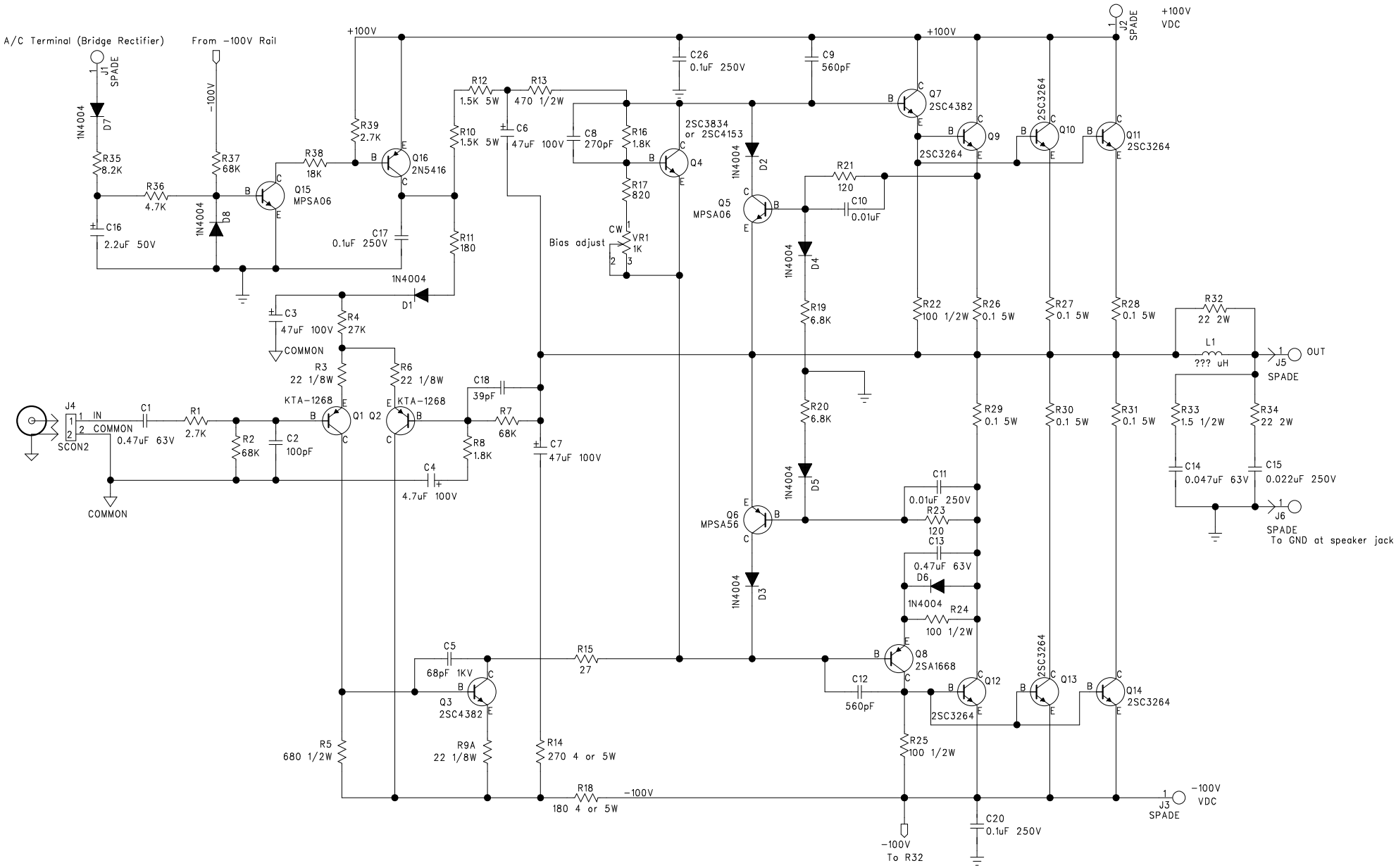


Q14 2N5416

TO-39

Bottom View

Q3&Q7 2SC4382
Q4 2SC3834
Q8 2SA1668

TO-220

Q9-Q12 2SC3264

MT-200

