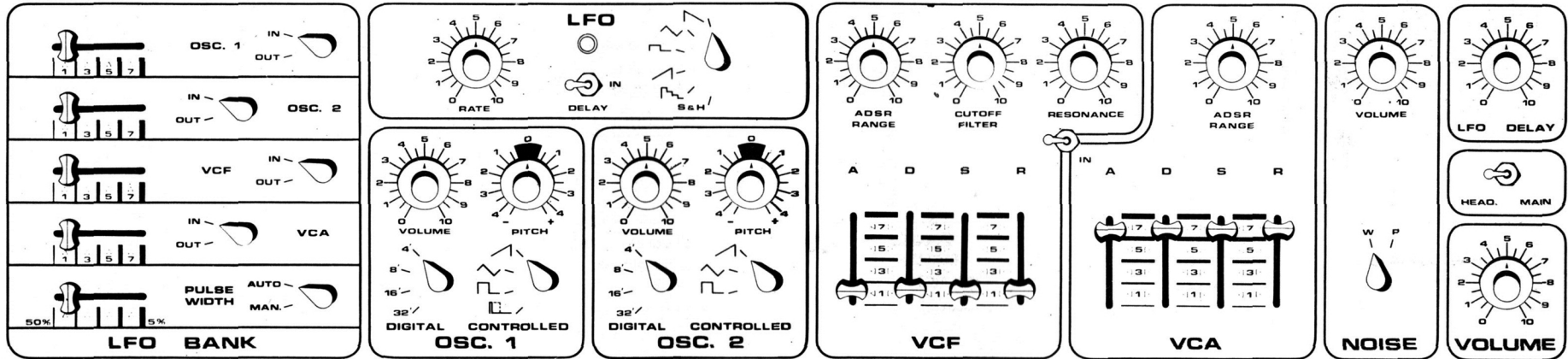


**SCHEMATIC
DIAGRAM**

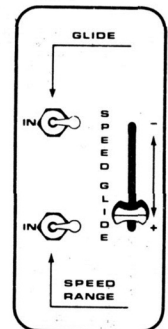
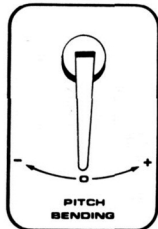
CRUMAR[®]
Musical Instruments

mod.
DS-1



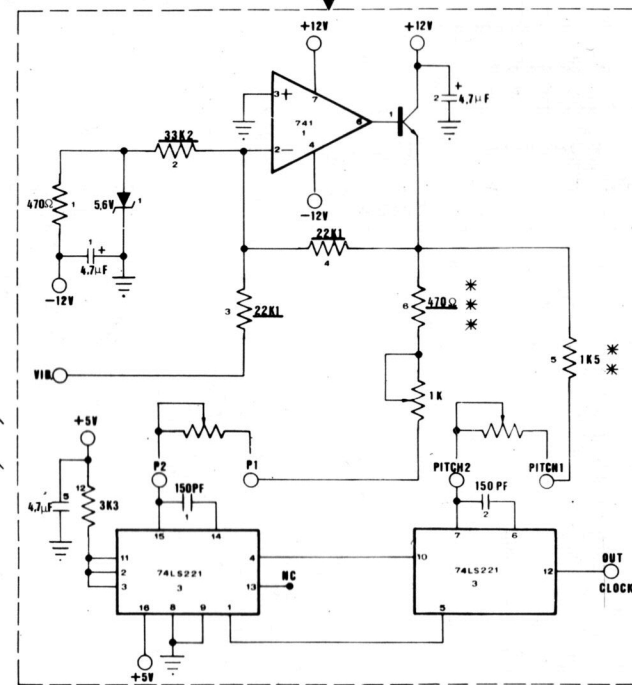
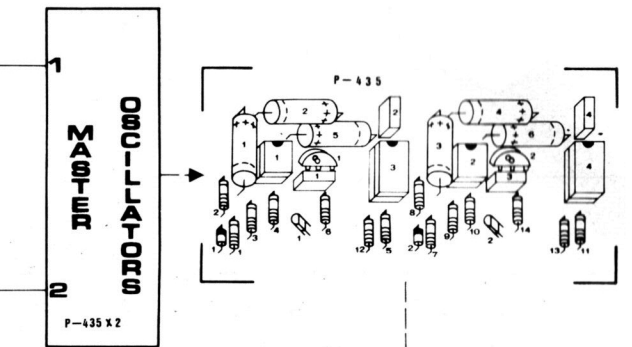
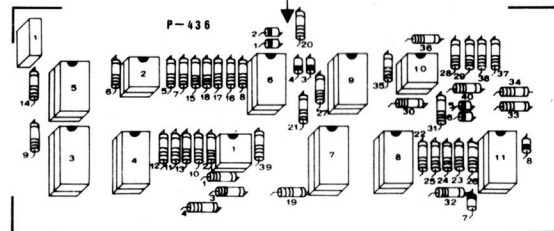
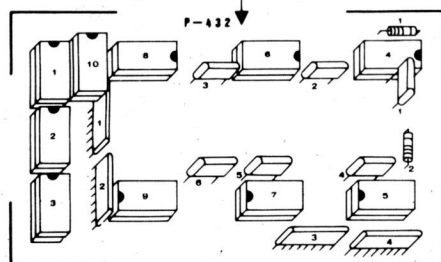
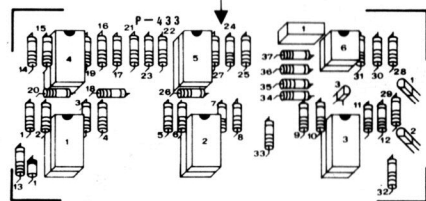
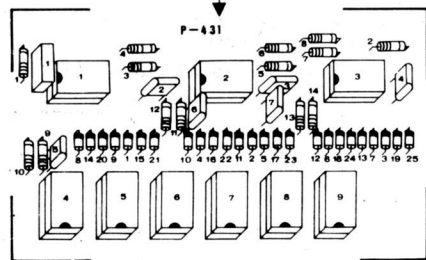
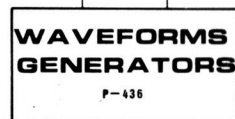
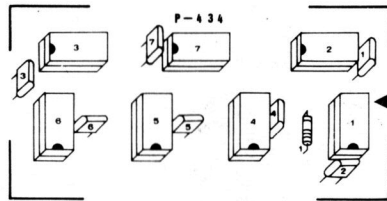
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DIGITAL SYNTHESIZER DS 1



