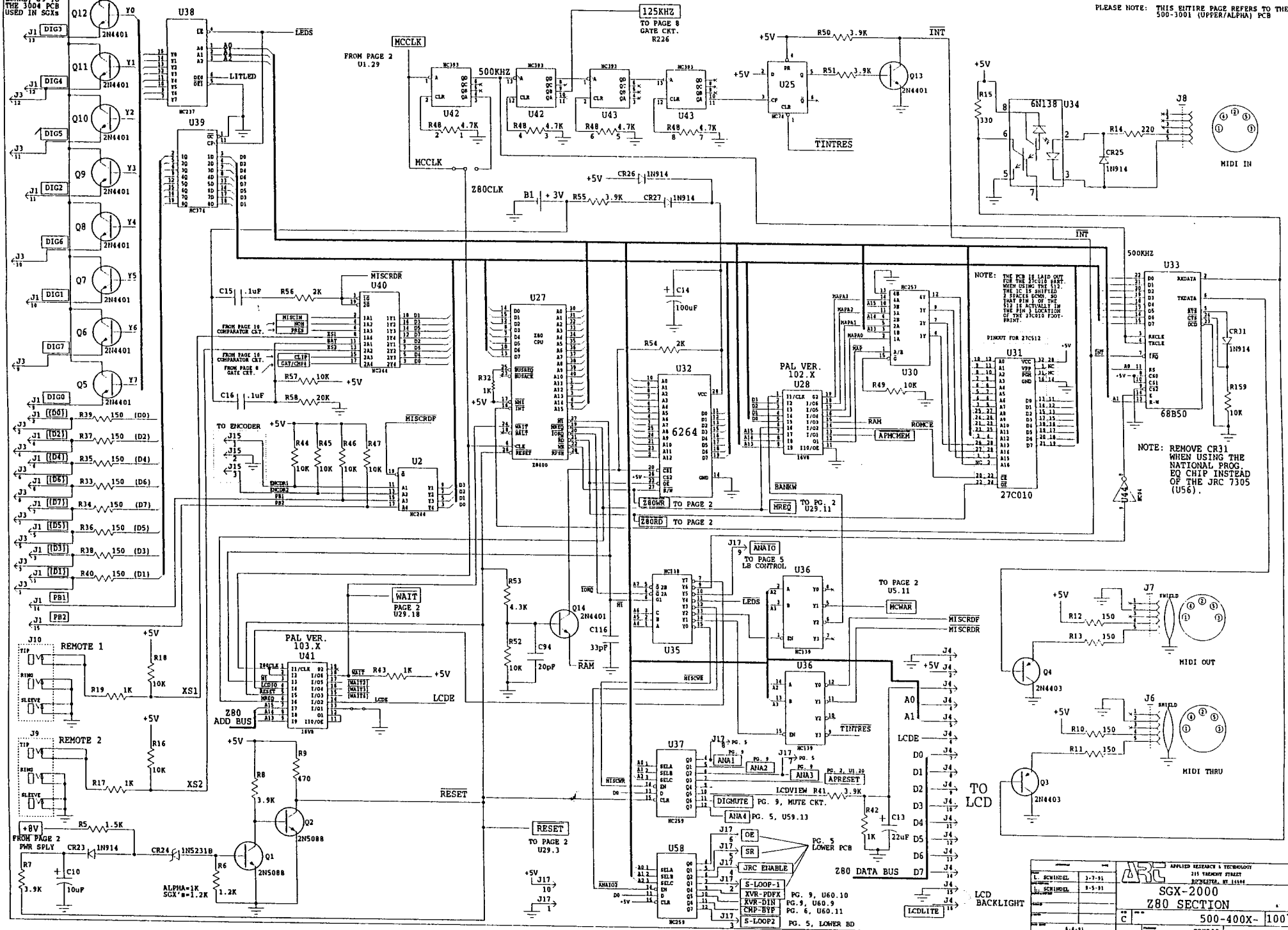


J1 CONNECTS TO FRONT PANEL SWITCH BOARD, J3 TO THE 3004 PCB USED IN SCA'S

PLEASE NOTE: THIS ENTIRE PAGE REFERS TO THE 500-1001 (UPPER/ALPHA) PCB



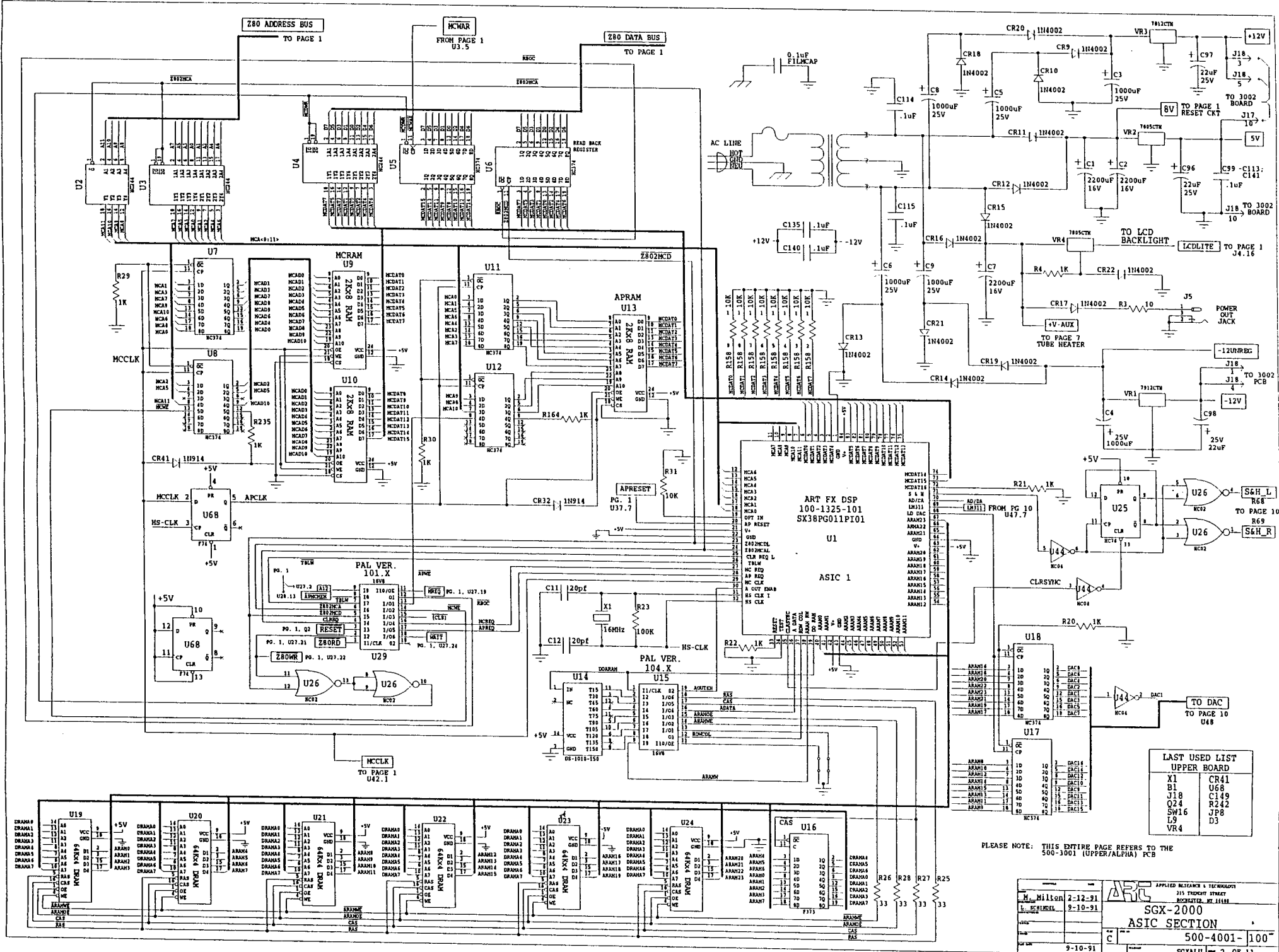
NOTE: THE PCB IS LAYED OUT FOR THE 68B50 RAM. WHEN USING THE 68B50 RAM, THE 68B50 IS ACTUALLY IN THE PIN 1 LOCATION OF THE 27C010 FOOT-PRINT.

