

# ML-1 SPECIFICATIONS

## PHONO

Gain (dB) : A3: 32/39      A4E: 38/44      D5: 54/60      D6: 60/66

Gain difference  
between channels:  $\pm 0.2\text{dB}$

THD : @20kHz, 3V, 32dB = .008%

IMD : 60Hz/7kHz, 4:1, 3V = .008%      -40-50 mA input  
System D (60dB) = .01%

Noise : 10mV, 1kHz, 32dB = -80dB  
1mw D system  $\longleftrightarrow$  -75dB

## LINE

Gain : Hi - 21dB  
Low - 11dB

Gain difference  
between channels:  $\pm 0.2\text{dB}$

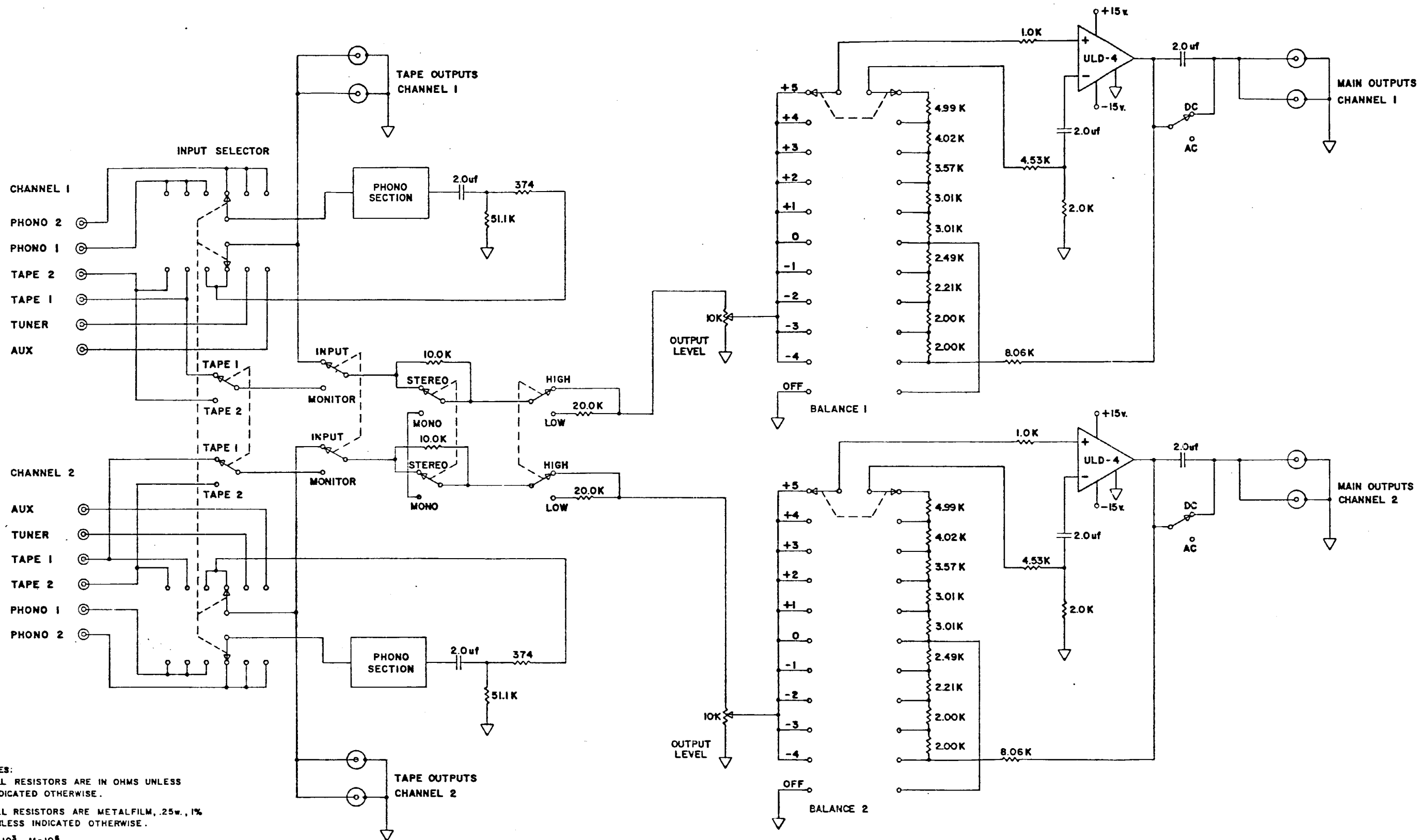