MODEL: DS1		REVISION:	
DATE:	DRAWN BY: <i>B. Ronda</i>	DESIGNED BY: <i>R. Blair</i>	DATE:

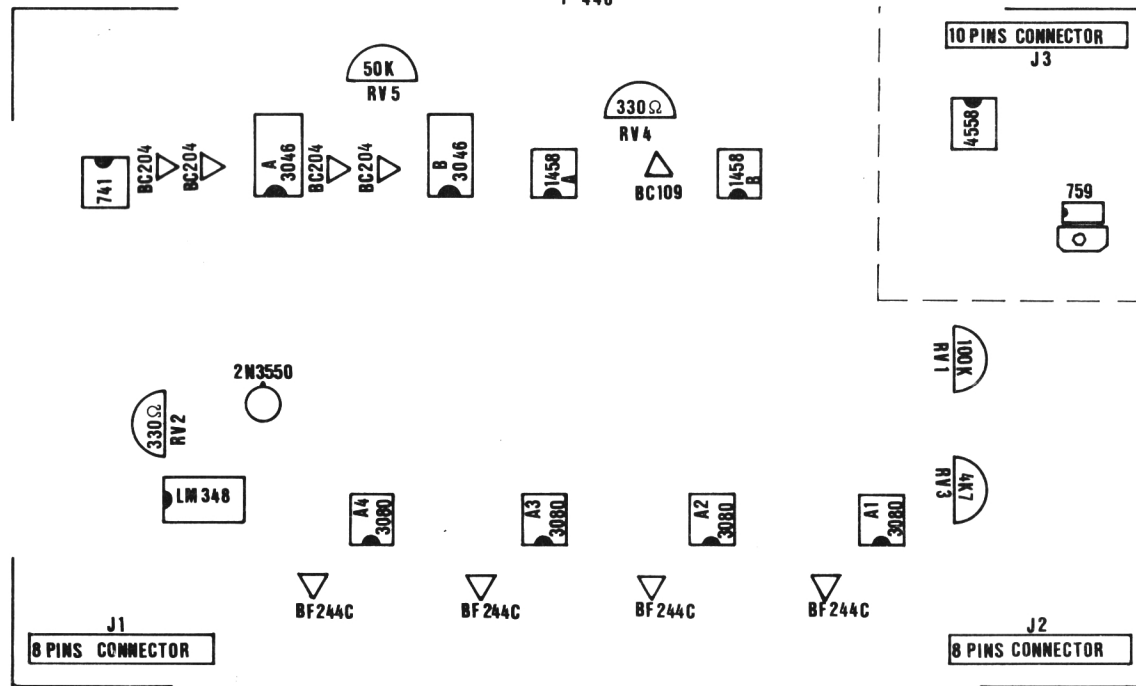
BOARD	INTEGRATED CIRCUITS	BOARD	INTEGRATED CIRCUITS
P-431	LC1 4083	P-434	LC2 74175
//	LC2-LC3 4042CD	//	LC3 74174
//	LC4-LC9 4042CD	//	LC4-LC5 7483
P-432	LC1 93417B	P-435	LC1-LC2 741
//	LC2 93417M	//	LC3-LC4 74LS 221
//	LC3 93417A	P-436	LC1 741
//	LC4 7485B	//	LC2 1458
//	LC5 74193B	//	LC3 4520
//	LC6 7485M	//	LC4 4070
//	LC7 74193M	//	LC5 4016
//	LC8 7485A	//	LC6 4069
//	LC9 74193A	//	LC7 4520
//	LC10 7400	//	LC8 4070
P-433	LC1-LC3 CD4010A	//	LC9 4016
//	LC4-LC5 LM348	//	LC10 1458
//	LC6 CA1458	//	LC11 4088
P-434	LC1 7483		