Q1&Q2 KTA-1268

TO-92

Q6 MPSA56
Q5&Q13 MPSA06

TO-92

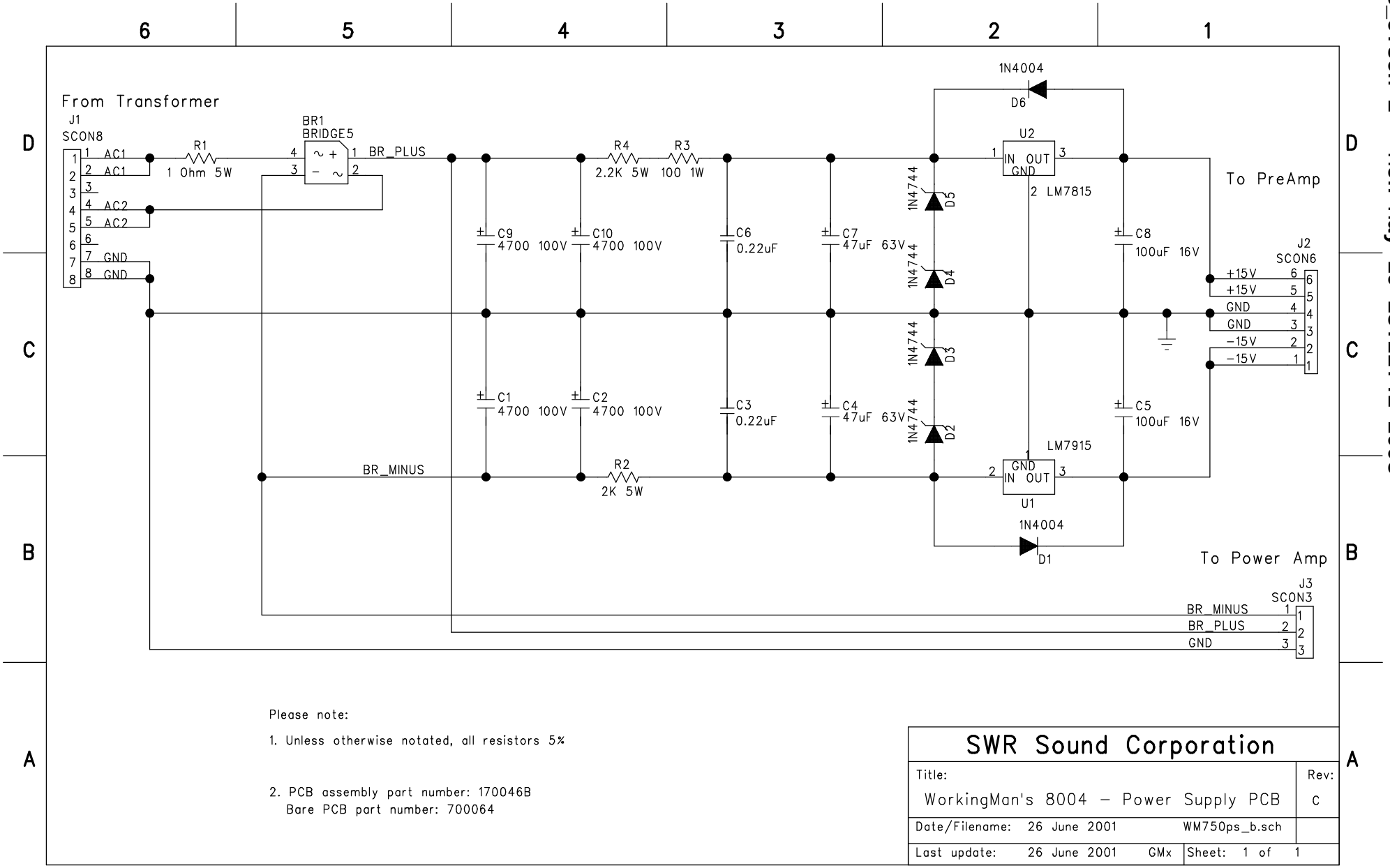
All Others Front View

NOTES (Unless otherwise specified):