THD : @20kHz, 3V, 10k = .01%

IMD : 60Hz, 7kHz, 4:1, 3V = .008%

Noise : 2.5V, 1kHz = -95dB

Balance Control  
Accuracy :  $\pm 0.2\text{dB}$

*[Handwritten signature]*

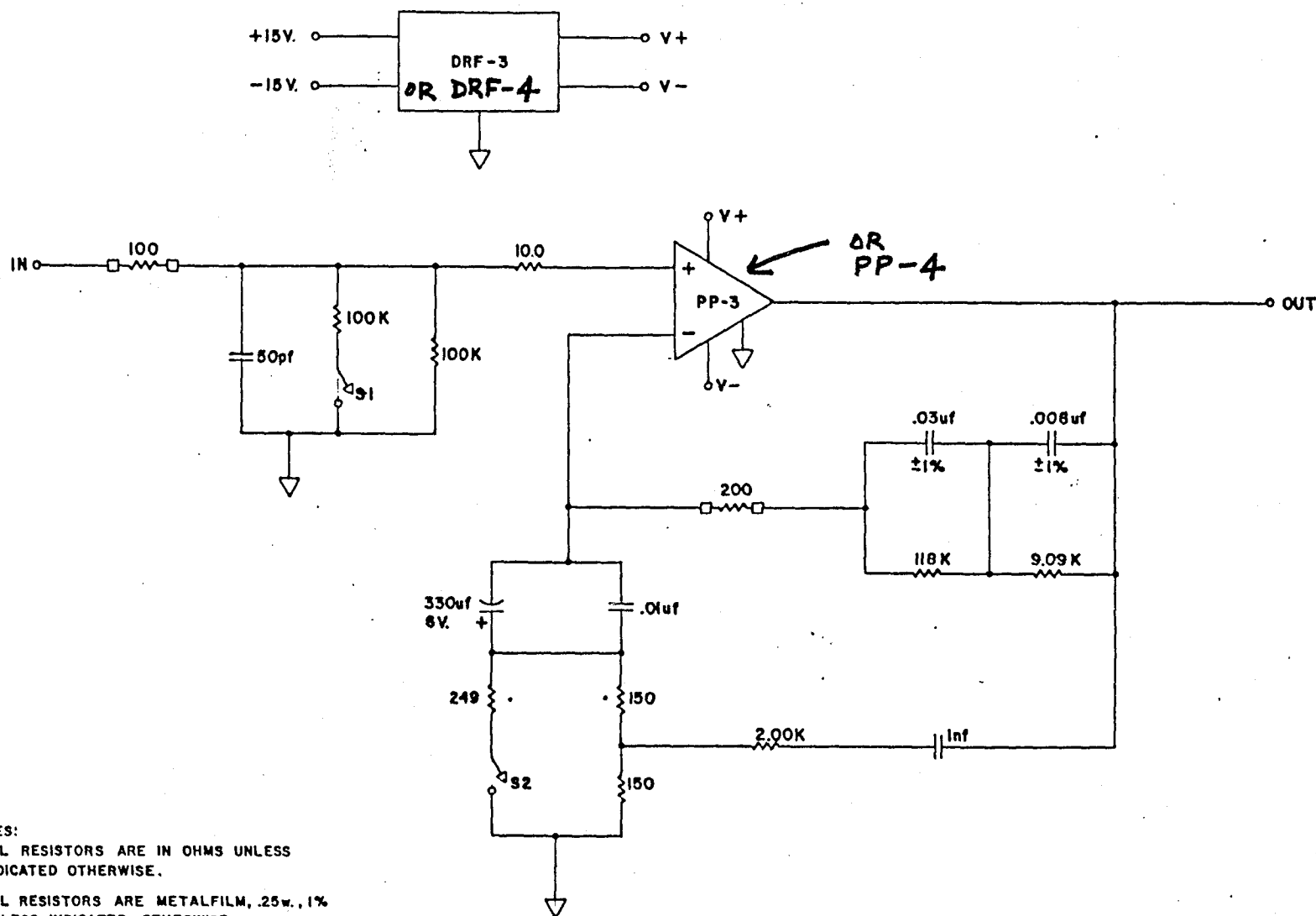


- NOTES:
1. ALL RESISTORS ARE IN OHMS UNLESS INDICATED OTHERWISE.
  2. ALL RESISTORS ARE METALFILM, .25W, 1% UNLESS INDICATED OTHERWISE.
  3. K=10<sup>3</sup>, M=10<sup>6</sup>.
  4. ALL CAPACITORS ARE IN MICROFARADS UNLESS INDICATED OTHERWISE.
  5. μ=10<sup>-6</sup>, M=10<sup>6</sup>.

**ORIGINAL IF RED**

Property of  
Madrigal Audio Laboratories Inc.

TOLERANCES UNLESS SPECIFIED		FRACTION 1/100		DECIMAL 1.000		ANGLE 11°		DATE		NAME		NO.	
MATERIAL		LAYER		OP		LAYER		DATE		NAME		NO.	
ML-1		-10-2		94-1000-00									



NOTES:

1. ALL RESISTORS ARE IN OHMS UNLESS INDICATED OTHERWISE.
2. ALL RESISTORS ARE METALFILM, .25w., 1% UNLESS INDICATED OTHERWISE.
3. K=10<sup>3</sup>, M=10<sup>6</sup>.
4. ALL CAPACITORS ARE IN MICROFARADS UNLESS INDICATED OTHERWISE.
5. n=10<sup>9</sup>, M=10<sup>6</sup>.

