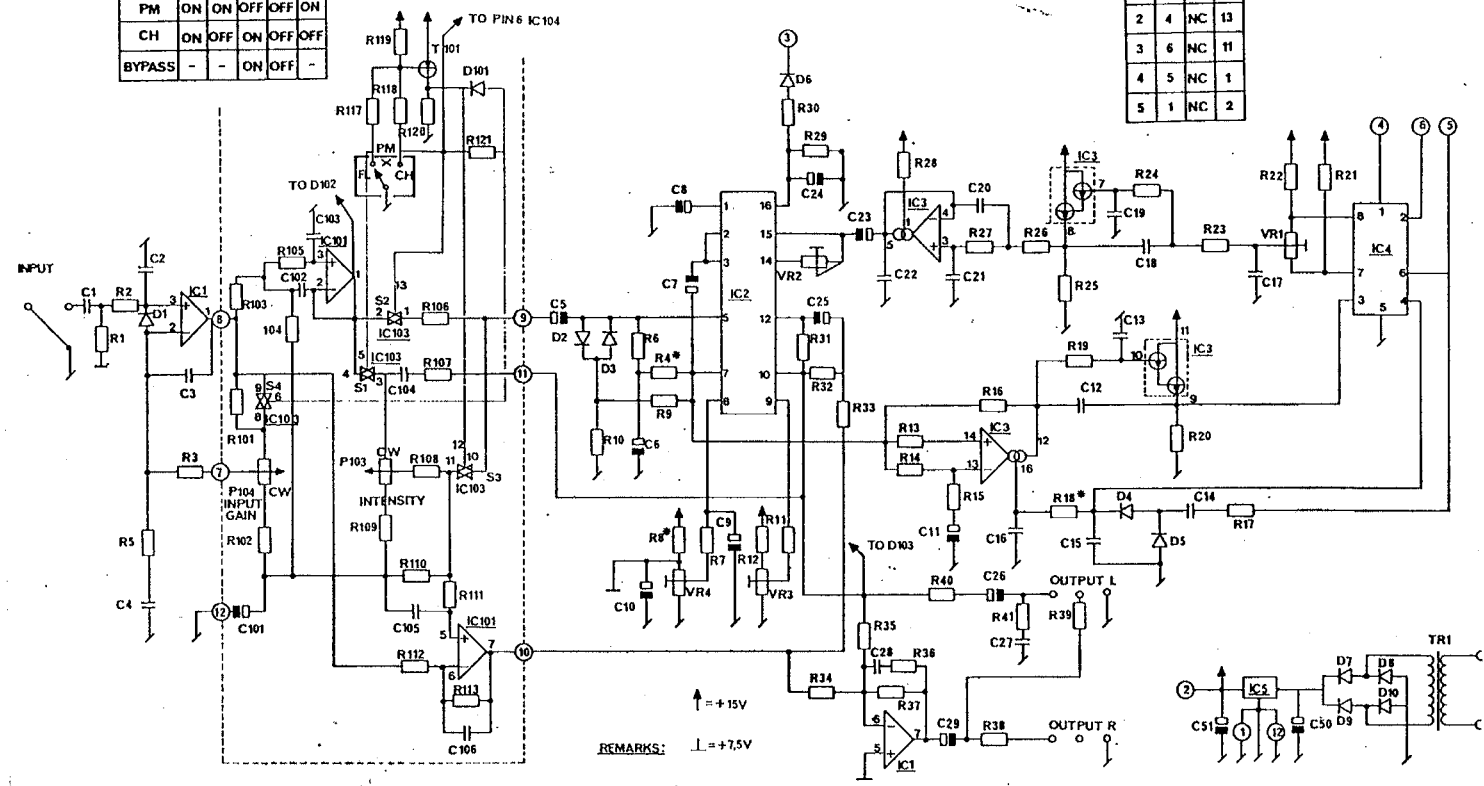


SCF 04-L

| | | | | | |
|--------|-----|-----|-----|-----|-----|
| | S1 | S2 | S3 | S4 | S5 |
| FL | OFF | ON | ON | ON | ON |
| PM | ON | ON | OFF | OFF | ON |
| CH | ON | OFF | ON | OFF | OFF |
| BYPASS | - | - | ON | OFF | - |