NOTE: REMOVE CR31 WHEN USING THE NATIONAL PROG EQ CHIP INSTEAD OF THE JRC 7305 (U56).

TO LCD

LCD BACKLIGHT

APPLIED RESEARCH & TECHNOLOGY	
L. SCHINDLER 3-7-91	J.H. HENNING STREIBER 3-5-91
<b>SGX-2000</b>	
<b>Z80 SECTION</b>	
500-400X-100	
SGX280 1 OF 11	



PLEASE NOTE: THIS ENTIRE PAGE REFERS TO THE 500-1001 (UPPER/ALPHA) PCB

**LAST USED LIST  
UPPER BOARD**

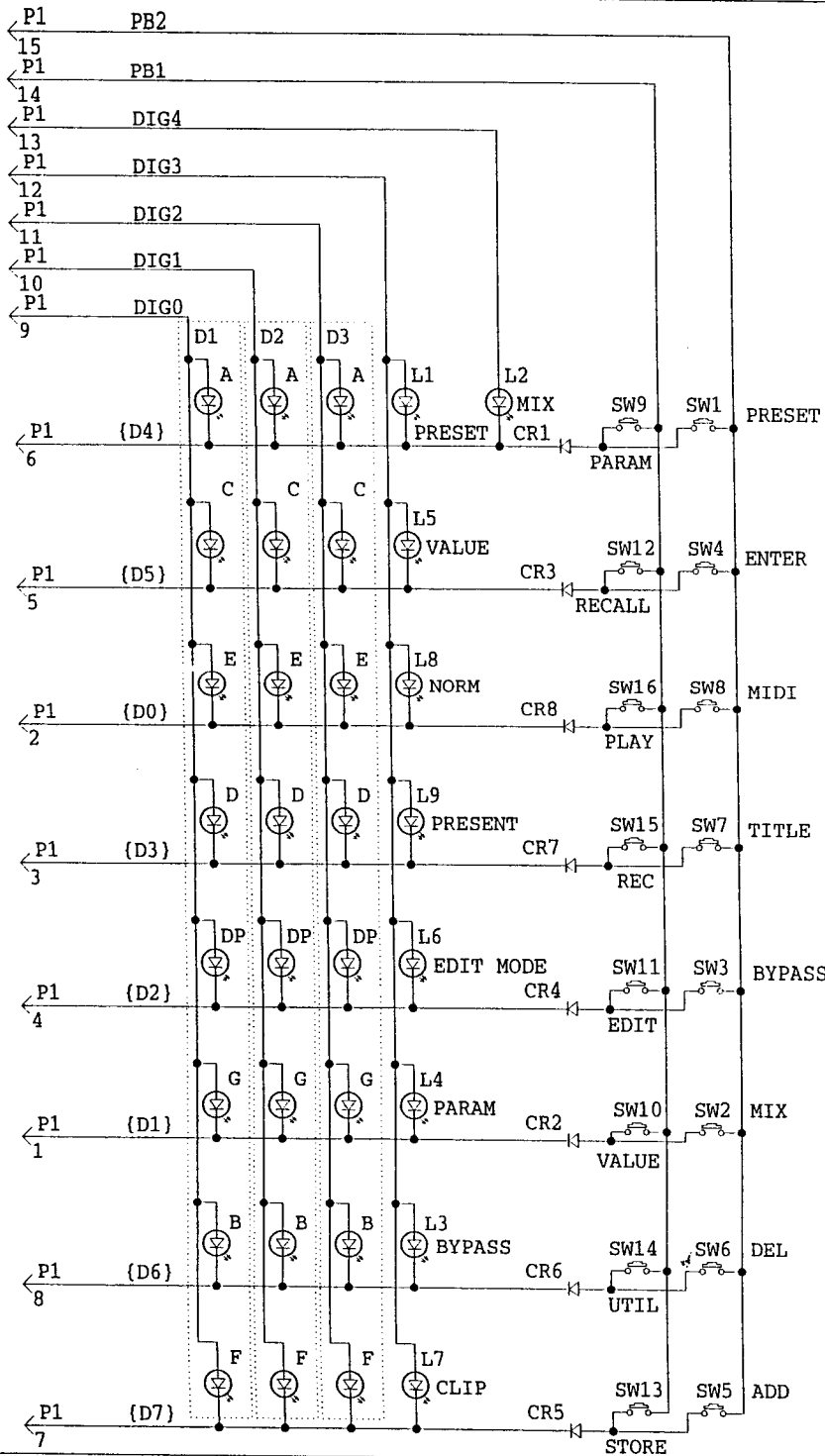
X1	CR41
B1	C68
J18	C149
Q24	R242
SW16	JPB
L9	D3
VR4	

M. J. Wilson	2-12-91
L. S. Wilson	9-10-91
DATE	9-10-91

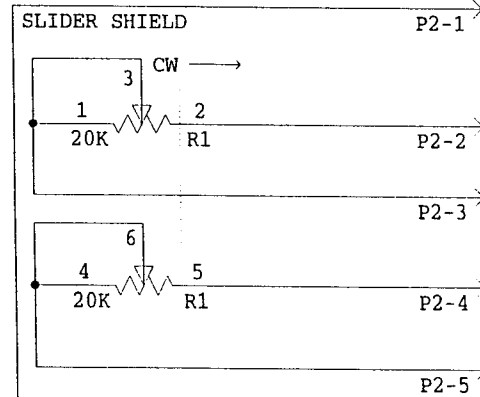
APPLIED MICROSYSTEMS CORPORATION  
 315 THURONT STREET  
 ROSELAND, NJ 07068  
**SGX-2000**  
**ASIC SECTION**  
 500-4001-100  
 SGXALU 2 OF 11