notes: * THE OSCILLATOR 2 IS DIFFERENT FROM OSCILLATOR 1 IN THAT THE VALUE OF THIS RESISTOR IS 301 OHM.
 * THE RESISTOR WITH FRAMED VALUE ARE AND MUST BE ONLY RESISTOR WITH METAL LAYER EGG SERIES WITH 1% TOLERANCE.
 *

MODEL: DS 1		REVISION	
DATE: 27 1 78	DRAWN BY: S. Borden	DESIGNED BY: R. Brian	DATE

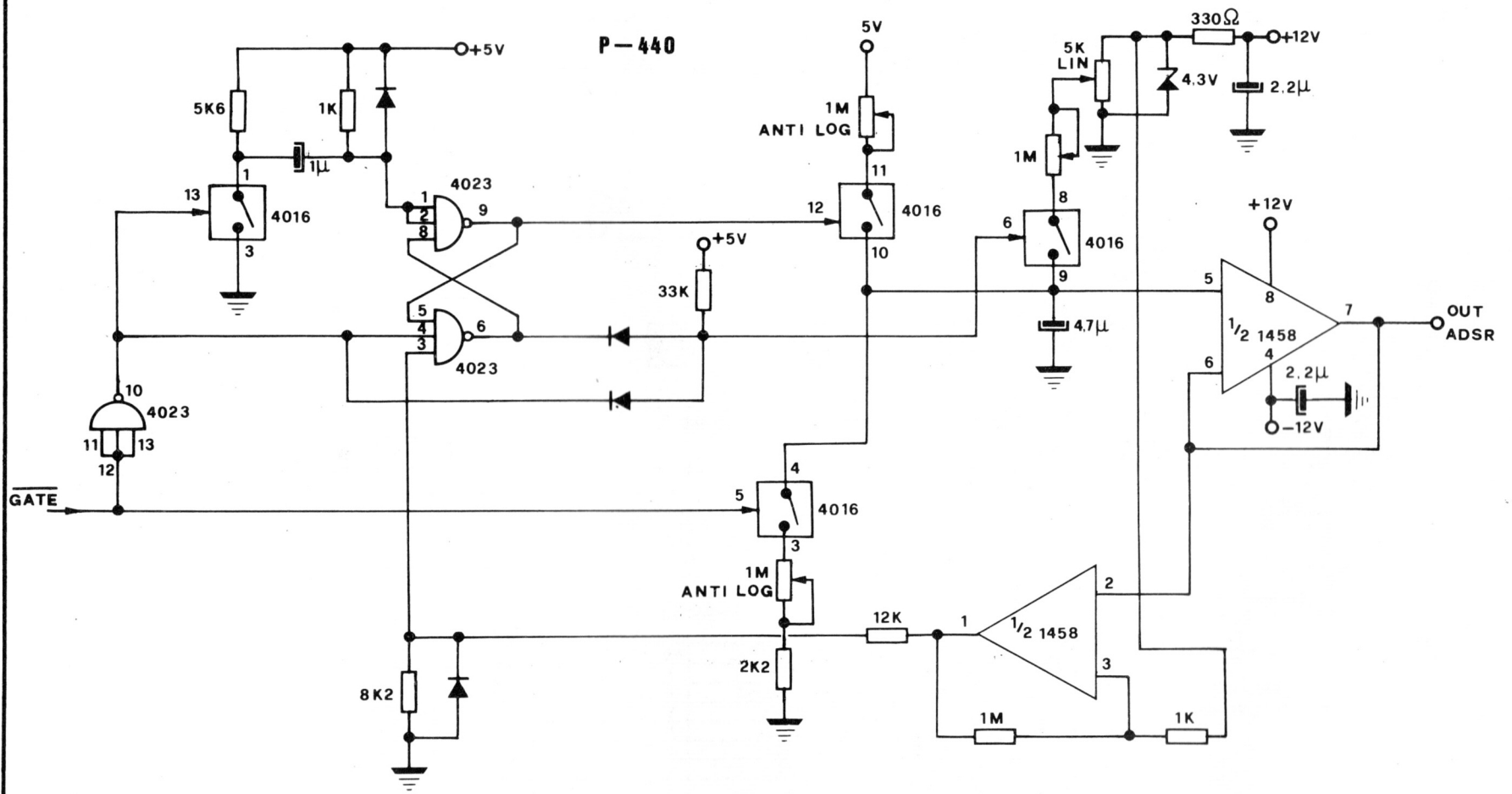
P 446



PIN	REFERENCE J1	PIN	REFERENCE J2	PIN	REFERENCE J3
1	-5.6V	1-2	GND	1	ADSR VCA
2	CUTOFF POT	3	RESON CENTR.	2	MODULAT INPUT
3	GND	4	POLY	3	-12V
4	MODULAT INPUT	5	NOISE	4	+12V
5	ADSR VCF	6	OSC 1	5	GND
6	KT SW TA	7	OSC 2	6	GND
7	RESONANCE LATER.	8		7	OUT VOL GEN
8	GND			8	INPUT HEAD PH
				9	GND
				10	OUT HEAD PH