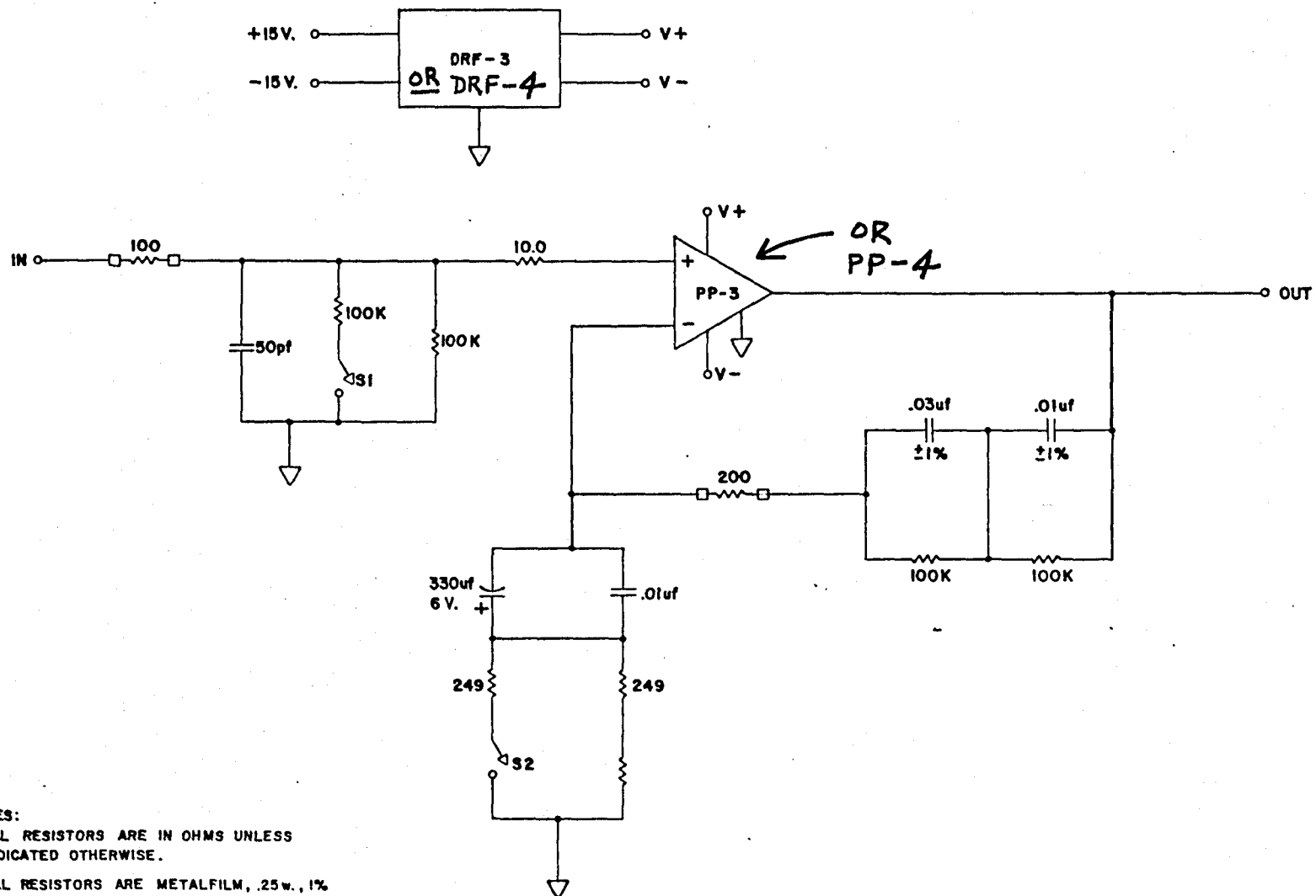
**ORIGINAL IF RED**

Property of

Madrigal Audio Laboratories Inc.

		TOLERANCES UNLESS SPECIFIED		mark evinson audio systems, ltd	
		FRACTION 1/10		35 order board format converted 08/10/00	
		DECIMAL 1.000		SHEET 01	
		ANGLE 1°		USED IN	
		DR. DATE		ML-1	
		CH. DATE		NAME	
ISSUE		REVISION		PHONO SYSTEM A3	
DATE		SCALE		94-1001-00	





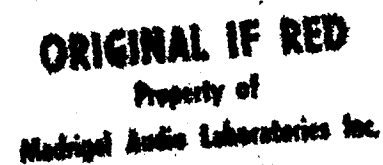
NOTES:


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4. ALL CAPACITORS ARE IN MICROFARADS UNLESS INDICATED OTHERWISE.
5.  $\mu$ =10<sup>-6</sup>, M=10<sup>6</sup>.