PLEASE NOTE: THIS ENTIRE PAGE REFERS TO THE FRONT PANEL SECTION OF THE 500-3001 (UPPER/ALPHA) PCB

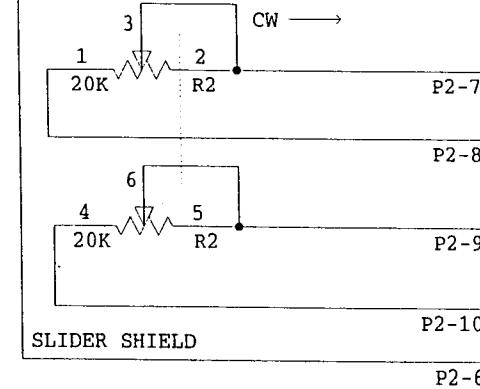
CONNECTOR P1



LOOP 1 RETURN SLIDER



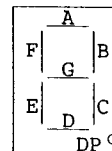
LOOP 2 SEND SLIDER



SWITCHES

SW#	FUNC	BIT
1	PRESET	4
2	MIX	1
3	BYPASS	2
4	ENTER	5
5	ADD EFF	7
6	DEL EFF	6
7	TITLE	3
8	MIDI	0
9	PARAM	4
10	VALUE	1
11	EDIT	2
12	RECALL	5
13	STORE	7
14	UTIL	6
15	REC	3
16	PLAY	0

OUTPUT SLIDER



DISCRETE LEDs

SEG	BIT
A	4
B	6
C	5
D	3
E	0
F	7
G	1
DP	2

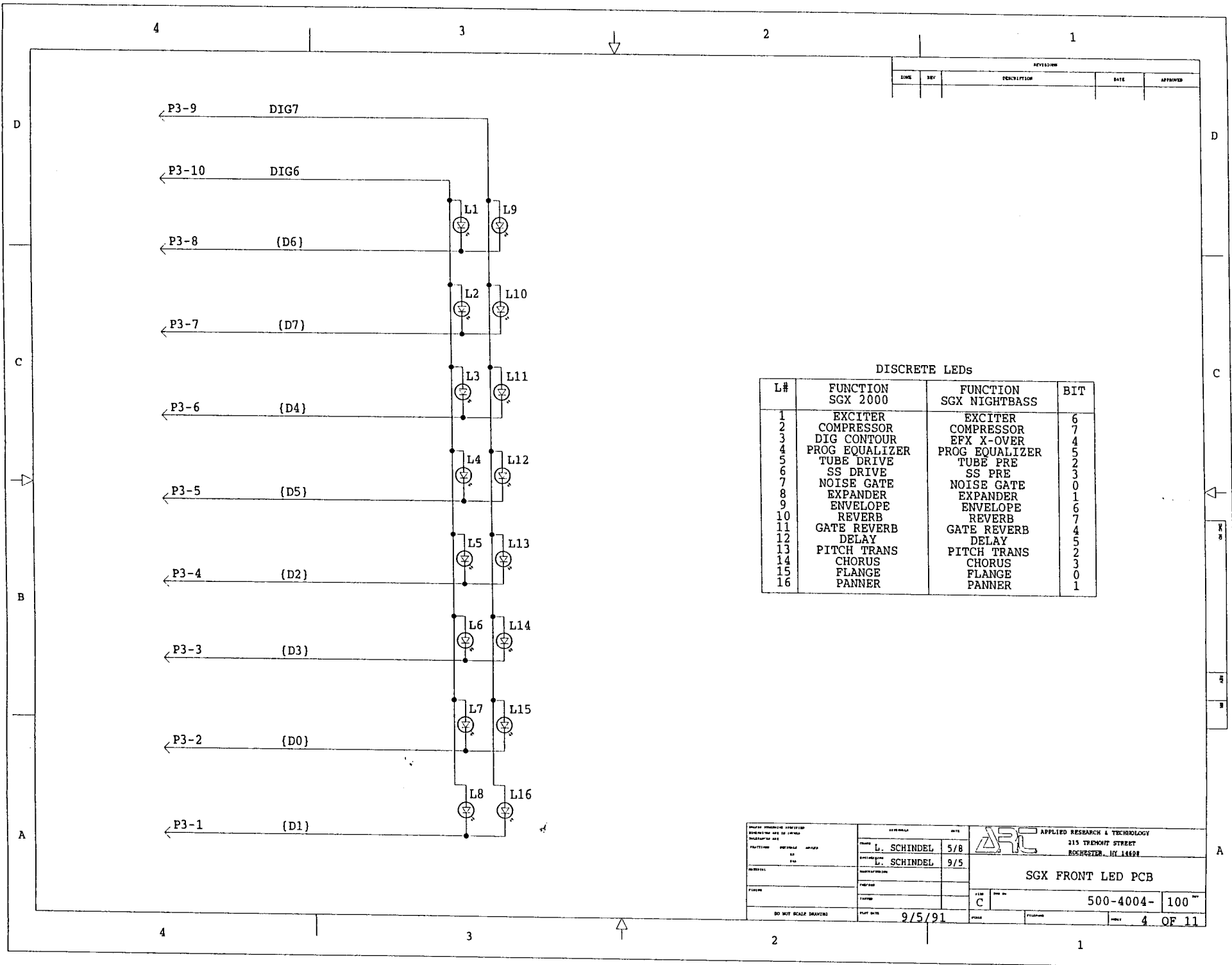
DISCRETE LEDs

SEG	BIT
F	7
B	6
C	5
A	4
D	3
DP	2
G	1
E	0

DISCRETE LEDs

L#	FUNC	BIT
1	PRESET	4
2	MIX	4
3	BYPASS	6
4	PARAM	1
5	VALUE	5
6	EDIT	2
7	CLIP	7
8	NORM	0
9	PRESENT	3

APPROVAL	DATE	APPLIED RESEARCH & TECHNOLOGY 215 TREMONT STREET ROCHESTER, NY 14608
DESIGNED BY	DATE	
DESIGNED BY	DATE	<b>SGX UPPER</b> <b>FRONT PANEL BOARD</b>
DESIGNED BY	DATE	
DATE	DATE	PART NO. <b>500-4001-100</b>
DATE	DATE	TITLE <b>SGXTLED</b> PAGE <b>3 OF 11</b>



