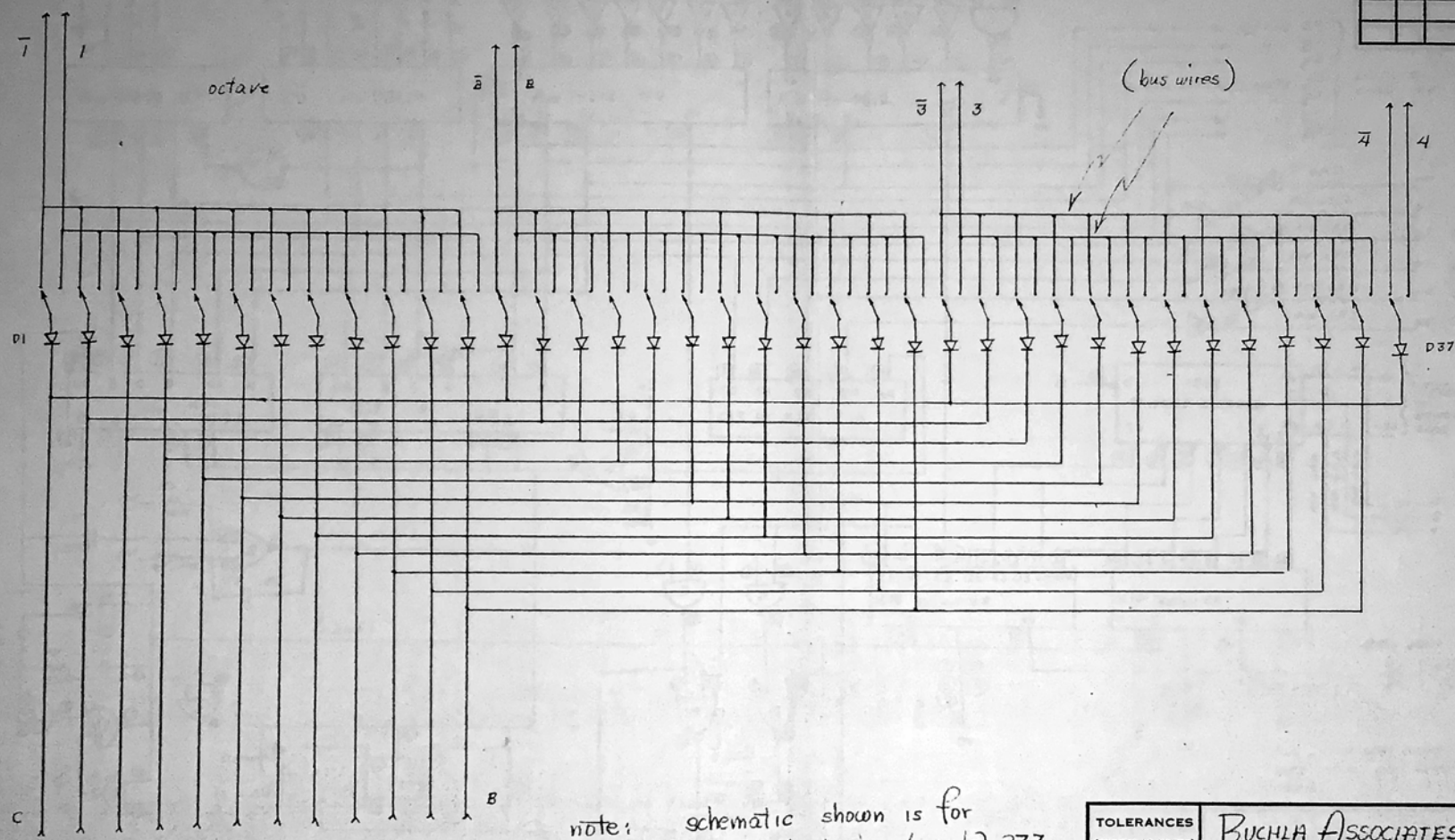


DATE	BY	REVISION RECORD	AUTH.	DR.	CK.