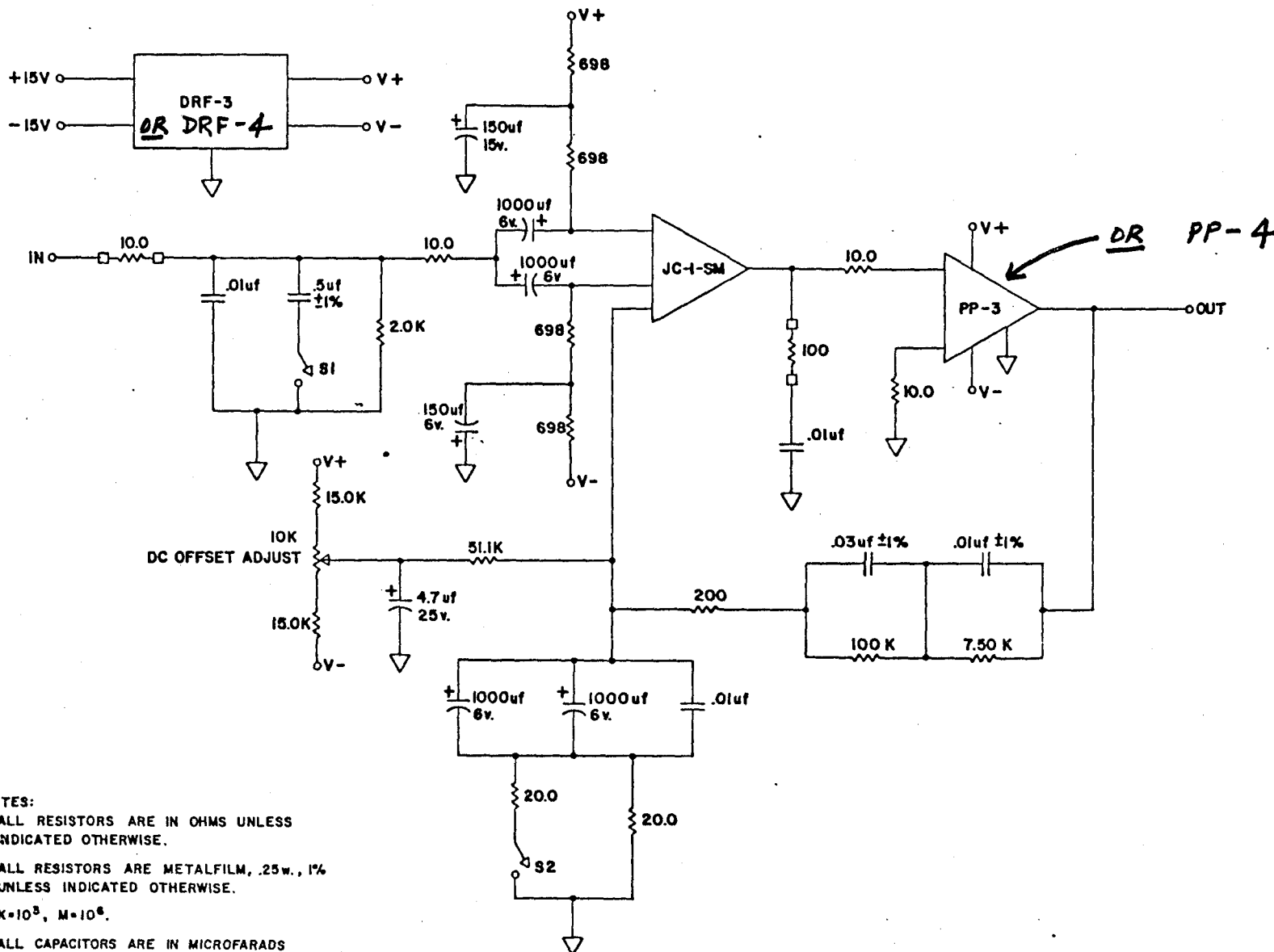
ORIGINAL IF RED

Property of  
Mediocal Audio Laboratories Inc.

TOLERANCES UNLESS SPECIFIED		mark evinson audio systems, inc.	
FRACTION 1/100		35 CEDAR AVENUE HARTFORD CONNECTICUT 06114 U.S.A.	
DECIMAL 1.005		SHEET OF	
ANGLE 1/2°		A B C D E F	
DR. DATE		USED IN	
DATE		ML-1	
NAME		NO.	
DESIGN		PHONO SYSTEM A3X	
DATE SCALE		94-1003-00	

 $\Delta n = 10^3, M = 10^6$ 

			TOLERANCES UNLESS SPECIFIED	 audio systems, ltd.					
			FRACTION : D40	16 CECILIA AVENUE NORTH CONCORD MASS 02154 U.S.A.					
			DECIMAL : 009	MATERIAL	DRYET		DP		
			ANGLE : 1°	USED IN	A	B	C	D	E
			DR. DATE	ML-1					
			CH. DATE	NAME	NO				
INVOICE	DESIGN	DATE	SCALE	PHONO SYSTEM D6					94-1002-00