REV		DESCRIPTION	DATE	APPROVED

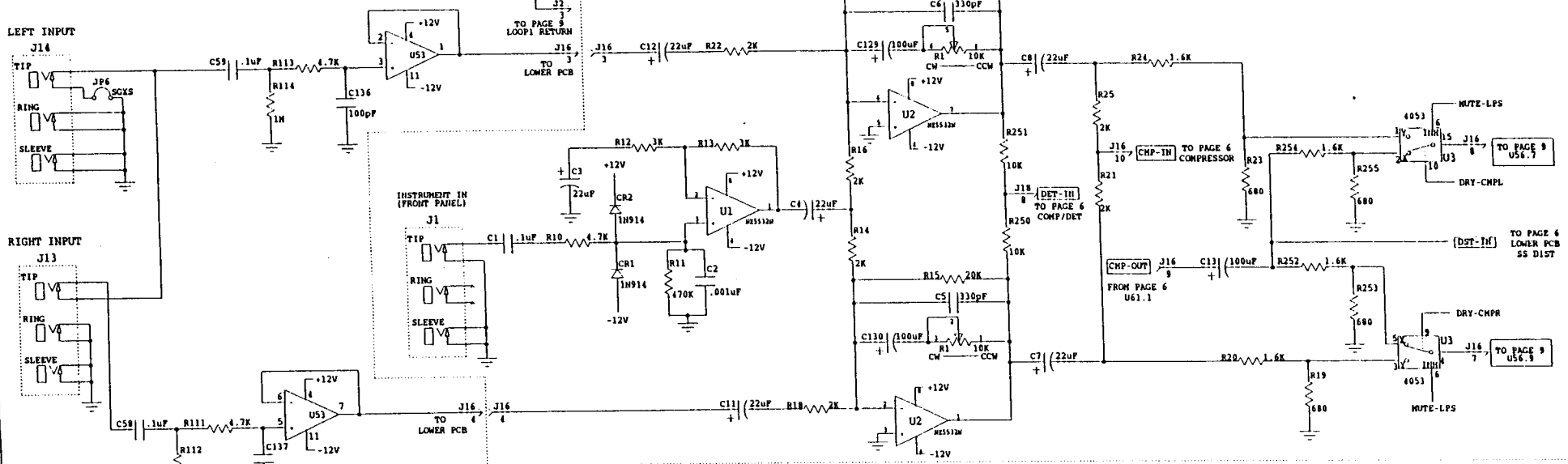
DISCRETE LEDs

L#	FUNCTION SGX 2000	FUNCTION SGX NIGHTBASS	BIT
1	EXCITER	EXCITER	6
2	COMPRESSOR	COMPRESSOR	7
3	DIG CONTOUR	EFX X-OVER	4
4	PROG EQUALIZER	PROG EQUALIZER	5
5	TUBE DRIVE	TUBE PRE	2
6	SS DRIVE	SS PRE	3
7	NOISE GATE	NOISE GATE	0
8	EXPANDER	EXPANDER	1
9	ENVELOPE	ENVELOPE	6
10	REVERB	REVERB	7
11	GATE REVERB	GATE REVERB	4
12	DELAY	DELAY	5
13	PITCH TRANS	PITCH TRANS	2
14	CHORUS	CHORUS	3
15	FLANGE	FLANGE	0
16	PANNER	PANNER	1

PROJECT: SGX FRONT LED PCB DRAWING NO: 500-4004-100 PARTS: 16 DATE: 9/5/91	APPROVAL: L. SCHINDEL 5/8 DATE: 9/5 DATE: 9/5	APPLIED RESEARCH & TECHNOLOGY 215 TREMONT STREET ROCHESTER, NY 14609 <b>SGX FRONT LED PCB</b> 500-4004-100 9/5/91
DO NOT SCALE DRAWING		DATE: 9/5/91

