PVDM
PRO & Consumer Audio

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This is still a work in progress

Quick guide to Revox B77:

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2 Location of the boards

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4 Motor Caps – value and colouring

5 Calibration instruction – the short & quick version

6 Audio Connection Board – layout of all cable connections

1. Revox B77 – Location of the boards:

Power Supply Board

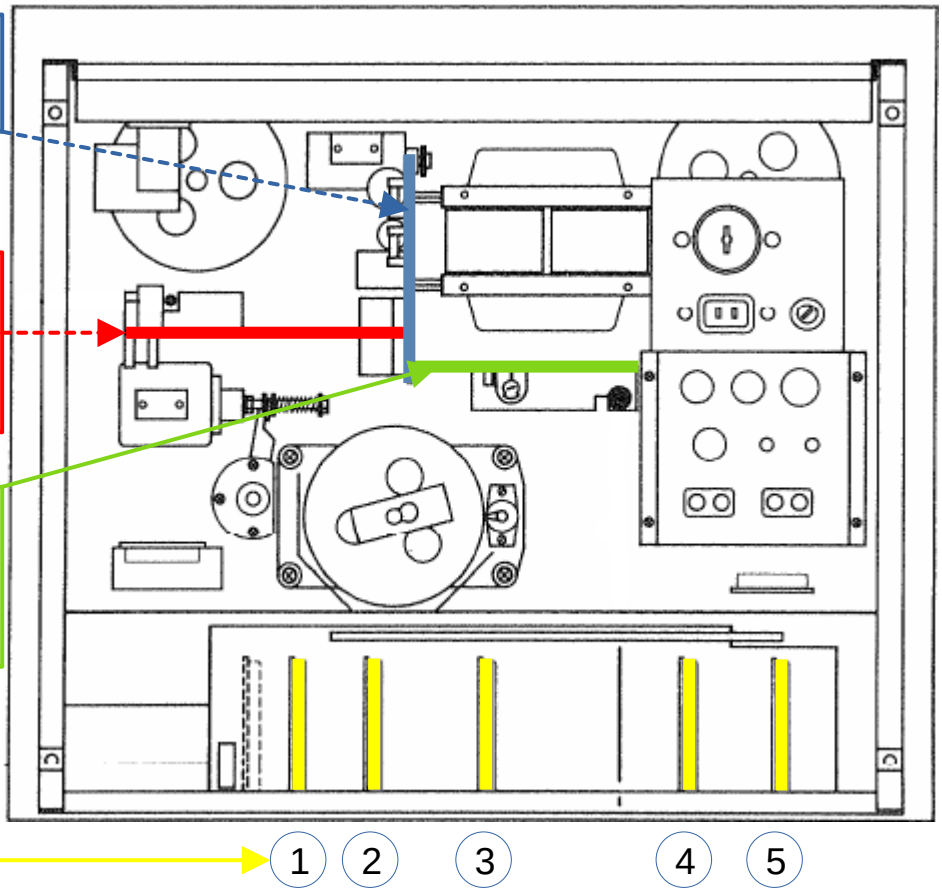
1.177.310/.311/.312

Tape Drive/Transport Control Board

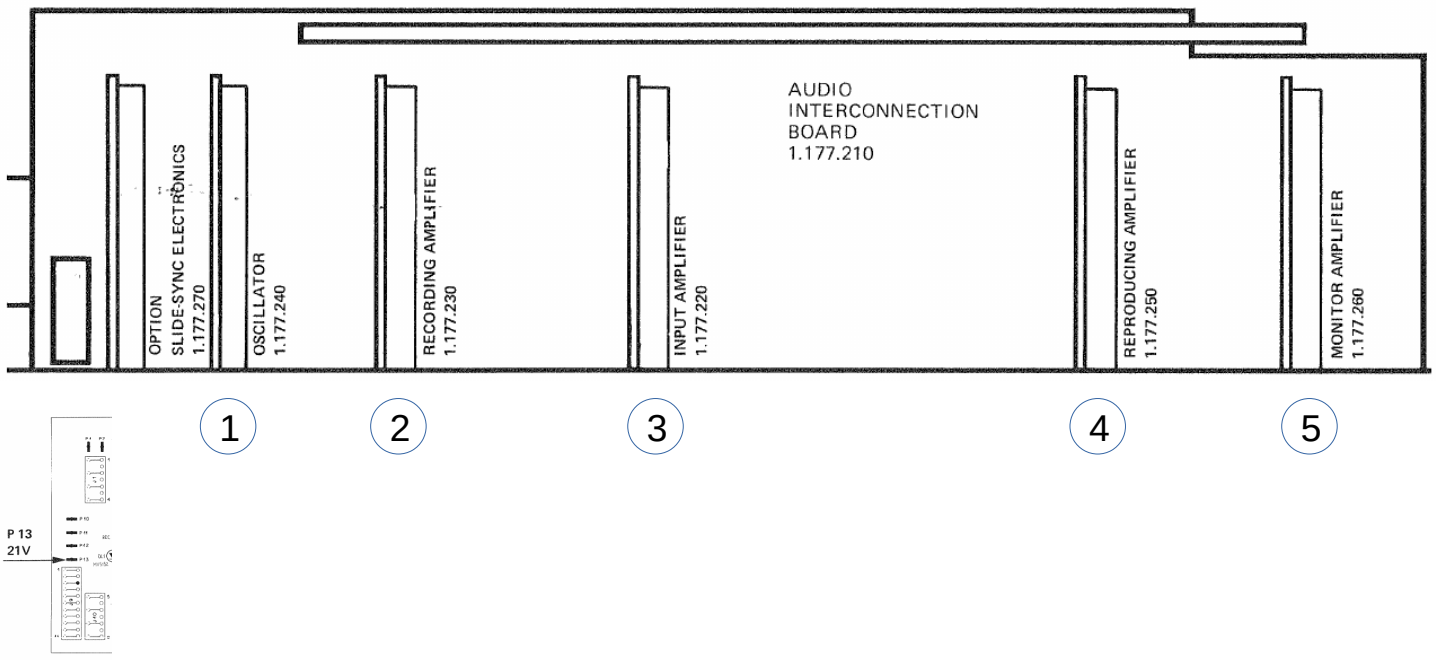
Mk1: 1.177.315
Mk2: 1.177.317.00/.317.81

