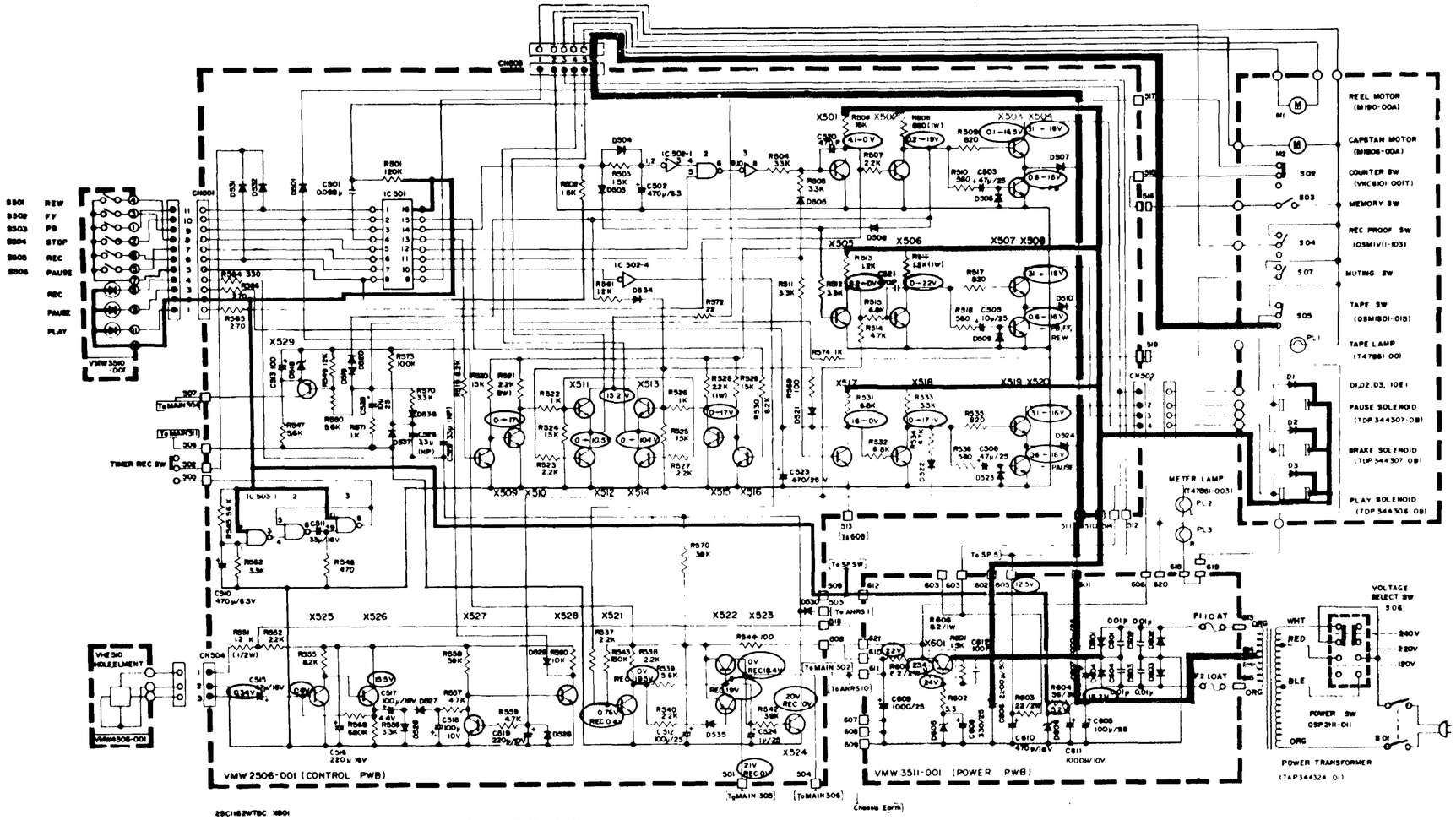
	E	D	B	
R5				REMOTE CONT REC MUTING
C TESTER	0	20.5	0	ON
E VOLTMETER	0	0	0	OFF
	0	20.6	0	ON
	0	0	0.7	OFF

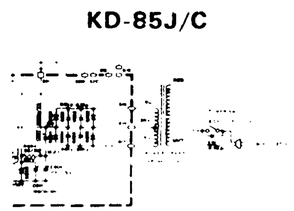
CD 1. FL 1

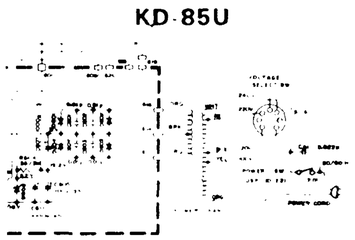


NOTES:

1. All voltages are measured by VTVM, without input signal at REC mode.
   Unless otherwise specified, all resistors are 1/4 W, ±5% carbon resistors.
   And all capacitors are 50 V fixed ceramic capacitors or 50 V mylar capacitors.
2. UF – Unflamable carbon resistor
   MF – Metal film resistor
   OMF– Oxided metal film resistor
   Ta – Tantalum solid electrolytic capacitor
   LL – +20% low leak current electrolytic capacitor
   PP – Polypropylene capacitor
   PS – Polystyrene capacitor
   MM – Metallized mylar capacitor
   NP – Non-polarized electrolytic capacitor
3. Blue line shows the signal at recording.
   Red line shows the signal at playback.
4. parts are safety assurance parts. When replacing those parts, make sure to use the specified one.







2SC1162/TBC X801
2SA564RS X523, X529
2SC828RS X501, X502, X506, X508, X509, X510, X515, X516, X517, X518, X521, X522, X524, X525, X526, X527, X528
2SC1383S X504, X508, X520
2SC1847QR X511, X513
2SC1384S X507, X512, X514, X519
2SC1847R X503
M5442OP IC 501
TD3402AP IC 502, 503
1S2076A D503, D504, D505, D506, D508, D509, D512, D513, D514, D517, D520, D522, D523, D528, D531, D532, D535, D536
1S188FM D501, D526, D527, D529, D530, D531, D532, D535, D536
T30B5S-001 B0E(1) D507, D510, D524, D601, D602, D603, D604
RD43EC D518
RD10E D519
RD5, 1FB D506
RD24E D508

S01 POWER SW AT OFF
S02 COUNTER SW AT OFF (ON AT 999)
S03 MEMORY SW AT OFF
S04 REC PROOF SW AT REC STATE
S05 TAPE SW AT OFF
S501 REW SW AT OFF
S502 FF SW AT OFF
S503 PB SW AT OFF
S504 STOP SW AT OFF
S505 REC SW AT OFF
S506 PAUSE SW AT OFF
S 07 MUTING SWAT OFF

Transistor
Base
Collector
Emitter

Diode

NOTES:

1. All voltages are measured by VTVM, without input signal at REC mode.
   Unless otherwise specified, all resistors are 1/4 W, ±5% carbon resistors.
   And all capacitors are 50 V fixed ceramic capacitors or 50 V mylar capacitors.
2. UF – Unflamable carbon resistor
   MF – Metal film resistor
   OMF– Oxided metal film resistor
   Ta – Tantalum solid electrolytic capacitor
   LL – +20% low leak current electrolytic capacitor
   PP – Polypropylene capacitor
   PS – Polystyrene capacitor
   MM – Metallized mylar capacitor
   NP – Non-polarized electrolytic capacitor
3. Red lines show +B circuits.
4. parts are safety assurance parts. When replacing those parts, make sure to use the specified one.