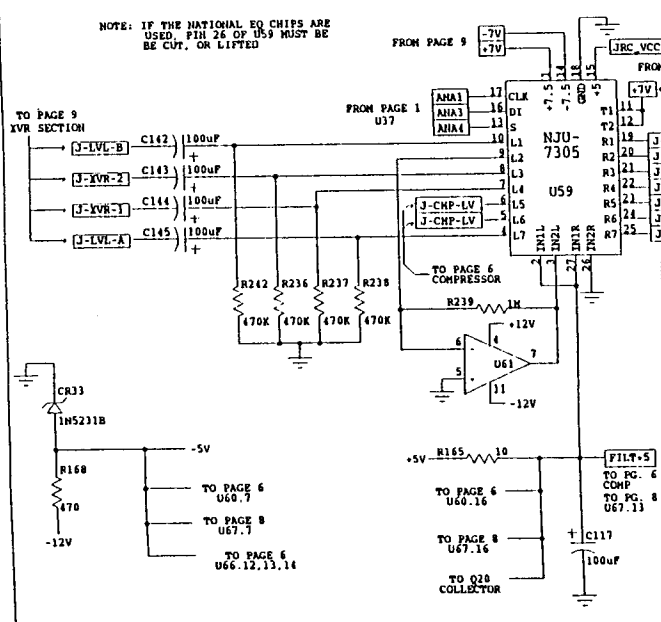
### UPPER BOARD AUDIO INPUT

### LOWER BOARD AUDIO INPUT

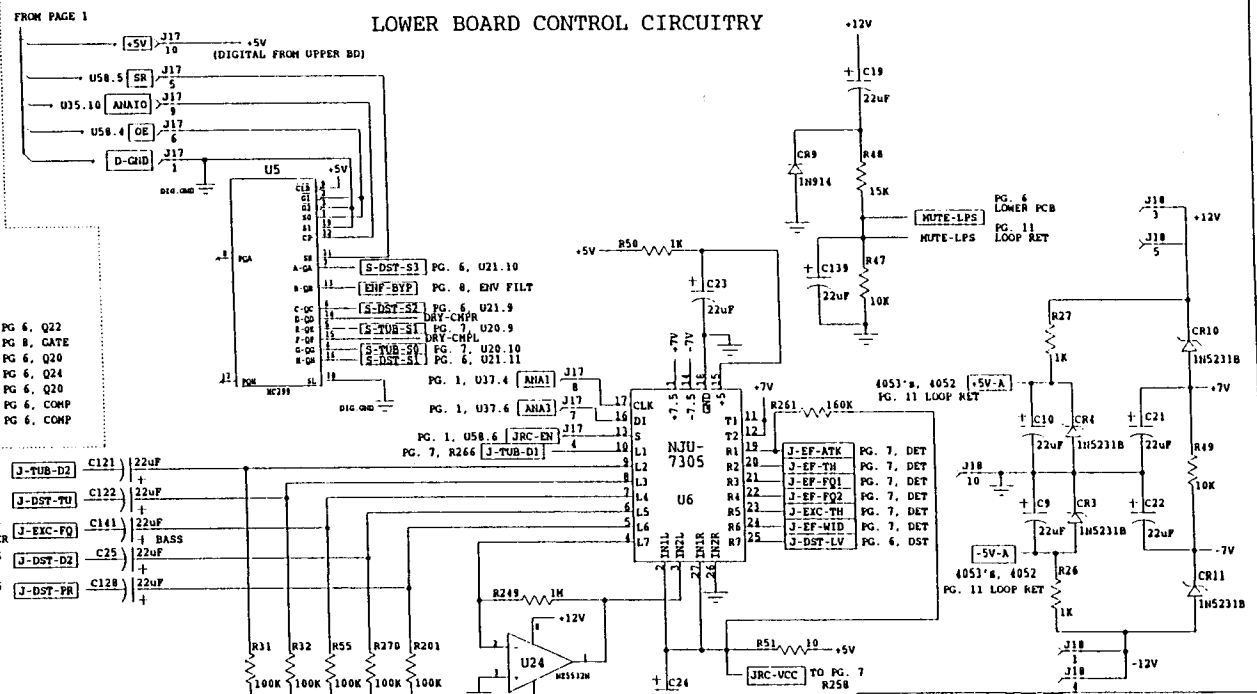


### UPPER BOARD CONTROL CIRCUITRY

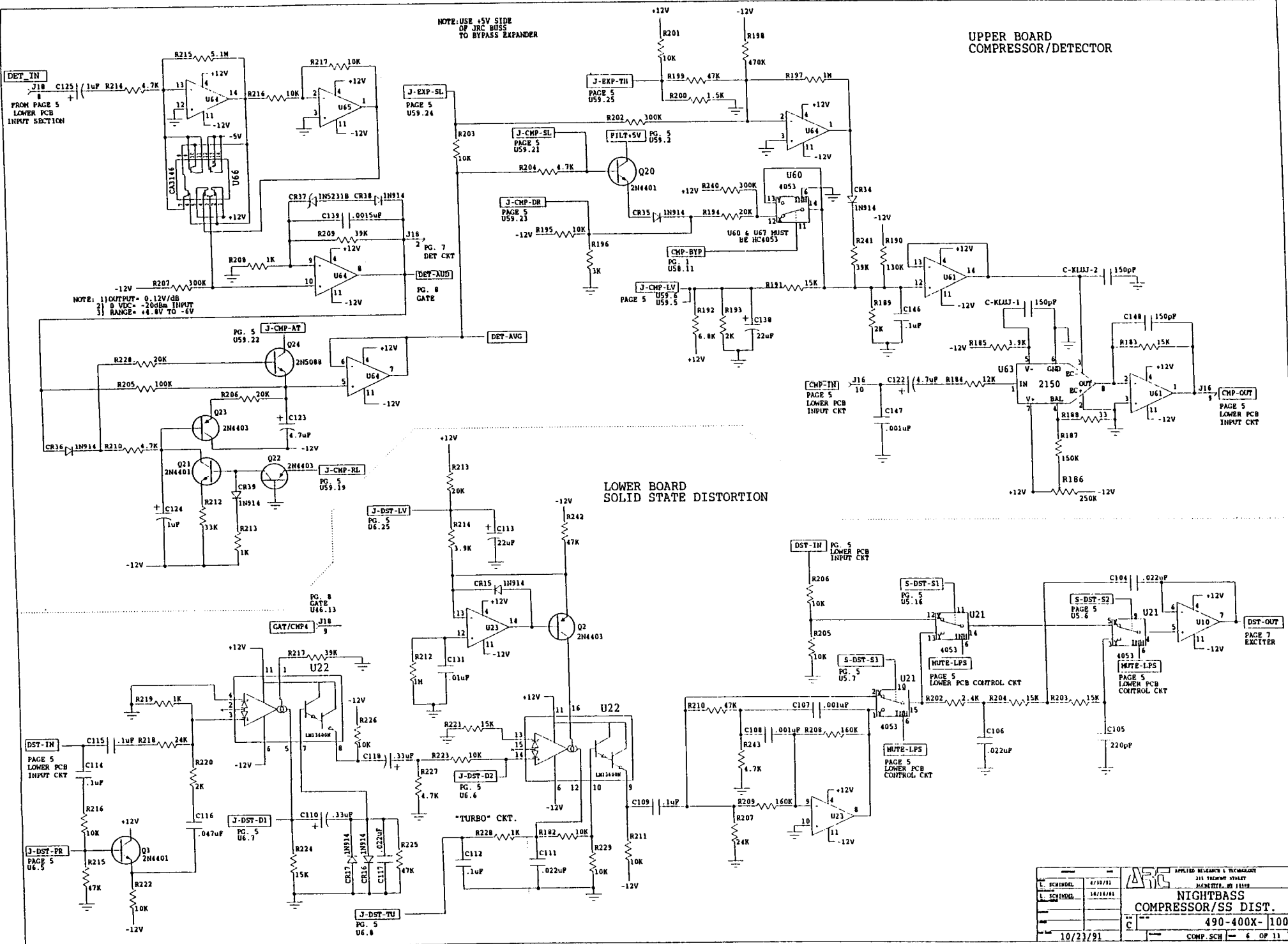
NOTE: IF THE NATIONAL EQ CHIPS ARE USED, PIN 26 OF U59 MUST BE BE CUT, OR LIFTED



### LOWER BOARD CONTROL CIRCUITRY



APPLIED RESEARCH & TECHNOLOGY	
215 PARKWAY STREET ROCKFORD, ILL. 61154	
C. SCHEIDT	4/30/81
J. SCHNEIDER	7/28/81
<b>NIGHTBASS</b>	
<b>ANALOG INPUT/DYNAMICS</b>	
<b>490-400X-100</b>	
10/23/91	BASIN, SCH 5 OF 11