Capstan Speed Control Board

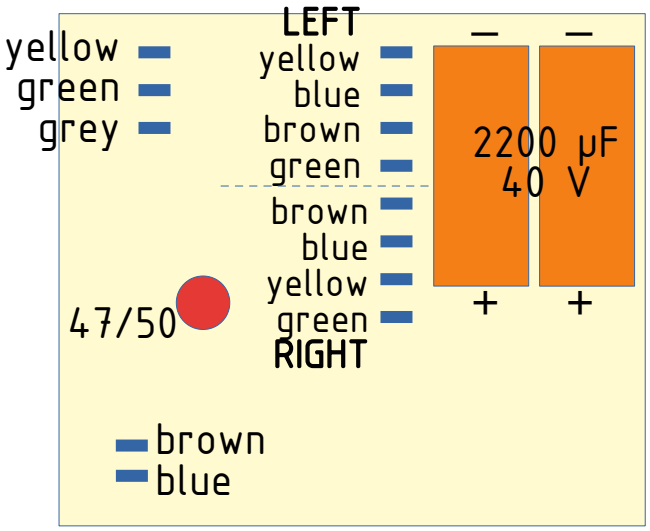
Mk1: 1.177.325/.326/.327
Mk2: .325.81/.326.81/.327.81
.325.82/.326.82/.327.82



1. Oscillator Card
2. Record Amplifier
3. Input Amplifier
4. Repro Amplifier
5. Monitor Amplifier

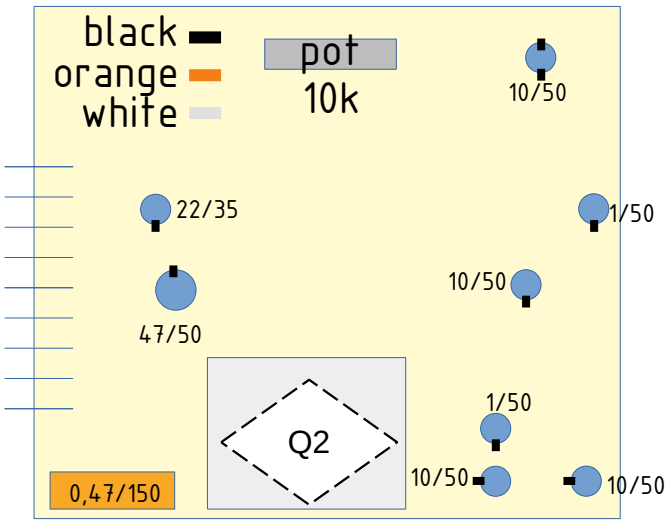


Revox B77 – details of the boards – wires, caps:



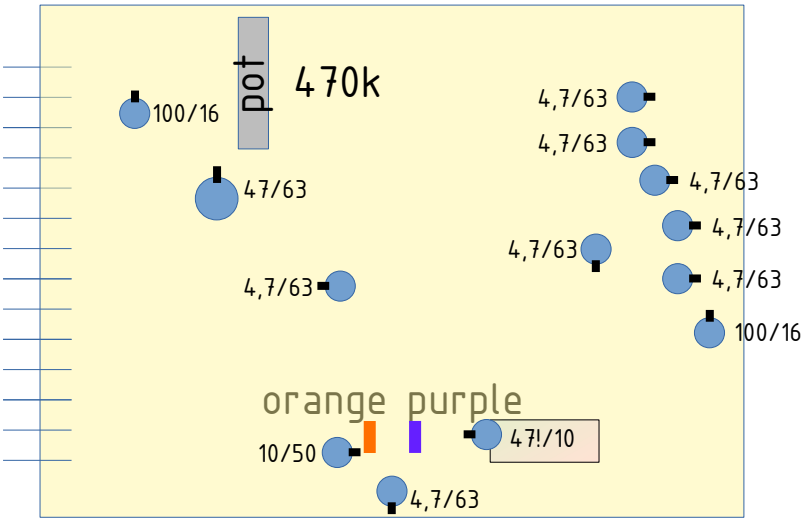
PSU PCB 1.177.

47 µF	50 V	1x
2200µF	40 V	2x
-		
tot		3x



Capstan PCB 1.177.327.81

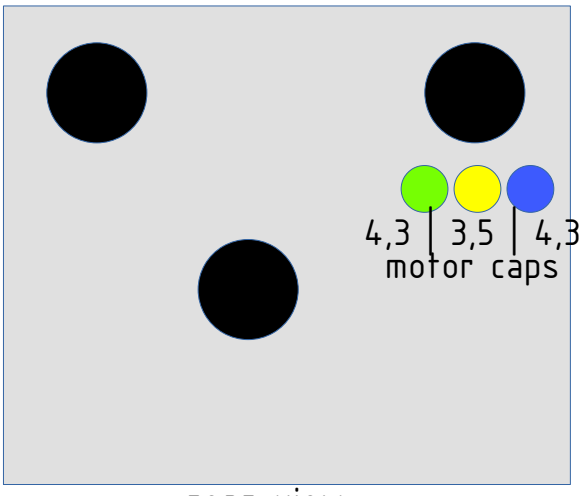
1 µF	50 V	2x
10 µF	50 V	4x
22 µF	35 V	1x
47 µF	50 V	1x
-		
tot		8x



Tape Drive/Transport Control PCB 1.177.317.81

4,7 µF	63 V	8x
10 µF	50 V	1x
47 µF	63 V	2x
100 µF	16 V	2x
-		
tot		13x

Revox B77 – Motor Caps – value and colouring:



rear view

2. Revox B77 – Quick Overview Of Calibration:

SHORT VERSION if you're familiar with the procedure (else I suggest do it from SM first time)

1a –for regulated 21 V supply:

check P13 on audio interconnect board for 21 V ± 1 V

1b –for unregulated 24 V supply:

check R34 on tape transport control board for 24..26 V

of J5 pin 12, J5 = connector onder de 2 zekeringen vh psu pcb. pin 1 is onderaan.

of op de zichtbare pin vd bovenste grote 2200 elco.

2 – check 35..50 mV @ 3 3/4 IPS at P12 (brown) and P13 (blue) of tacho head

3 – check TP1 on speed control board for 800 Hz (adjust R14)

4 – set control levels at the back fully open

5 – input tone @ 1k at max input level setting and adjust input signal until 0,775 V is obtained at output. (20 mV)

6 – adjust METER CAL for 0 VU on meter

7 – adjust level > 6 dB to check overload indicators, adjust R34/37 or R30/38 on monitor board

8 – adjust the REPRO HEAD azimuth

9 – play reference level from cal tape, adjust REPRO LVL for 0,775 V on output

10 – set input levels to ZERO

11 – start recording on blank tape and check for 30..32 V on erase head and 150 kHz ± 5 kHz (adjust T1 on osc board)

12 – start rec and measure bias trap on rec amp board for < 350 mV or less, adjust coils

13 – adjust the REC HEAD azimuth

14 – set input levels to MAX

15 – start recording and feed 10 kHz @ –20 dB below 0 VU

16 – adjust BIAS pots according to table 6.4–15 on pg. 50 of SM PDF (approx. 3 < x < 7 dB overbias depending on tape) for both speeds