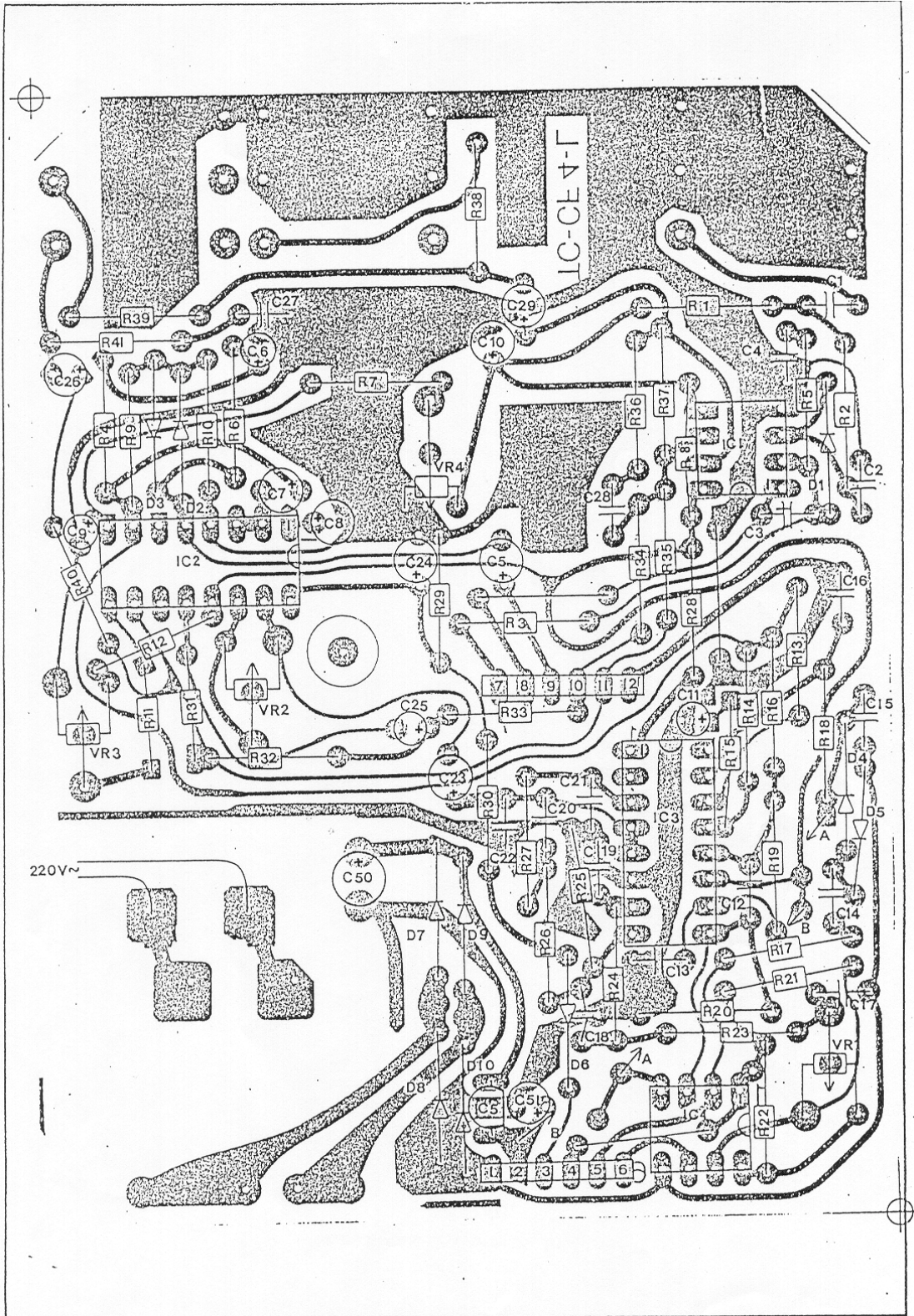
| | | | |
|----|----|------|-----|
| IC | 0V | 7.5V | 15V |
| 1 | 4 | 5 | 8 |
| 2 | 4 | NC | 13 |
| 3 | 6 | NC | 11 |
| 4 | 5 | NC | 1 |
| 5 | 1 | NC | 2 |