UPPER BOARD  
COMPRESSOR/DETECTOR

LOWER BOARD  
SOLID STATE DISTORTION

NOTE: USE +5V SIDE  
OF JRC BUS  
TO BYPASS EXPANDER

NOTE: 1) OUTPUT = 0.12V/DB  
2) D VDC = -20dBm INPUT  
3) RANGE = +1.4V TO -6V

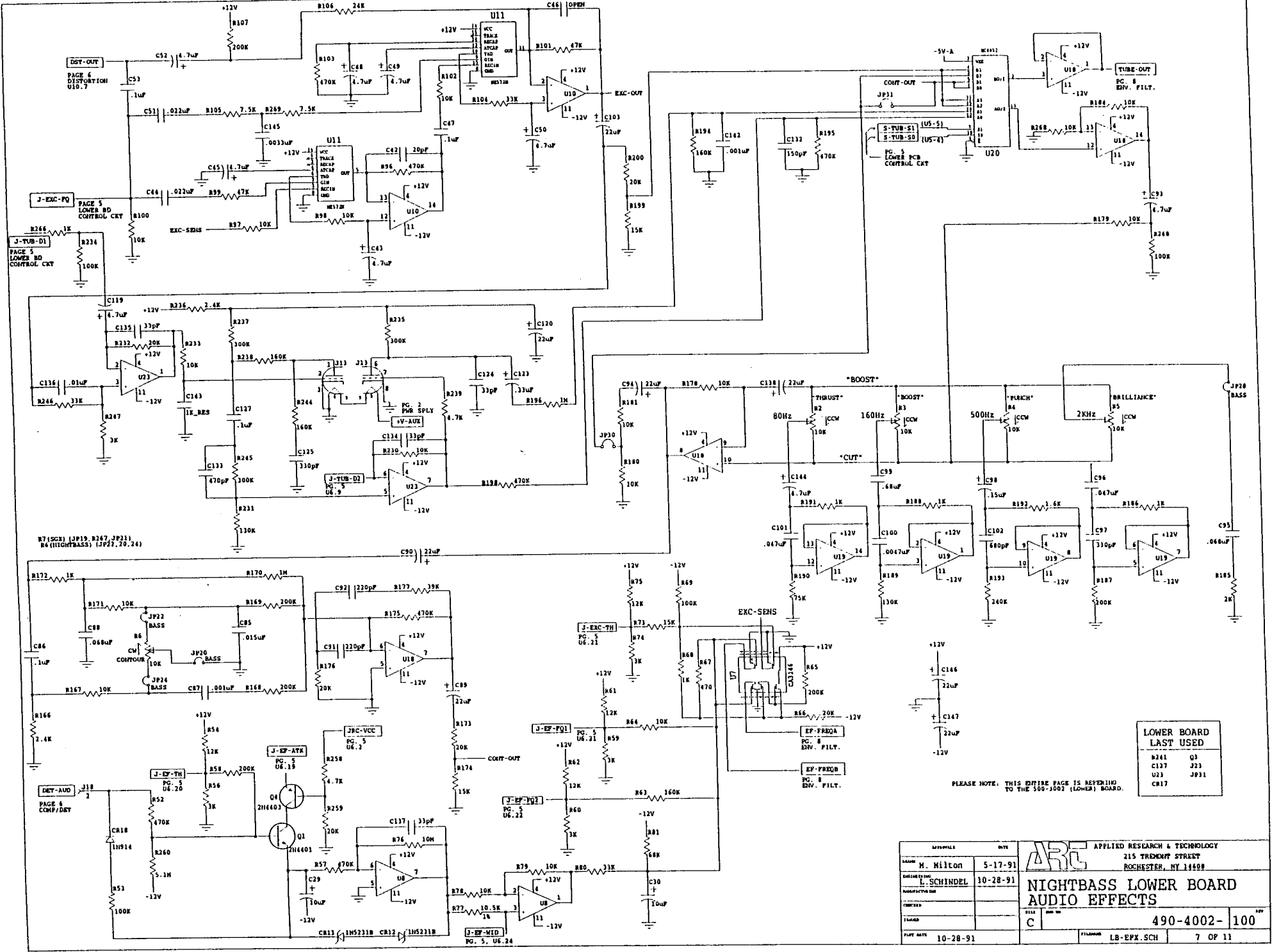
"TURBO" CKT.

MUTE-LPS  
PAGE 5  
LOWER PCB  
CONTROL CKT

MUTE-LPS  
PAGE 5  
LOWER PCB  
CONTROL CKT

MUTE-LPS  
PAGE 5  
LOWER PCB  
CONTROL CKT

APPLIED RESEARCH & TECHNOLOGY	
PCB MODEL	4/19/91
DESIGNED BY	215 THERON STALEY
DATE	10/14/91
<b>NIGHTBASS</b>	
<b>COMPRESSOR/SS DIST.</b>	
490-400X-100	
DATE	10/23/91
COMP. SCH	6 OF 11