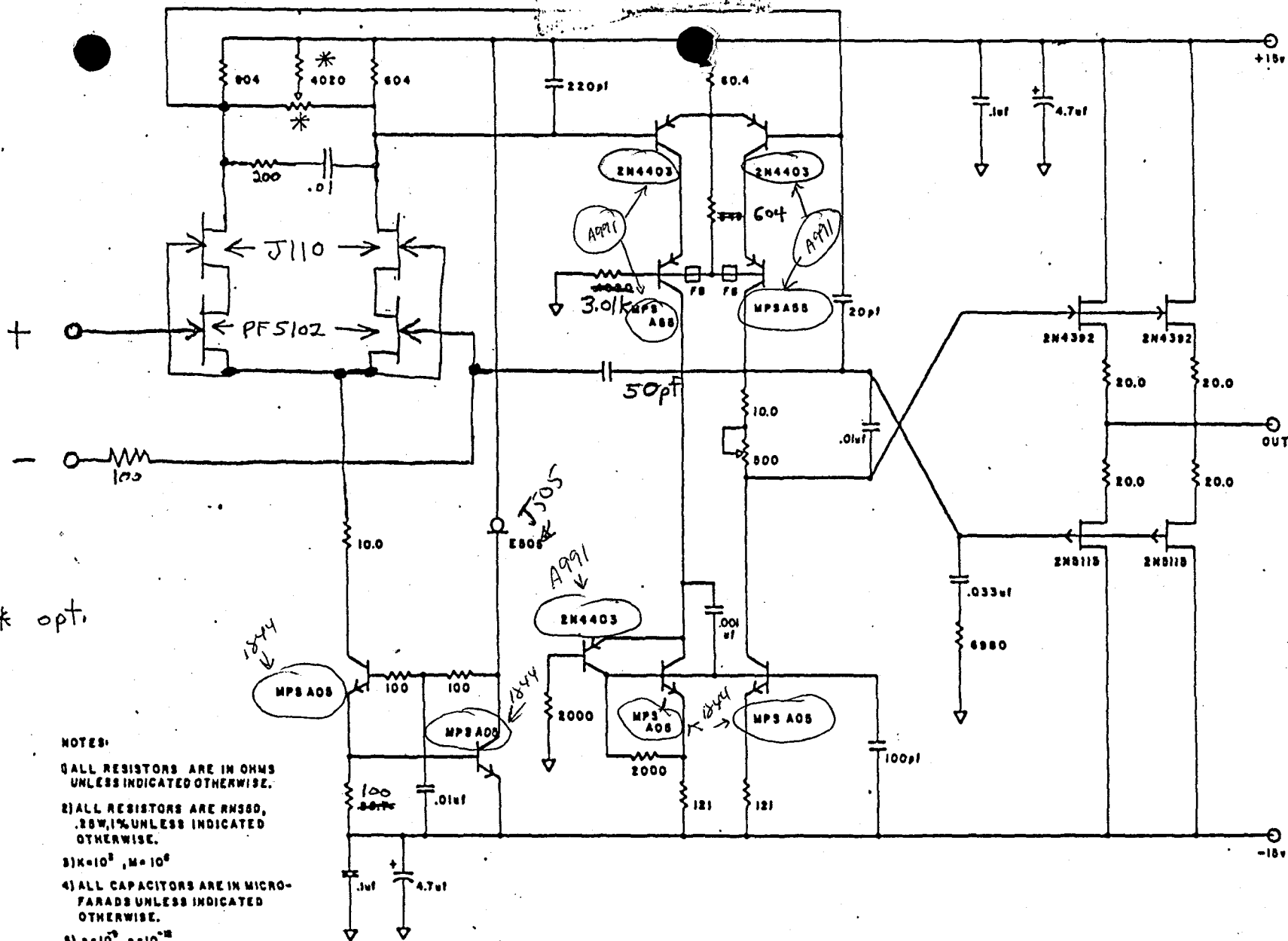
**NOTES:**

1. ALL RESISTORS ARE IN OHMS UNLESS INDICATED OTHERWISE.
2. ALL RESISTORS ARE METALFILM, .25w., 1% UNLESS INDICATED OTHERWISE.
3. K=10<sup>3</sup>, M=10<sup>6</sup>.
4. ALL CAPACITORS ARE IN MICROFARADS UNLESS INDICATED OTHERWISE.
5. K=10<sup>3</sup>, M=10<sup>6</sup>.

**ORIGINAL IF RED**

Property of  
Madrigal Audio Laboratories Inc.

TOLERANCES UNLESS SPECIFIED		mark evinson audio systems, ltd	
FRACTION 1/100		35 circular avenue hamden connecticut 06514 u.s.a.	
DECIMAL 1.000		SHEET 01 OF 01	
ANGLE 11°		NAME ML-1	
DR.	DATE	USED IN	NO.
CH.	DATE	NAME	
REVISION		PHONO SYSTEM D5	
DATE SCALE		94-1004-00	



TOL. 0.0005 UNLESS SPECIFIED		FRACTION 1/100		DECIMAL 1.000		ANGLE 53°	
DATE		DATE		DATE		DATE	
NAME				PP-4			
ML-1				ML-1			

mark evinson audio systems, inc.