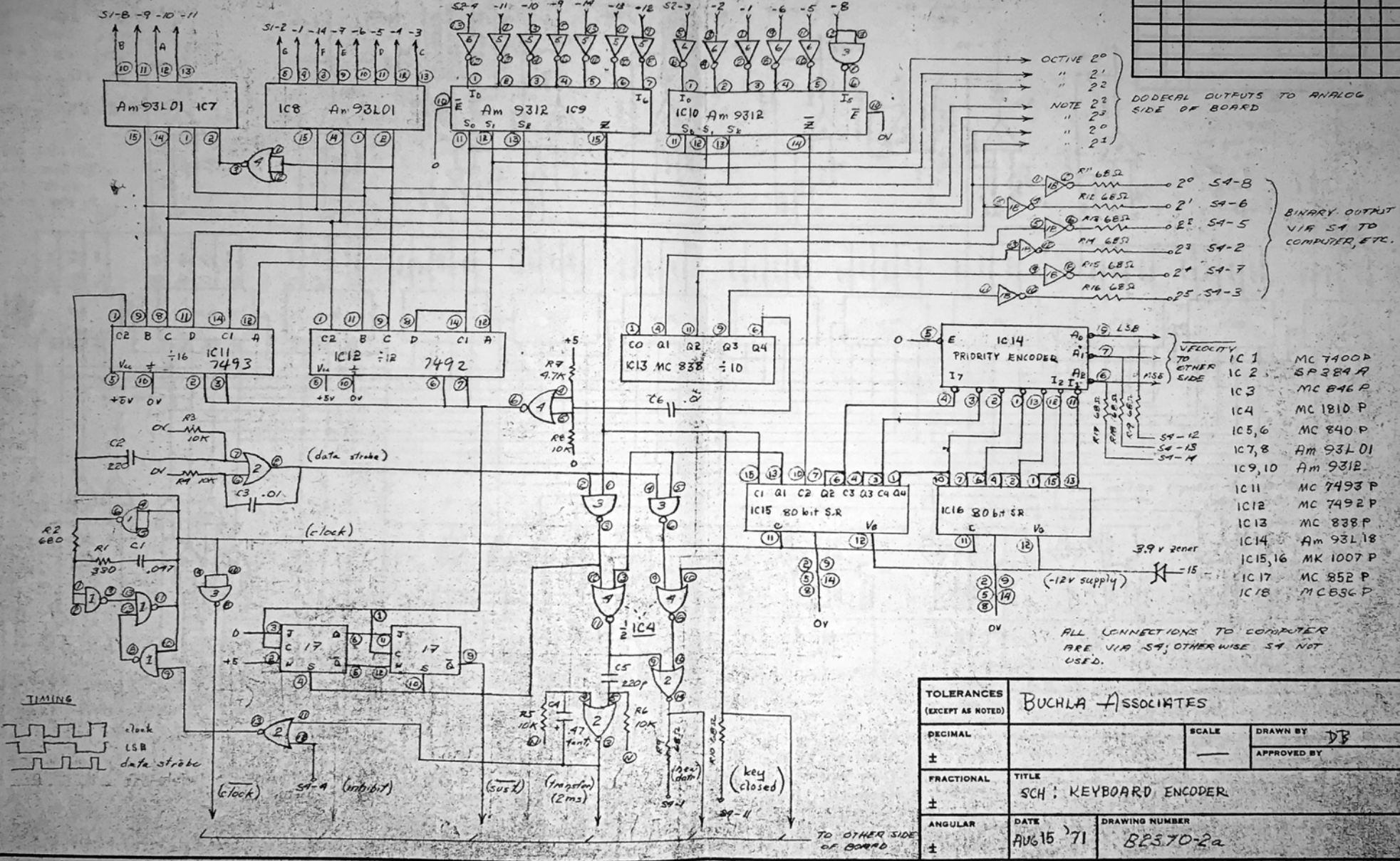


note: schematic shown is for  
 37 note keyboard model 237  
 61 note keyboard is similar,  
 but with 5 octaves (61 switches)  
 all diodes are 1N457 or equiv.

TOLERANCES (EXCEPT AS NOTED)	BUCHLA ASSOCIATES		
DECIMAL ±	200 series	SCALE —	DRAWN BY F
FRACTIONAL ±	TITLE SCH; KEY SWITCHING MODEL 237 (AND 261)		
ANGULAR ±	DATE 10-1-71	DRAWING NUMBER B2370-1	
APPROVED BY			

S1

DATE	BYM	REVISION	RECORD	AUTH.	DR.	CK.

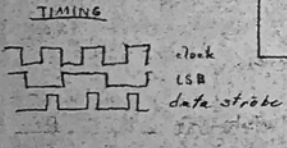


DODECAL OUTPUTS TO ANALOG SIDE OF BOARD

BINARY OUTPUT VIA S4 TO COMPUTER, ETC.