LOWER BOARD  
LAST USED

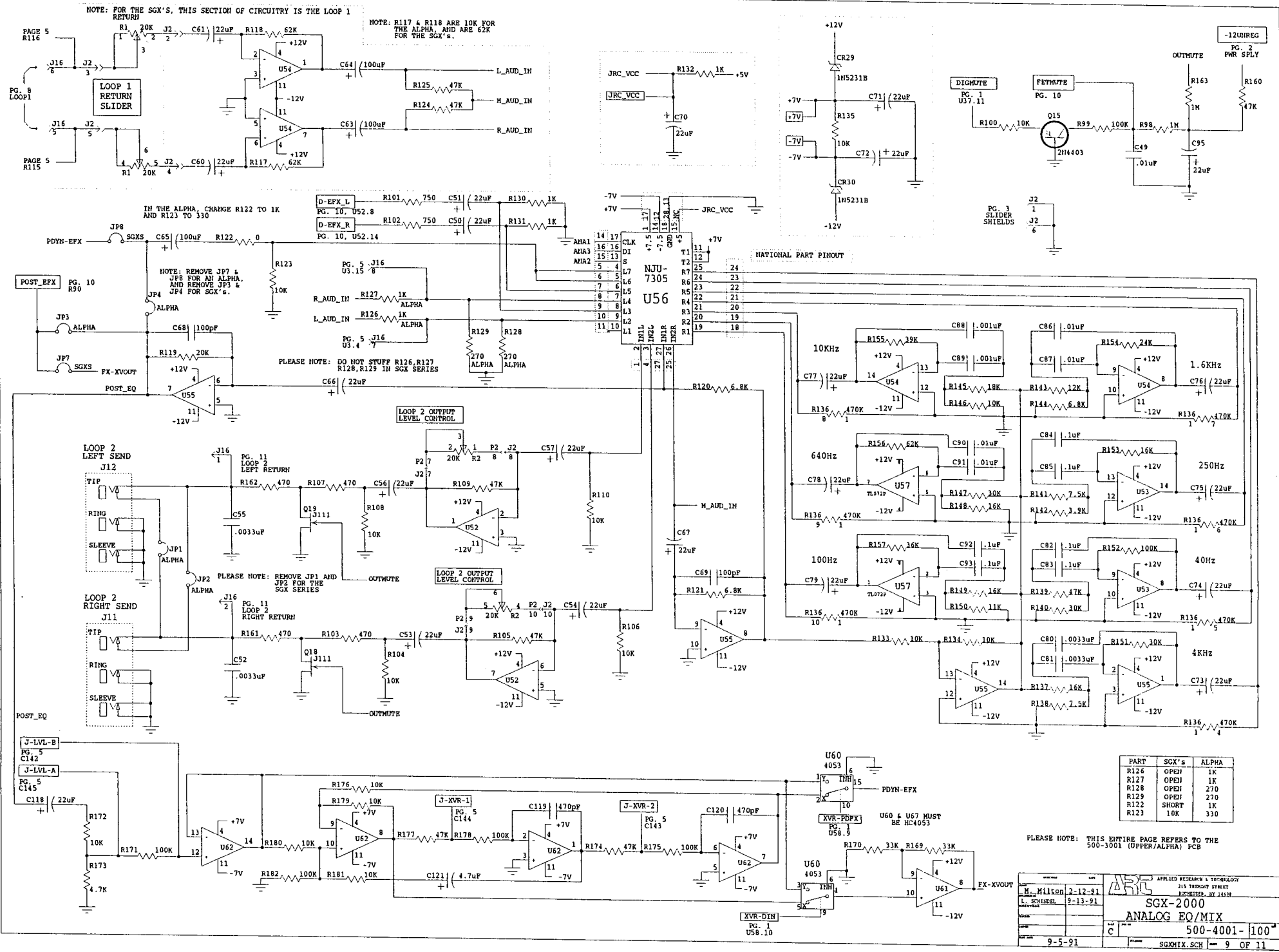
R241	Q3
C127	J23
U23	JP31
CR17	

PLEASE NOTE: THIS ENTIRE PAGE IS REFERING TO THE 500-1002 (LOWER) BOARD.

APPROVALS	DATE	ART APPLIED RESEARCH & TECHNOLOGY 215 TREMONT STREET ROCHESTER, NY 14608						
SAVED M. Milton	5-17-91							
DESIGNED BY L. SCHINDEL	10-28-91	NIGHTBASS LOWER BOARD AUDIO EFFECTS						
MANUFACTURED BY								
CONTROL NO.		<table border="1"> <tr><td>SILE</td><td>REV</td><td>REV</td></tr> <tr><td>C</td><td></td><td></td></tr> </table>	SILE	REV	REV	C		
SILE	REV		REV					
C								
PLANT		490-4002-100						
PLANT DATE	10-28-91	FILM NO.	LB-EPX.SCH	7 OP 11				







NOTE: FOR THE SGX'S, THIS SECTION OF CIRCUITRY IS THE LOOP 1 RETURN

NOTE: R117 & R118 ARE 10K FOR THE ALPHA, AND ARE 62K FOR THE SGX'S.

IN THE ALPHA, CHANGE R122 TO 1K AND R123 TO 330

D-EFX\_L PG. 10, U52.8  
D-EFX\_R PG. 10, U52.14

NOTE: REMOVE JP7 & JP8 FOR AN ALPHA, AND REMOVE JP3 & JP4 FOR SGX'S.