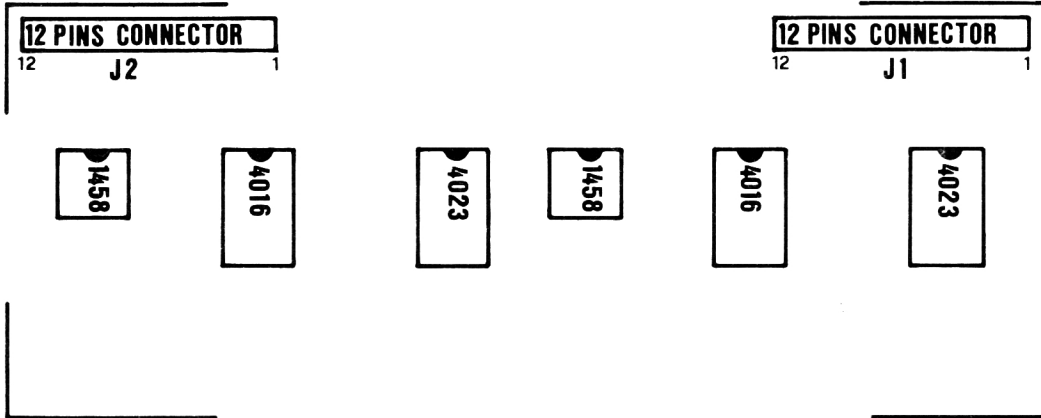
MODEL DS1		SCHEMA H		REVISION	
DATE	DRAWN BY	DESIGNED BY	DATE		
	<i>A. Smith</i>	<i>K. Bran</i>			

P-440



MODEL: DS1			REVISION				
SCHEMA L							
DATE	DRAWN BY	DESIGNED BY	DATE				
	<i>Spodis</i>	<i>R. Bani</i>					

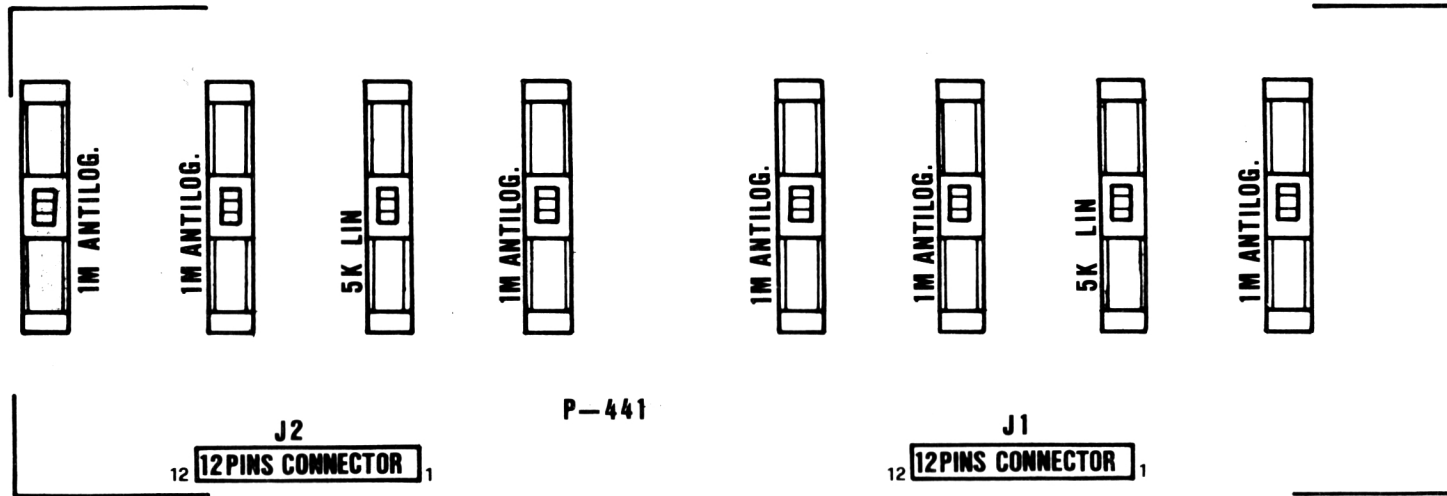
P. 440



PIN	REFERENCE J1	PIN	REFERENCE J2
1	+12V	1	OUT ADSR VCF
2	-12V	2	
3	R POT	3	
4	S POT	4	+5V
5	GND	5	R POT
6	GND	6	S POT
7	GND	7	GND
8	GND	8	GND
9	D POT	9	GND
10	A POT	10	GND
11	GATE	11	D POT
12	OUT ADSR VCA	12	A POT