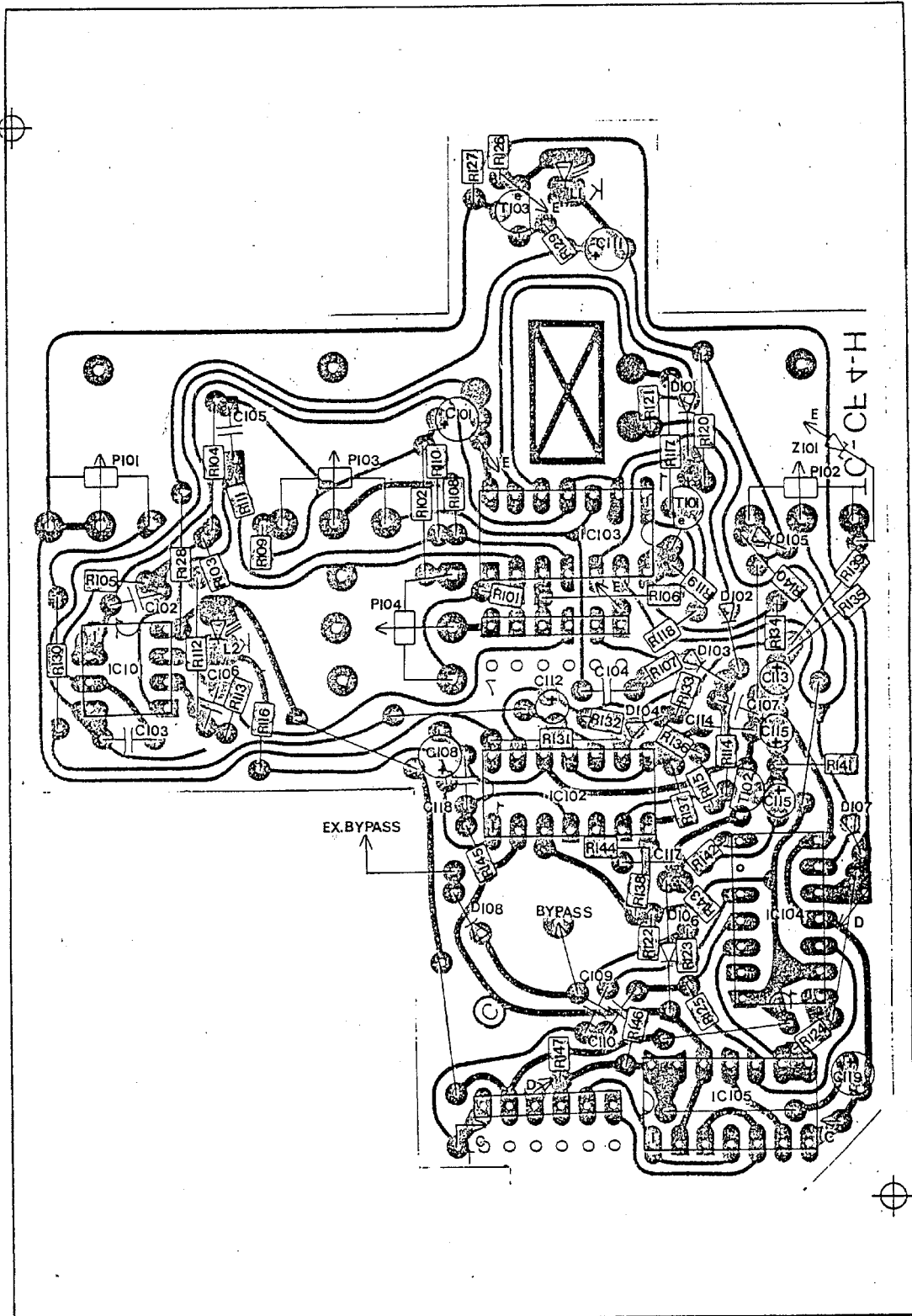
REMARKS:
 ⊕ = +15V
 ⊕ = +7.5V
 ⊖ = 0V

Dwg No. 2002-4
 TITLE: SCHEMATIC TC SCF BOTTOM BOARD
 DATE: 2002-04
 OF COMPANY: t.c. electronic
 PART OF: SCF version 04
 SCALE: 1:1
 Dwg No. 851216
 840215 BRT. FI/KK

Dalbovel 2, DK-8210 Aarhus V, Phone +45 5244288, Tlx. Fotek 16600 DK att. Tecltec Aarhus



| | | | | |
|--------|------|------|-------------------------------|---------------------|
| DATE | DRG. | APP. | TITLE | DRG. NO. |
| 831111 | 3F | FH3 | PARTS LAYOUT SCF BOTTOM BOARD | 2002-4 |
| 840307 | BRH | | SCALE | MAT. |
| | | | PART OF | doc. SCF version 04 |
| | | | | t.c. electronic |



| | | | | |
|--------|-------|------|----------------------------|-----------------|
| DATE | DRG. | APP. | TITLE | DRG. NO. |
| 83111 | JF | FAJ | PARTS LAYOUT SCF TOP BOARD | 2001-4 |
| 840307 | BRH | | PART OF | OF DENMARK |
| | SCALE | MAT. | doc SCF version 04 | t.c. electronic |