PLEASE NOTE: DO NOT STUFF R126, R127, R128, R129 IN SGX SERIES

PLEASE NOTE: REMOVE JP1 AND JP2 FOR THE SGX SERIES

JRC\_VCC +5V

JRC\_VCC +7V

JRC\_VCC -7V

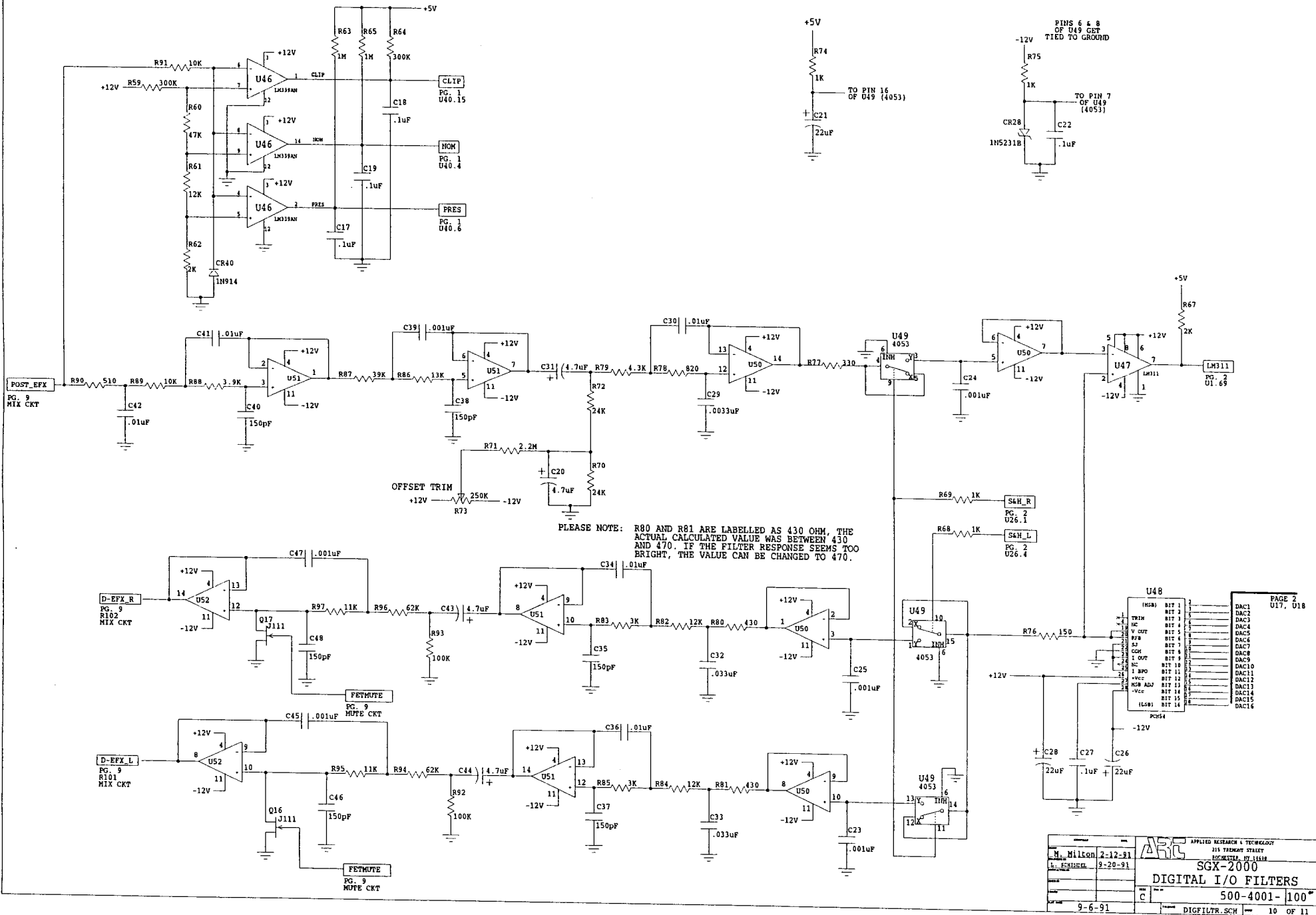
JRC\_VCC -12V

NATIONAL PART PINOUT

PART	SGX'S	ALPHA
R126	OPEN	1K
R127	OPEN	1K
R128	OPEN	270
R129	OPEN	270
R122	SHORT	1K
R123	10K	330

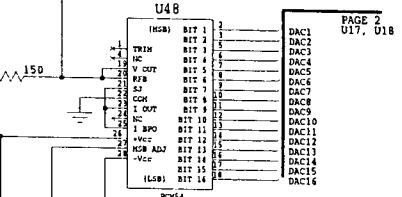
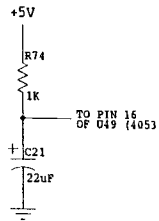
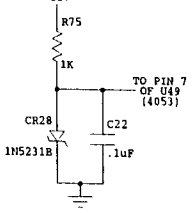
PLEASE NOTE: THIS ENTIRE PAGE REFERS TO THE 500-3001 (UPPER/ALPHA) PCB

W. Milton	2-12-81	APPLIED RESEARCH & TECHNOLOGY 215 REDDING STREET ROCHESTER, NY 14609
L. Schindler	9-13-91	
SGX-2000		ANALOG EQ/MIX
500-4001-100		
9-5-91	SGMIX.SCH	9 OF 11



PLEASE NOTE: R80 AND R81 ARE LABELLED AS 430 OHM, THE ACTUAL CALCULATED VALUE WAS BETWEEN 430 AND 470. IF THE FILTER RESPONSE SEEMS TOO BRIGHT, THE VALUE CAN BE CHANGED TO 470.

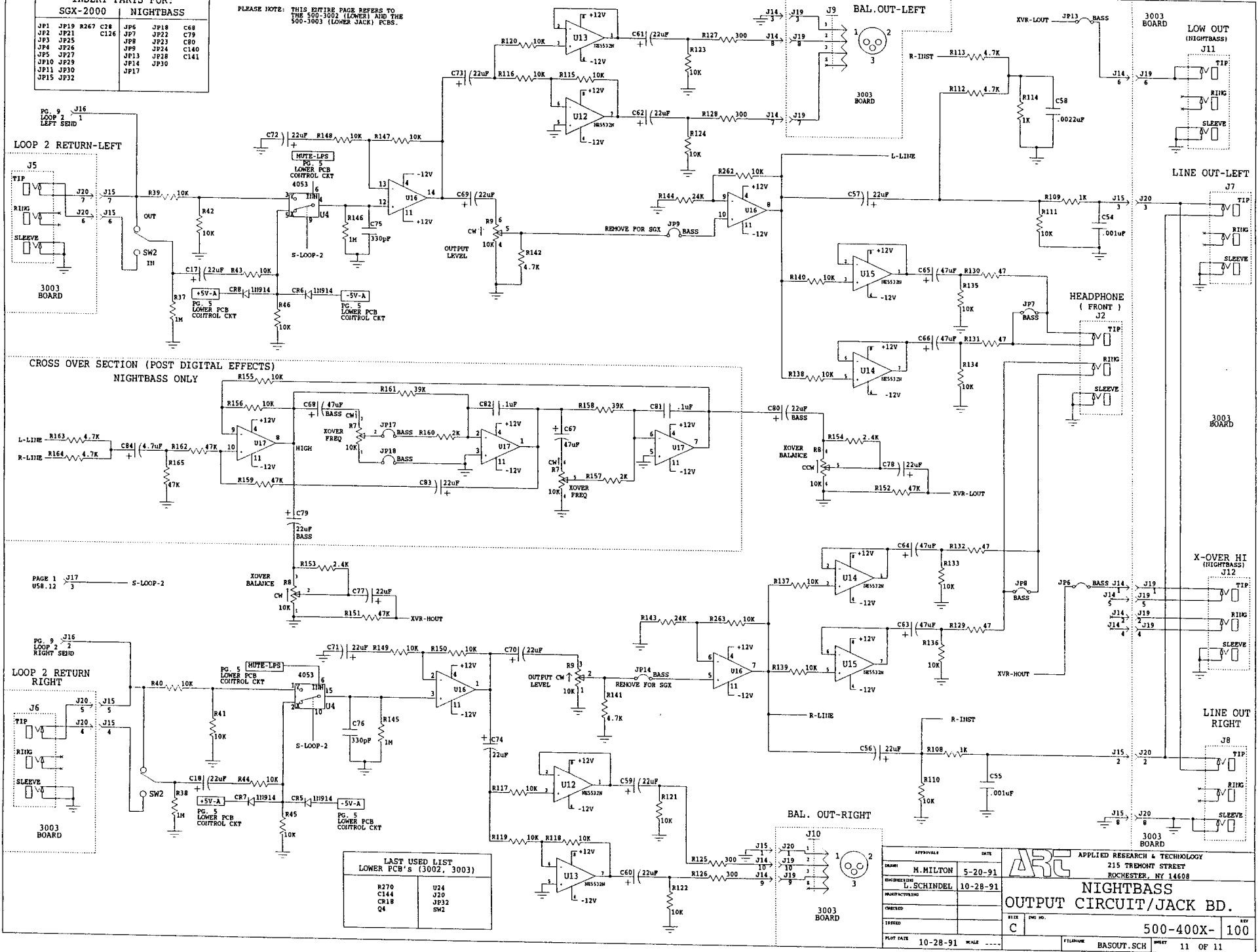
PINS 6 & 8 OF U49 GET TIED TO GROUND



**INSERT PARTS FOR:**  
SGX-2000 NIGHTBASS

JP1	JP19	R267	C78	JP6	JP18	C68
JP2	JP21		C126	JP7	JP22	C79
JP3	JP25			JP8	JP23	C80
JP4	JP26			JP9	JP24	C140
JP5	JP27			JP13	JP28	C141
JP10	JP29			JP14	JP30	
JP11	JP30			JP17		
JP15	JP32					

PLEASE NOTE: THIS ENTIRE PAGE REFERS TO THE 500-3002 (LOWER) AND THE 500-3003 (LOWER JACK) PCB'S.



**LAST USED LIST**  
LOWER PCB'S (3002, 3003)

R770	U24
C144	J20
CR18	JP32
Q4	SW2

APPROVALS	DATE	<b>ART</b> APPLIED RESEARCH & TECHNOLOGY 215 TREMONT STREET ROCHESTER, NY 14608	
DRAMA	M. MILTON		5-20-91
DIRECTION	L. SCHINDEL		10-28-91
MANUFACTURING			
CHECKED			
ISSUED			
PLAT DATE	10-28-91	SCALE	----
FILE NO.		500-400X-	REV
C		100	100
FILNAME		BASOUT.SCH	SHEET
			11 OF 11