30 audio system, 10000, commercial 00114, 100

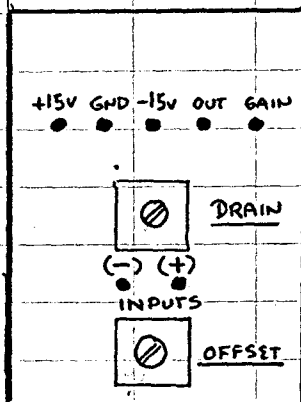


## BASING DIAGRAMS

BOTTOM VIEWS:

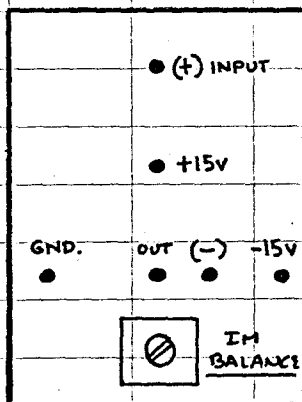
ULD

Line driver  
JC-2-ML-1



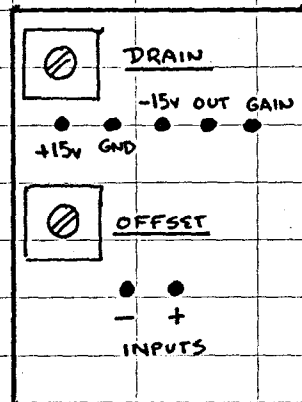
PP2

Phono  
JC-2, ML-1

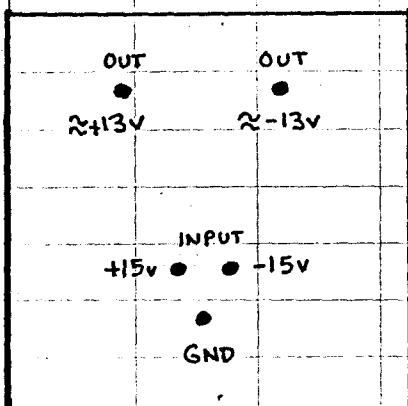


LD2

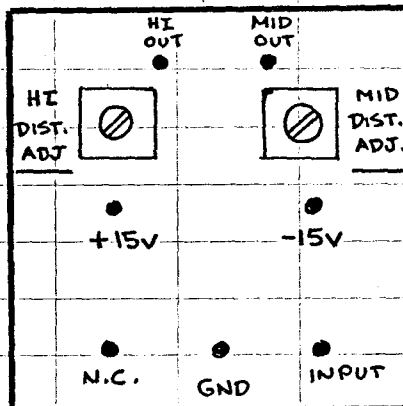
Line driver  
LNP-2



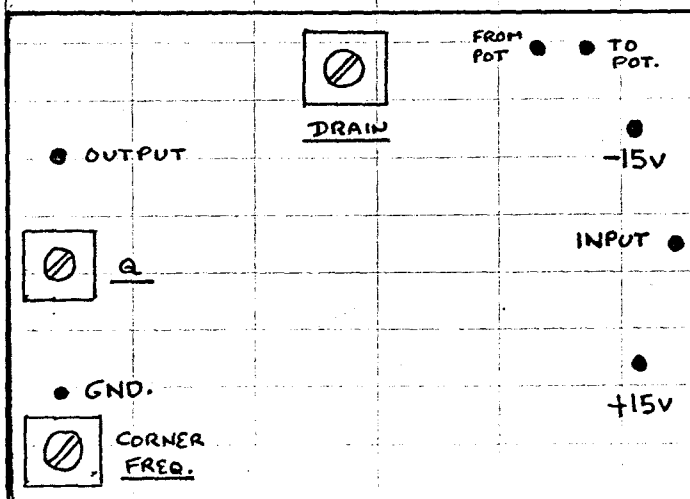
DRF



OCS



FILTERS



### ML-1 FACTORY SET GAIN POSITIONS

* System A3	switch 1 closed(50k)	switch 2 open(30dB)
System A4E	" 1 closed(820 ohms)	" 2 closed(44dB)
System D5	" 1 open(CRC out)	" 2 closed(60dB)
System D6	" 1 open(CRC out)	" 2 open(60dB)

### OPPOSITE SWITCH COMBINATIONS

* System A3	Switch 1 open(100k)	switch 2 closed(40dB)
System A4E	switch 1 open(50k)	switch 2 open(38dB)
System D5	" 1 closed(CRC in)	" 2 open(54dB)
System D6	" 1 closed(CRC in)	" 2 closed(66dB)

\*All previous documentation regarding system A3 has indicated 30dB and 40dB of gain (switchable). In actuality system A3 offers 31.6dB and 39dB.

Technical Services

February 21, 1979

1-502-564-3251