RESISTORS

| | | | | | |
|-----|------------|-----|------------|-----|----------|
| R 1 | 1 MOhm | R15 | 100 KOhm | R29 | 1 MOhm |
| R 2 | 4,7 KOhm | R16 | 36 KOhm | R30 | 2,2 KOhm |
| R 3 | 33 KOhm | R17 | 12 KOhm | R31 | 100 KOhm |
| R 4 | - KOhm 1* | R18 | 13 KOhm 3* | R32 | 100 KOhm |
| R 5 | 4,7 KOhm | R19 | 36 KOhm | R33 | 51 KOhm |
| R 6 | 51 KOhm | R20 | 39 KOhm | R34 | 18 KOhm |
| R 7 | 330 KOhm | R21 | 68 KOhm | R35 | 36 KOhm |
| R 8 | 47 KOhm 2* | R22 | 68 KOhm | R36 | 4,7 KOhm |
| R 9 | 13 KOhm | R23 | 24 KOhm | R37 | 36 KOhm |
| R10 | 3,6 KOhm | R24 | 36 KOhm | R38 | 100 Ohm |
| R11 | 330 KOhm | R25 | 18 KOhm | R39 | 2,2 KOhm |
| R12 | 100 KOhm | R26 | 24 KOhm | R40 | 3,6 KOhm |
| R13 | 470 Ohm | R27 | 24 KOhm | R41 | 470 Ohm |
| R14 | 470 Ohm | R28 | 36 KOhm | | |

** REMARKS **

1* = R 4 39 KOhm to 82 KOhm
 2* = R 8 30 KOhm to 56 KOhm
 3* = R18 1 KOhm to 22 KOhm
 (according to test procedure)

VARIABLE RESISTORS

VR 1. 10 KOhm
 VR 2 22 KOhm
 VR 3 47 KOhm
 VR 4 47 KOhm

CAPACITORS

| | | | | | | |
|-----|--------|----------------|-----|--------|----------------|------------|
| C 1 | 47 nF | 10% poly. (2e) | C17 | 470 pF | - | plaq. (2e) |
| C 2 | 220 pF | - | C18 | 1,5 nF | - | plaq. (2e) |
| C 3 | 15 pF | - | C19 | 68 pF | - | plaq. (2e) |
| C 4 | 4,7 nF | 20% poly. (2e) | C20 | 470 pF | - | plaq. (2e) |
| C 5 | 4,7 uF | 50V ellyt | C21 | 470 pF | - | plaq. (2e) |
| C 6 | 10 uF | 35V ellyt | C22 | 220 pF | - | plaq. (2e) |
| C 7 | 10 uF | 35V ellyt | C23 | 4,7 uF | 50V | ellyt |
| C 8 | 1 uF | 50V ellyt | C24 | 1 uF | 50V | ellyt |
| C 9 | 470 nF | 16V tantal | C25 | 4,7 uF | 50V | ellyt |
| C10 | 10 uF | 35V ellyt | C26 | 4,7 uF | 50V | ellyt |
| C11 | 470 nF | 16V tantal | C27 | 47 nF | 10% poly. (2e) | |
| C12 | 470 pF | - | C28 | 4,7 nF | 20% poly. (2e) | |
| C13 | 220 pF | - | C29 | 4,7 uF | 50V | ellyt |
| C14 | 15 pF | - | | | | |
| C15 | 10 nF | 10% poly. (2e) | C50 | 220 uF | 35V | ellyt |
| C16 | 10 nF | 10% poly. (2e) | C51 | 22 uF | 25V | ellyt |

INTEGRATED CIRCUITS

IC 1 RC 4558
 IC 2 NE 570
 IC 3 LM 13600
 IC 4 MN 3007 (N-MOS)
 IC 5 MC 78L15CP
 Recalibration needed if replacing
 IC 2 or IC 4

