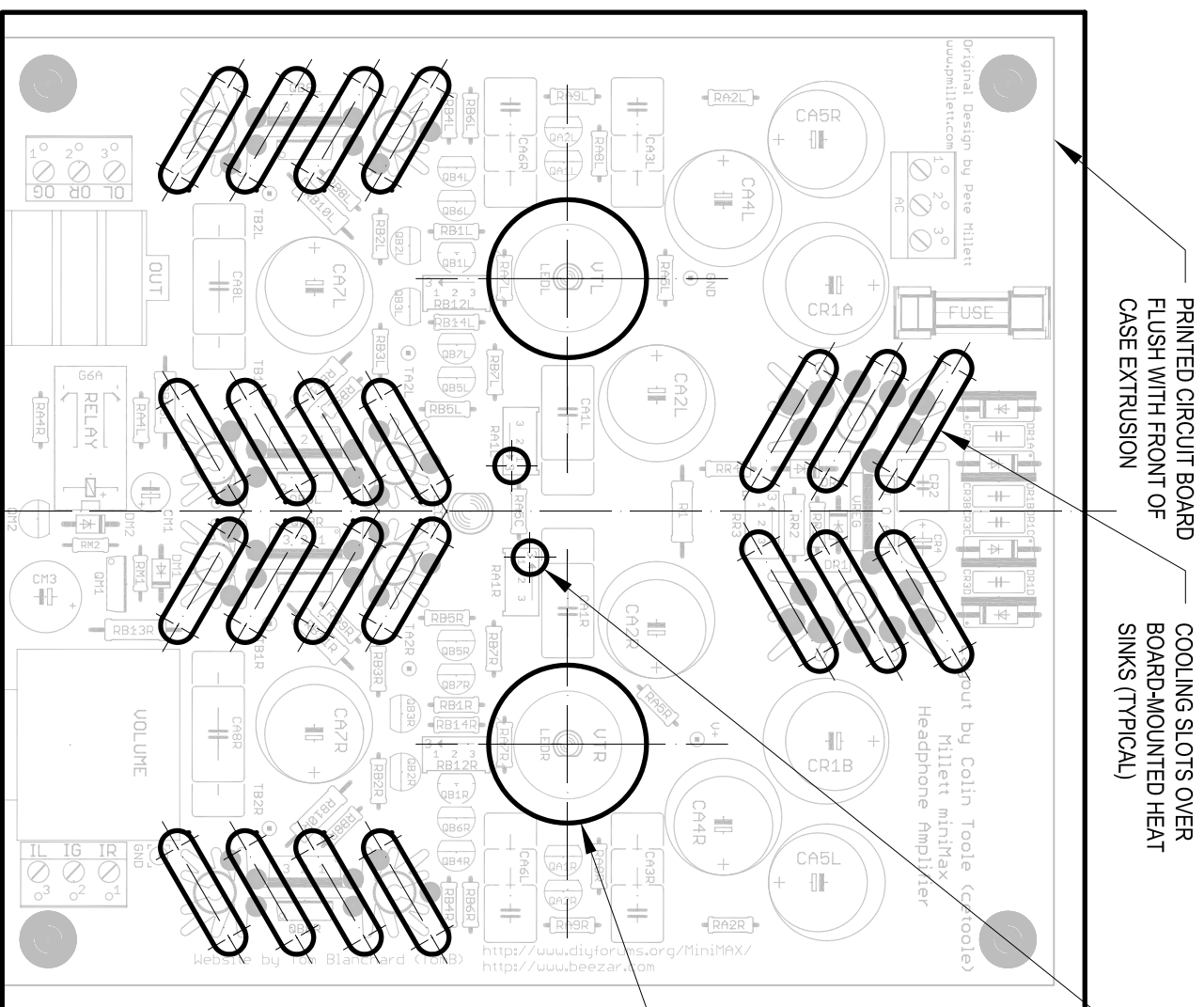


**GENERAL NOTES (applies to all sheets)**

1. Electronic project is a low-voltage (24VAC) vacuum tube, discrete solid-state hybrid stereo hi-fidelity headphone amplifier. Components are shown to provide reference for Lansing enclosure machining. PCB will be located in the bottom slot of the case. All components, except for the vacuum tubes, will be limited to 1" total height from the top surface of the PCB and will be totally enclosed within the case.
2. Case is based on Lansing #DT1A60-06A1 (clear) or #DT1K60-06B2 (black). Case includes the option for the Extended Metal Panel - 4 Hole on front and back with same finish as rest of case. Endplate screws shall also be silver for a clear case and black for a black case. General case dimensions are 5.528 inches wide by 6 inches long and 1.52 inches high.

3. Frontplate machining design includes holes for a volume pot shaft with locator stud and a standard phone jack for 1/4" stereo phone plugs. Silkscreen is included.
4. Backplate machining design includes holes for Right and Left channel RCA jacks, three tip jacks for multimeter measurement, a low-voltage AC input jack (same as DC adapter jacks), and a pushbutton power switch. Power switch requires a circular hole with a bottom locator key as dimensioned on M002. Silkscreen is included.
5. Extruded body top includes large holes for two vacuum tubes (left and right stereo channels). Tubes are approximately two inches tall and will stick out of the case holes. Two smaller holes are included for adjusting the tubes' bias using multi-turn trimmers and a trimmer adjustment tool or small screwdriver. Parallel angled cooling slots are aligned over board mounted, extruded 1" tall heat sinks. There is no silkscreening for body top.