1. All resistor in ohms, 1/4 watt, 5%
2. PCB part # for all units is 170033B
   Module is 700051

SWR Sound Corp.		
SWR750 – Power Amp Module		
June 2002	Revision E	Page 1 of 1

pwr750 AMP Rev E.sch-1 - Mon May 19 17:05:25 2003

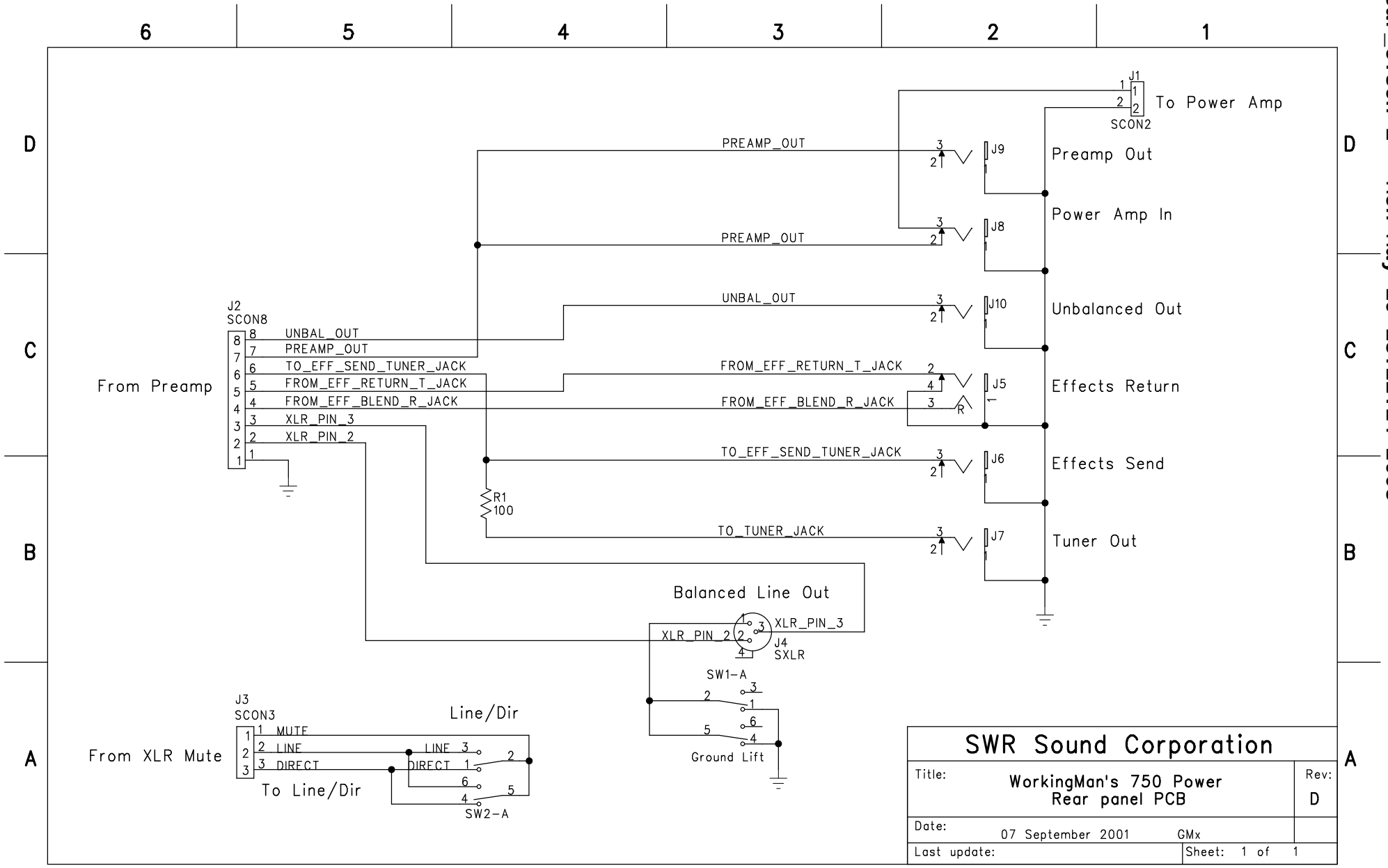


Please note:

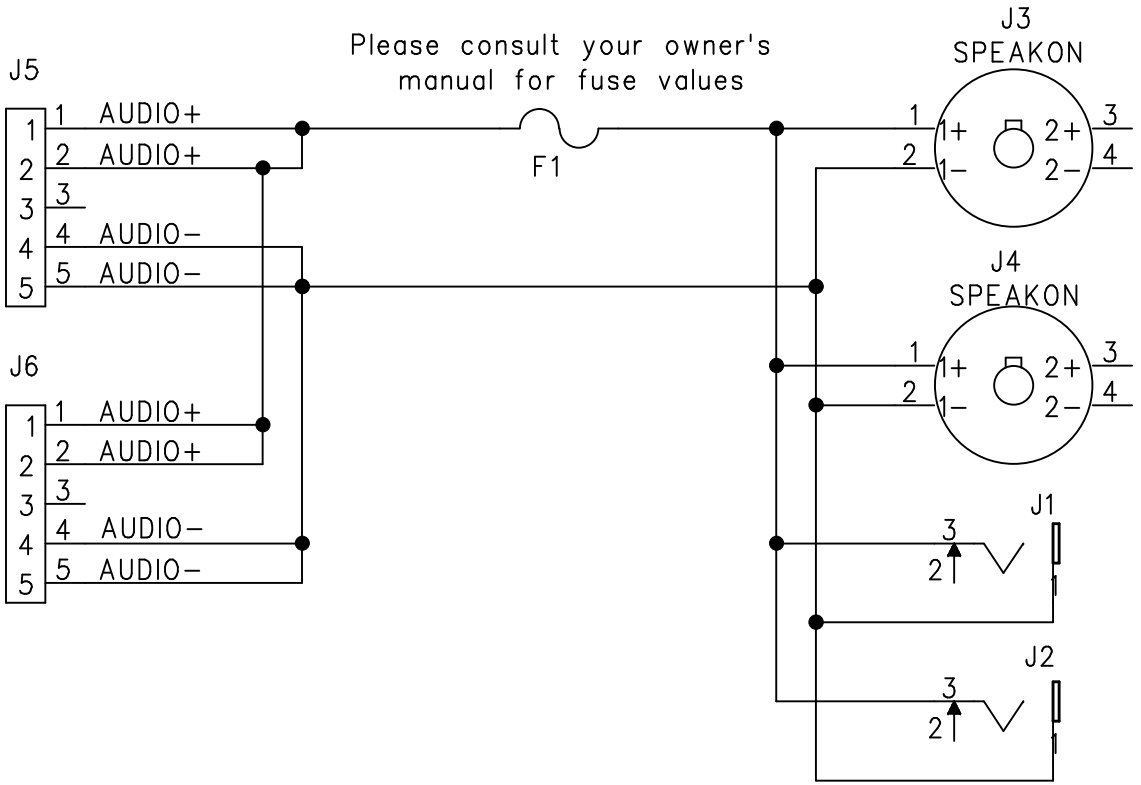
1. Unless otherwise notated, all resistors 5%

2. PCB assembly part number: 170046B
   Bare PCB part number: 700064

SWR Sound Corporation		
Title: WorkingMan's 8004 – Power Supply PCB		Rev: C
Date/Filename: 26 June 2001	WM750ps_b.sch	
Last update: 26 June 2001 GMx	Sheet: 1 of 1	



SWR Sound Corporation		
Title:	WorkingMan's 750 Power Rear panel PCB	Rev: D
Date: 07 September 2001	GMx	
Last update:	Sheet: 1 of 1	



PCB 170048A
Assy 700066

SWR Sound Corporation

Title: Speaker Output PCB		Rev: A
Date: 19 June 2001		
Last update: 26 February 2003	Sheet: 1 of 1	

output_rev a.sch-1 - Wed Feb 26 15:25:15 2003

6 5 4 3 2 1

D C B A

Passive/Active
J6
R26 1K
C12 0.22uF
C13 150pF
R1 3.9M
C1 10uF 35V
R2 4.7K
C26 150pF
R45 3.9M
Active
J7
R46 1K
C25 0.22uF
C28
R44
DO NOT STUFF DO NOT STUFF
U2-A TL072CP
U2-B TL072CP
R3 10K
C2 100pF
R27 10K
C14 100pF
R6 4.7K
R7 4.7K
C4 150pF
R10 4.7K
U3-A TL072CP
R4 10K
R32 27K
R9 33K
C3 250pF Mica
R5 56K
C15 0.047uF
R29 100
C27 0.1uF
R50 100K
R48 100K
U3-B TL072CP
R30 10K
C16 100pF
R28 3.3K
Dial-O-Tone
CW R52 50K 4B
R53 22K
R31 22K
R51 27K
C5 39pF
R11 47K
U4-A TL072CP
R49 CW 50K
Gain
D4 1N914
U4-B TL072CP
R33 10K
C17 100pF
R55 2.7K
C18 10uF 35V
To Mute
J1 SCON3
MUTE 1
LINE 2
DIRECT 3
From Line/Dir Power Supply
J2 SCON6
+15V +15V GND GND -15V -15V
R8 10K
OVERLOAD
TO_EFF_SEND_TUNER_JACK
R56 47K
U5-A TL072CP
D1 1N914
R18 100
R19 27K
R64 22K
C9 39pF
D2 1N914
OVERLOAD
R41 1.5K
C24 47uF 63V
C10 150pF
R20 1.2K
U8-A TL072CP
C23 100pF
R70 10K
R69 10K
U8-B TL072CP
R71 1.5K
47uF 63V C32
Bass
R54 CW B50K
C6 39pF
R35 2.2K
C29 0.27uF
R36 1K
C19 0.033uF
U5-B TL072CP
R34 120K
Eff. Blend
CW R68 50K 4B
R65 22K
R67 27K
R17 47K
U7-A TL072CP
R16 100
UNBAL_OUT
Lo Mid
R58 CW B50K
R13 470
C7 0.068uF
R15 820
C8 0.022uF
U6-A TL072CP
R14 470K
Hi Mid
R59 CW B50K
R57 470
C30 0.068uF
R60 820
C20 0.022uF
U6-B TL072CP
R37 33K
Treble
R62 CW B50K
R61 3.3K
C31 0.033uF
Breath
R66 CW B50K
R38 3.3K
C21 0.01uF
C22 100pF
R39 10K
R72 CW B50K
R63 10K
U7-B TL072CP
Master Volume
R40 100
XLR_PIN_2 J3-2
XLR_PIN_3 J3-3
UNBAL_OUT J3-8
PREAMP_OUT J3-7
To Rear Panel
To Power Amp
+15V
R23 1M
OVERLOAD
U1-A LM339N
R22 33K
Overload
Red D3
R24 100K
R21 8.2K
R47 2.2K
R25 100K
U1-B LM339N
C11 0.01uF
Spare:
U1-C LM339N
U1-D LM339N
X1 MTG350 X2 MTG350 X3 MTG350
(MTG=Mounting hole)
HEADPHONE
R43 270 1W
R42 270 1W
J8
R
CGND
FROM_EFF_BLEND_R_JACK
FROM_EFF_RETURN_T_JACK
To Rear Panel
J3-6 TO EFF SEND TUNER JACK
J3-1
J3-4 FROM_EFF_BLEND_R_JACK
J3-5 FROM_EFF_RETURN_T_JACK
From Power Amp
J5
1 HEADPHONE
2
3 CGND