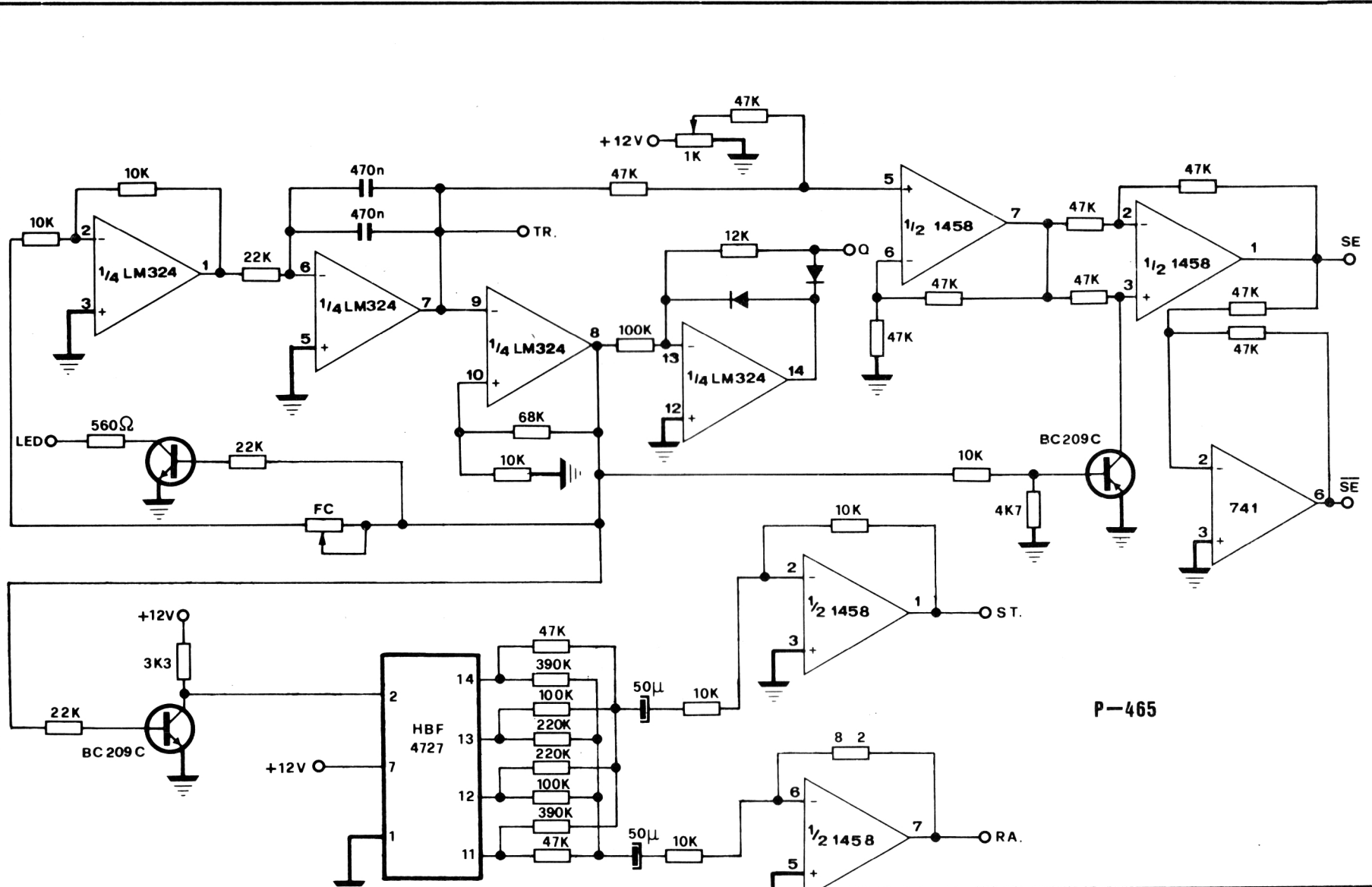
MODEL DS1			REVISION		
SCHEMA L					
DATE	DRAWN BY	DESIGNED BY	DATE		
	<i>Dipol</i>	<i>R. bra</i>			