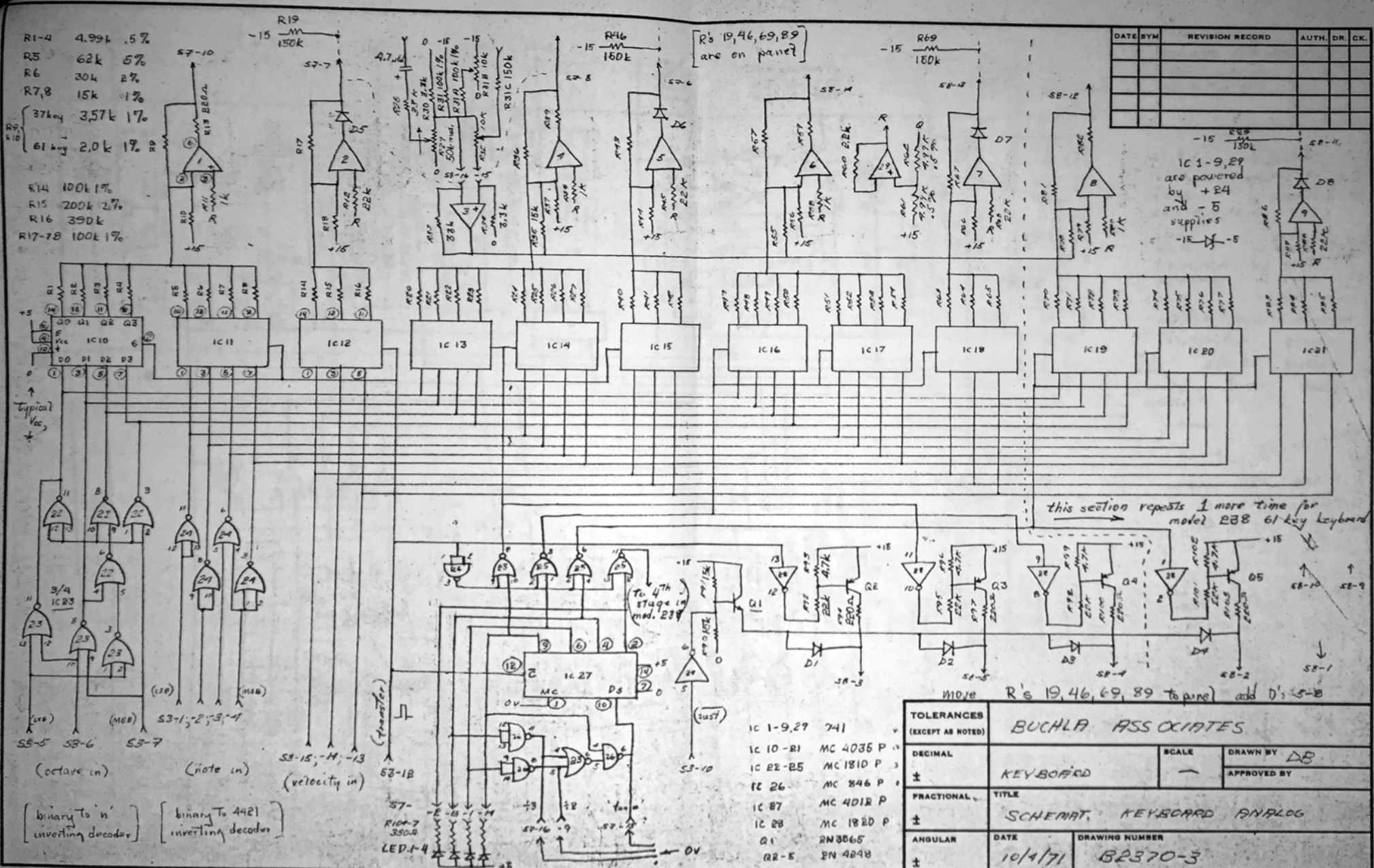
- IC 1 MC 7400 P
- IC 2 SP 384 A
- IC 3 MC 846 P
- IC 4 MC 1810 P
- IC 5,6 MC 840 P
- IC 7,8 Am 93L01
- IC 9,10 Am 9312
- IC 11 MC 7493 P
- IC 12 MC 7492 P
- IC 13 MC 838 P
- IC 14 Am 93L18
- IC 15,16 MK 1007 P
- IC 17 MC 852 P
- IC 18 MC 836 P

ALL CONNECTIONS TO COMPUTER ARE VIA S4; OTHERWISE S4 NOT USED.