Unless otherwise noted,
all resistors are 1/4 Watt, 5%

Revised for Production

SWR Sound Corporation

Title:	Rev:
WorkingMan's 8004 – Preamp section	B
Date: 10 July 2001	
Last update: 14 December 2001	Sheet: 1 of 1

BIAS PROCEDURE SM-400/SM-900/ST-800

Equipment required:
Sinewave generator
2 ohm, 250 watt load
AC millivolt meter
Oscilloscope

1. Lower signal generator output to minimum, set frequency to 1KHz and insert into "mono" effects return jack (unbalanced line in for Stereo 800).

2. Set Power Amp Assign Switch on back panel to "Stereo" position (up). Plug 2 ohm dummy load in channel to be tested.

3. Raise Master Volumes on SM-900 and ST-800 to full clockwise. Set Effects Blend control on SM-900 to "wet" (full clockwise). Set Balance control on SM-400 to mid-position.

4. Adjust bias trim pots to full counter-clockwise position.

5. Turn on/off switch to "on" position. Connect unit to autotransformer (variac) and raise AC line level to 115 volts.

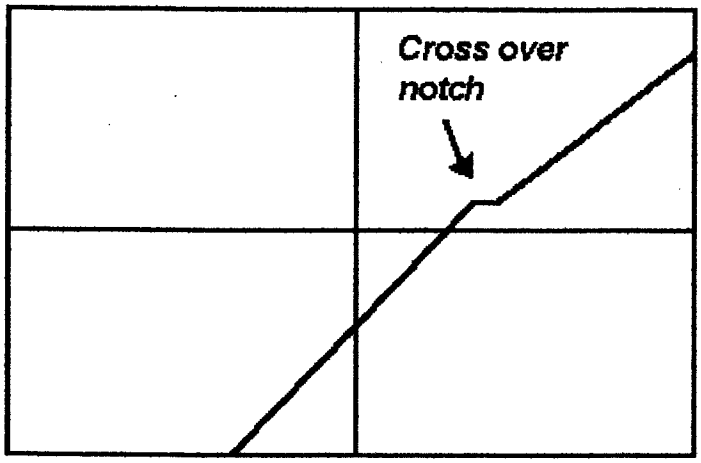
6. Position ground reference on oscilloscope just above center line of screen.

7. Raise signal generator level so that 2 volts RMS appears at the speaker output.

8. Monitor signal on scope with the following settings:
Load: 2 ohms
Scope: Sweep Time: 50us Volts/Div: 0.2V
Signal Generator: Freq. 1KHz

9. The signal should have a prominent crossover notch at about zero crossing. Refer to diagram below.

Figure 1.



10. Adjust bias trimpot of amp being tested just past the point the crossover notch disappears. <u>DO NOT OVER ADJUST</u> as this will set the idle current too high and the power amp will overheat

11. Repeat procedure for other side.