DWG 7



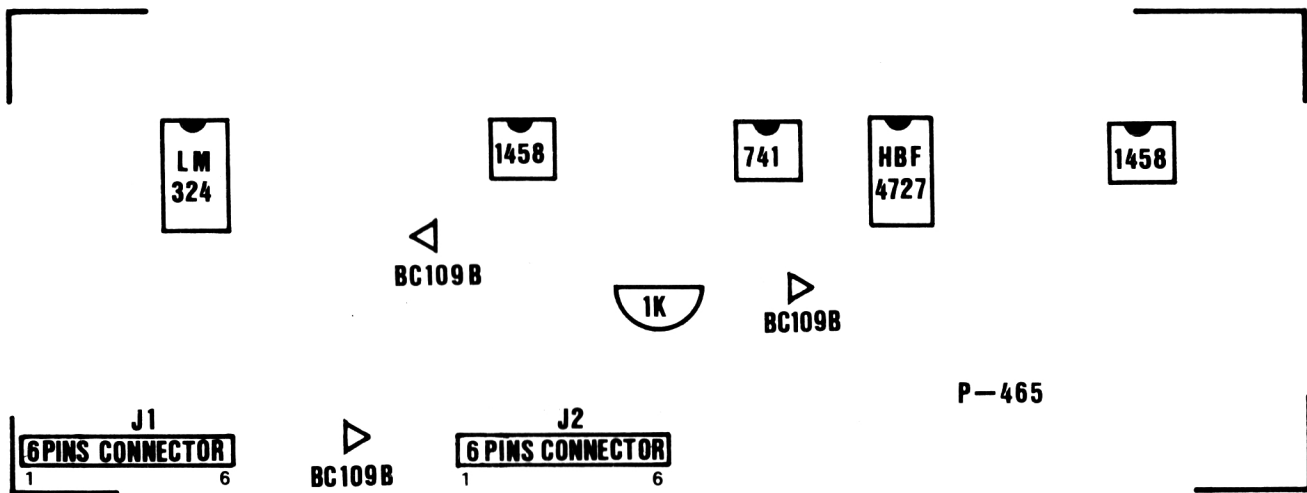
PIN	REFERENCE J2	PIN	REFERENCE J1
1	OUT ADSR VCF	1	+12V
2	" " "	2	-12V
3	" " "	3	R POT.
4	+5V	4	S POT.
5	R POT.	5	GND
6	S POT.	6	"
7	GND	7	"
8	"	8	"
9	"	9	D POT.
10	"	10	A POT.
11	D POT.	11	GATE
12	A POT.	12	OUT ADSR VCA

MODEL	DS1	SCHEMA L	REVISION			
DATE	DRAWN BY	DESIGNED BY	DATE			
	<i>Rendani G.</i>	<i>R. Prati</i>				



P-465

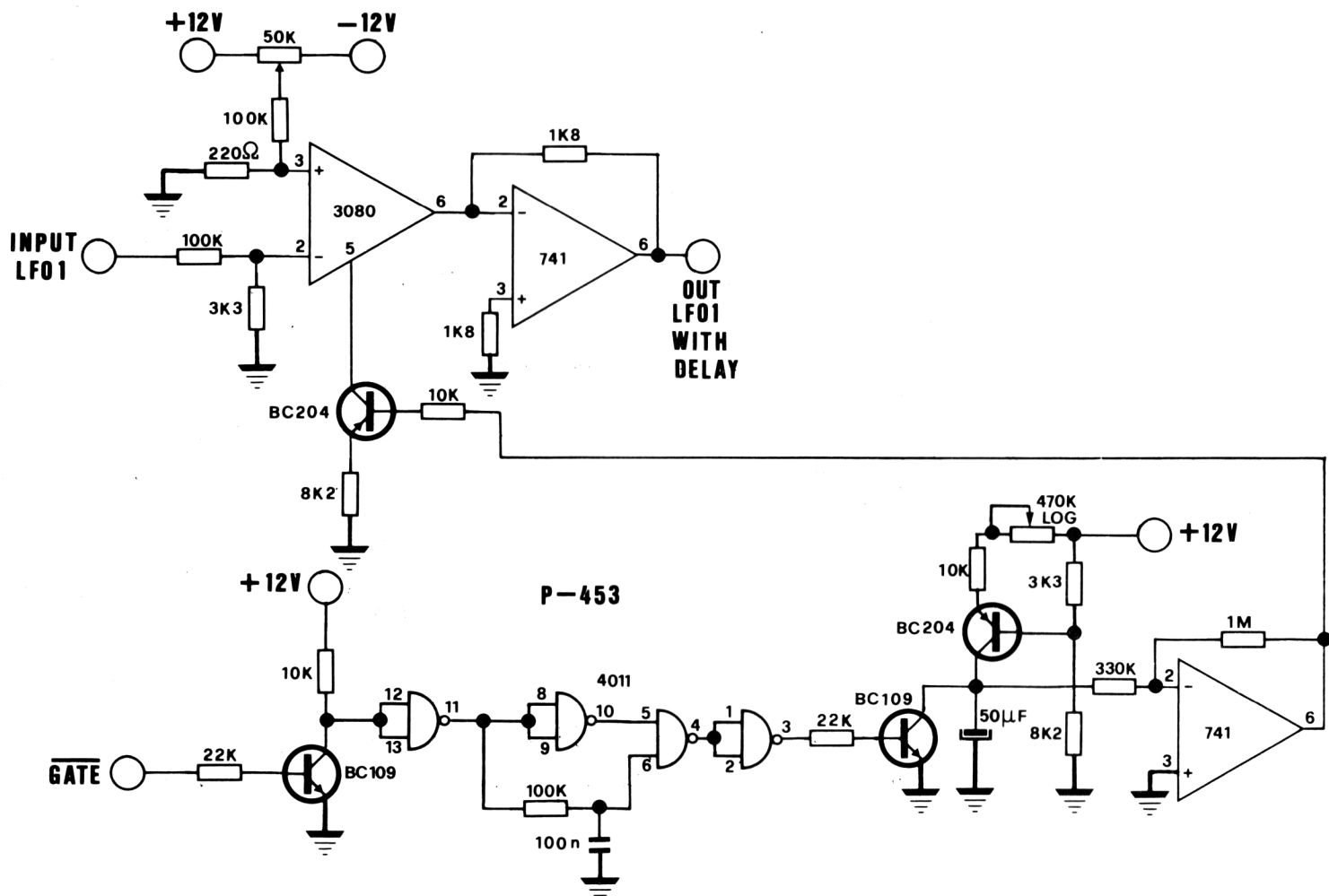
MODEL: DS1		REVISION			
SCHEMA M					
DATE	DRAWN BY	DESIGNED BY	DATE		
	<i>Boaden</i>	<i>G. R. Bran</i>			