6. Extruded body bottom includes duplicate of cooling slot pattern used on top, but with no tube or bias adjust holes. Dimensions are detailed on sheet M003. One hole, along the vertical centerline of the extruded body bottom, is included as a PCB mounting/locator hole. There is no silkscreen for the extruded body bottom.
7. Extruded body sides includes symmetrical and angled cooling slots. Slots are positioned so as to be above the PCB top surface and within the top and bottom side features of the Lansing "D" style case. Dimensions are detailed on sheet M003. There is no silkscreen for the extruded body sides.
8. Preliminary estimates are for 100+ cases, with a To-Be-Determined mix between black and clear cases.
9. Silkscreen shall be black on a clear case or white on a black case. See sheet M004 for details on silkscreening.



PRINTED CIRCUIT BOARD  
FLUSH WITH FRONT OF  
CASE EXTRUSION

COOLING SLOTS OVER  
BOARD-MOUNTED HEAT  
SINKS (TYPICAL)

ACCESS HOLE FOR  
TRIMMER ADJUSTMENT  
(TYP FOR 2)

PRINTED CIRCUIT BOARD  
IN BOTTOM SLOT

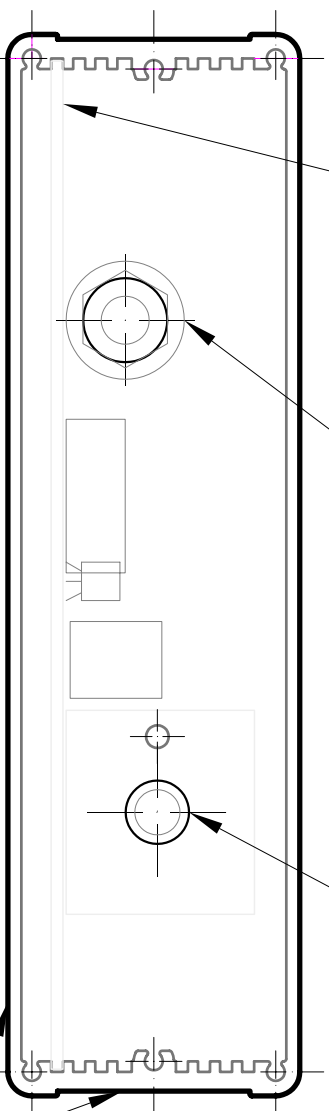
HEADPHONE JACK  
(STD PHONE JACK)

VOLUME POT SHAFT  
WITH LOCATOR KEY

HOLE IN CASE LID  
FOR VACUUM TUBE  
(TYP. FOR 2)

**FRONT MOUNTED COMPONENTS**

FULL SCALE



OUTLINE OF  
EXTRUDED BODY

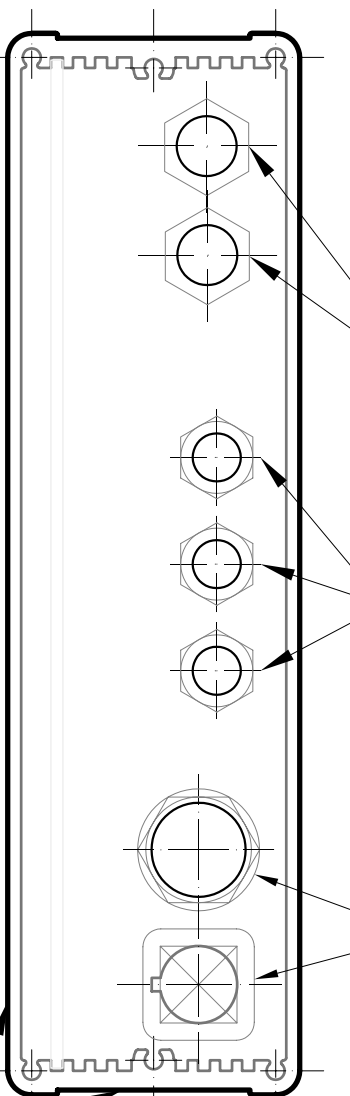
RCA JACKS

2.1MM AC ADAPTER SOCKET

POWER SWITCH

**REAR MOUNTED COMPONENTS**

FULL SCALE

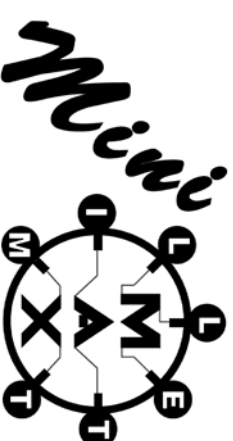
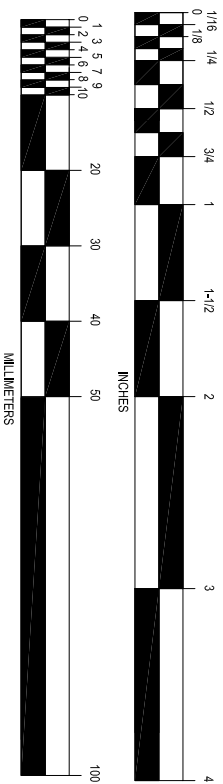


OUTLINE OF  
EXTRUDED BODY

**EXTRUDED BODY TUBE - TOP**

FULL SCALE

OUTLINE OF  
EXTRUDED BODY



Millett Hybrid MiniMAX Headphone Amplifier

DIYforums.org, beezar.com

Component Reference

beezar.com

home of TooleAudio and the Millett MAX



PROJECT # MiniMAX-1  
DATE: 9/16/2008  
PROJ. OFFICER: TMB  
DRAWN BY: TMB  
CHECKED BY: TMB  
DRAWING # 1  
OF 4  
R3.0  
M001