17 – keep levels on MAX

18 – start REC 1 kHz and adjust generator for 0,775 V on output

19 – switch MONITOR to position TAPE

20 – adjust REC LEVEL to obtain output of 0,775 V. Check between TAPE and SOURCE

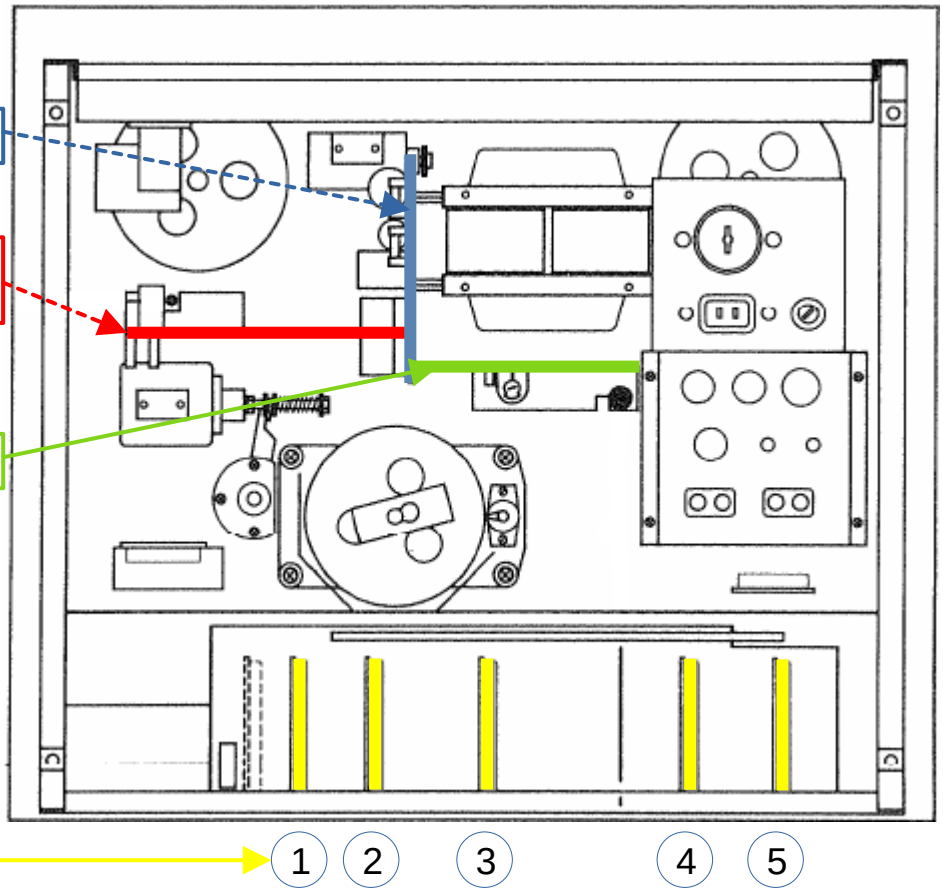
21 – start REC with input 12 kHz –20 dB

22 – adjust pots EQ SLOW FAST until output is equal to the signal level at 1 kHz for both speeds

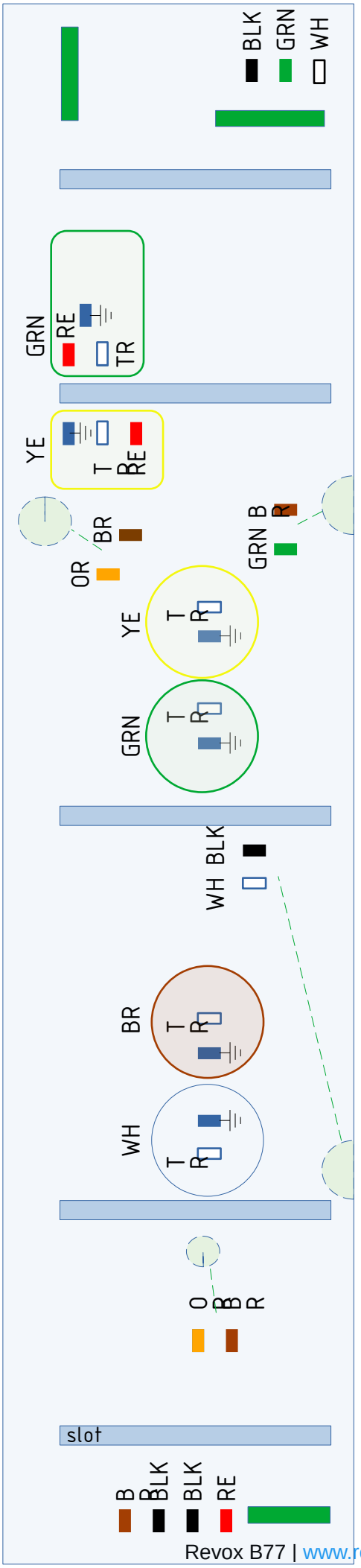
23 = measure distortion (< 1%, or see table 6.5–2 pg. 53 SM)

24= measure wow and flutter (<0,1 % see SM)

1. Revox B77 SLS – Layout of the boards:



3. AUDIO INTERCONNECTION BOARD



= connector

= hole with wires

TR = transparent

BR = brown

BLK = black

RE = red

OR = orange

WH = white

GRN = green

YE = yellow

= earth