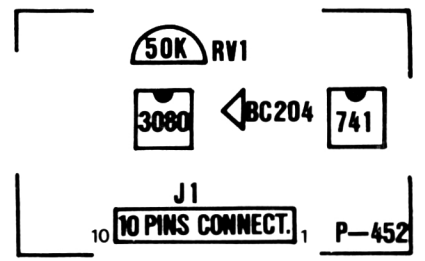
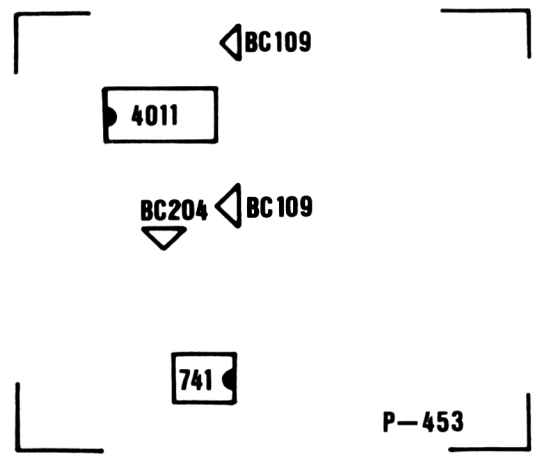
PIN	REFERENCE	J1
1	SE	
2	GND	
3	FC	
4	+12V	
5	TR	
6	FC	

PIN	REFERENCE	J2
1	QUADRA	
2	LED	
3	-12V	
4	SE	
5	ST.	
6	RA.	