DIODES

D 1 - D10 1N4148

TRANSFORMER

TR 1 VN25 (220V - 24V-0.8VA)
 (110V - 24V-0.8VA)

page 1 of 2

| | | | | |
|------|----------|------|-----------------------------|-----------------|
| DATE | DWG. NO. | APP. | TITLE | DWG. NO. |
| | | | PARTS LIST C/F Bottom Board | 2002-4 |
| | | | SCALE | |
| | | | MAT. | |
| | | | PART OF | |
| | | | DOC. TC SCF version 4 | |
| | | | | t.c. electronic |

RESISTORS

| | | | | | |
|------|----------|------|----------|------|----------|
| R101 | 6,2 KOhm | R117 | 100 KOhm | R133 | 47 KOhm |
| R102 | 2,2 KOhm | R118 | 100 KOhm | R134 | 18 KOhm |
| R103 | 8,2 KOhm | R119 | 10 KOhm | R135 | 16 KOhm |
| R104 | 10 KOhm | R120 | 100 KOhm | R136 | 16 KOhm |
| R105 | 4,3 KOhm | R121 | 1 MOhm | R137 | 82 KOhm |
| R106 | 47 KOhm | R122 | 100 KOhm | R138 | 100 KOhm |
| R107 | 2,2 KOhm | R123 | 1 MOhm | R139 | 4,7 KOhm |
| R108 | 47 KOhm | R124 | 100 KOhm | R140 | 47 KOhm |
| R109 | 10 KOhm | R125 | 1 MOhm | R141 | 47 KOhm |
| R110 | 91 Kohm | R126 | 47 KOhm | R142 | 16 KOhm |
| R111 | 4,7 KOhm | R127 | 47 KOhm | R143 | 33 KOhm |
| R112 | 18 KOhm | R128 | 4,7 KOhm | R144 | 220 KOhm |
| R113 | 10 KOhm | R129 | 4,7 KOhm | R145 | 220 KOhm |
| R114 | 2,2 MOhm | R130 | 10 KOhm | R146 | 4,7 KOhm |
| R115 | 6,8 MOhm | R131 | 100 KOhm | R147 | 100 Ohm |
| R116 | 10 KOhm | R132 | 470 KOhm | | |

POTENTIOMETERS

| | | | |
|------|---------|----------|--------------|
| P101 | 1 MOhm | neg.log. | (SPEED) |
| P102 | 22 KOhm | lin. | (WIDTH) |
| P103 | 22 KOhm | lin. | (INTENSITY) |
| P104 | 10 KOhm | lin. | (INPUT GAIN) |

CAPACITORS

| | | | | | | | |
|------|--------|-----|------------|------|--------|-----|--------------|
| C101 | 22 uF | 25V | ellyt | C111 | 22 uF | 25V | ellyt |
| C102 | 4,7 nF | - | plaq. (2e) | C112 | 1 uF | 50V | ellyt (mini) |
| C103 | 2,2 nF | - | plaq. (2e) | C113 | 4,7 uF | 16V | tantal |
| C104 | 33 nF | 10% | poly. (2e) | C114 | 22 nF | - | plaq. (2e) |
| C105 | 220 pF | - | plaq. (2e) | C115 | 3,3 uF | 50V | ellyt |
| C106 | 470 pF | - | plaq. (2e) | C116 | 3,3 uF | 50V | ellyt |
| C107 | 47 nF | 10% | poly. (2e) | C117 | 470 pF | - | plaq. (2e) |
| C108 | 1 uF | 50V | ellyt | C118 | 100 pF | - | plaq. (2e) |
| C109 | 470 pF | - | plaq. (2e) | C119 | 4,7 uF | 16V | tantal |
| C110 | 10 nF | - | plaq. (2e) | | | | |

INTEGRATED CIRCUIT

| | | | |
|-------|------------|----|------------------|
| IC101 | RC 4558 | or | LM 4558 |
| IC102 | LM 339 | | |
| IC103 | MC 14016B | or | CD 4016B (C-MOS) |
| IC104 | MC 14007UB | or | CD 4007UB |
| IC105 | MC 14011B | or | CD 4011B |

ZENER-DIODES

| | | |
|------|-------|------|
| Z101 | BZX79 | C4V3 |
|------|-------|------|

TRANSISTORS

| | |
|------|----------|
| T101 | BC 558-B |
| T102 | BC 558-B |
| T103 | BC 548-B |

DIODES

| | |
|-----------|--------|
| D101-D108 | 1N4148 |
|-----------|--------|

LEDS

| | | |
|-----------|-------------------|-------------|
| L101-L102 | TLR 124 (red 3mm) | (/SBR 3431) |
|-----------|-------------------|-------------|