MODEL	DS1	REVISION			
	SCHEMA M				
DATE	DRAWN BY	DESIGNED BY	DATE		
	Bordou G.	R. Bran			

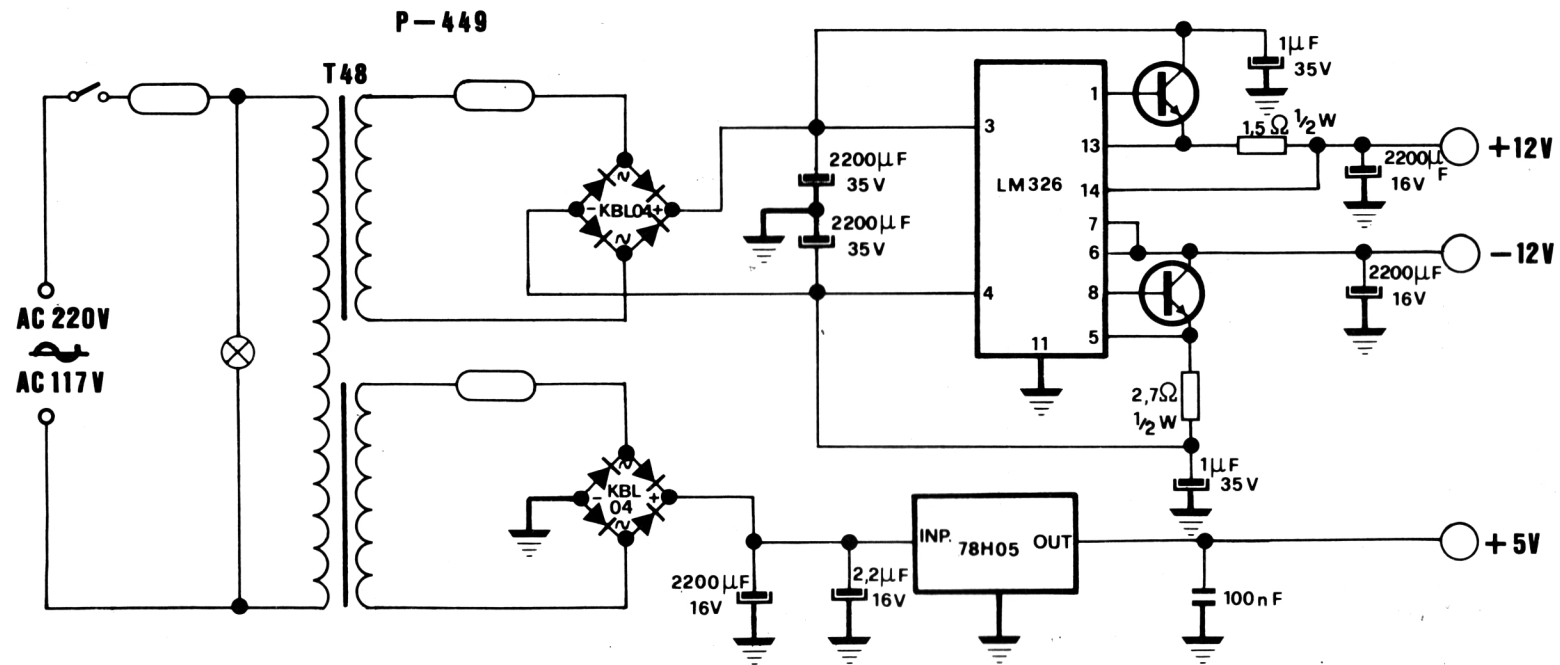


MODEL	DS1 SCHEMA Q	REVISION			
DATE	DRAWN BY <i>Donna G. R. Brown</i>	DESIGNED BY			

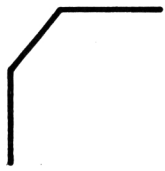


PIN	REFERENCE	J1
1	+12V	
2	OUT LF01	
3	PIN 6 741	
4	-12V	
5	GND	
6	"	
7	"	
8	INP LF01	
9	" " " "	" "
10	" " " "	" "

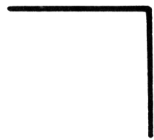
MODEL	DS1 SCHEMA Q	REVISION			
DATE	DRAWN BY	DESIGNED BY	DATE		
	<i>Bodan G.</i>	<i>Rbran</i>			



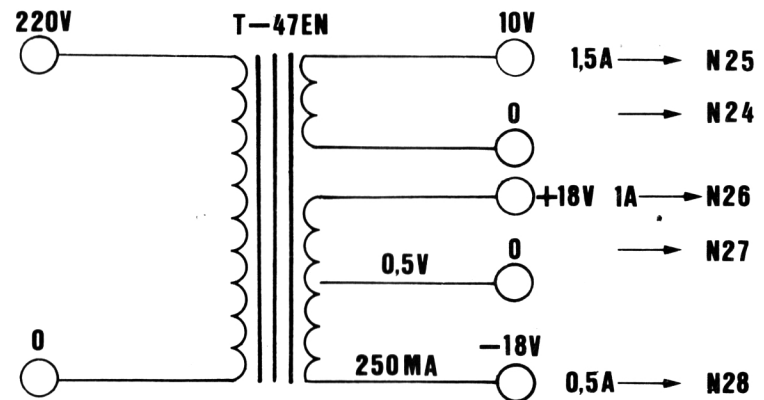
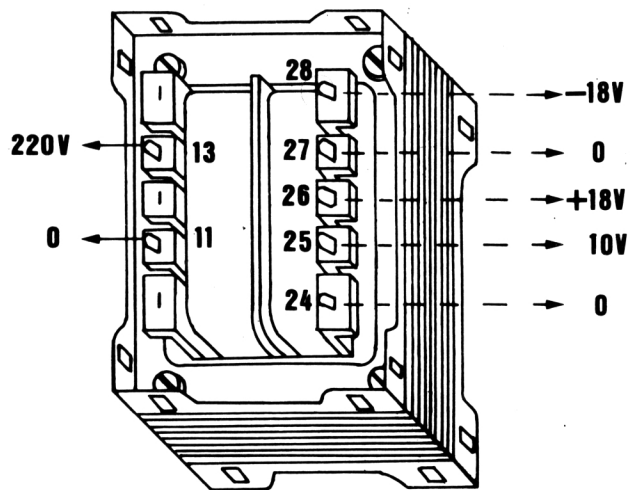
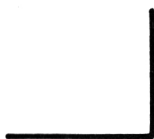
MODEL	DS1 SCHEMA P	REVISION			
DATE	DRAWN BY <i>Bordas</i>	DESIGNED BY <i>R. Fran</i>	DATE		



LM
326



P-449



MODEL DS1 SCHEMA P			REVISION			
DATE	DRAWN BY <i>Borden G.</i>	DESIGNED BY <i>R. Brain</i>	DATE			

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