TOLERANCES (EXCEPT AS NOTED)		BUCLA ASSOCIATES	
DECIMAL	±	SCALE	DRAWN BY DB
FRACTIONAL	±	TITLE	APPROVED BY
ANGULAR	±	DATE	DRAWING NUMBER
		AUG 15 '71	BES.70-2a

- R1-4 4.99k 5%
- R5 62k 5%
- R6 30k 2%
- R7,8 15k 1%
- { 37k 3.57k 1%
- { 61k 2.0k 1%
- R14 100k 1%
- R15 200k 2%
- R16 350k
- R17-78 100k 1%



DATE	SYM	REVISION	RECORD	AUTH.	DR.	CK.

IC 1-9, 29 are powered by +5 and -5 supplies

this section repeats 1 more time for model 238 61 key keyboard

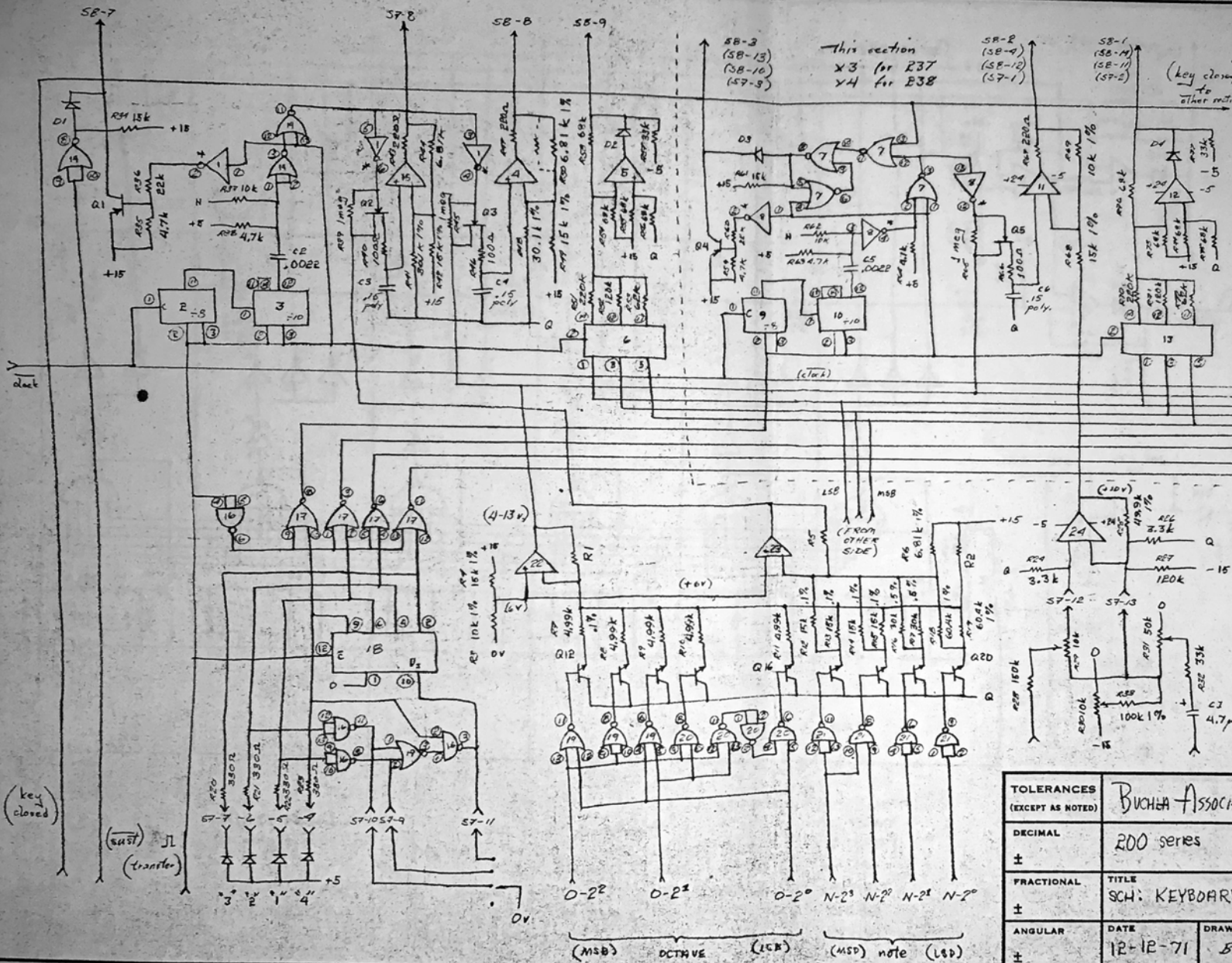
Model R's 19, 46, 69, 89 to panel add D's 5-B

- IC 1-9, 29 741
- IC 10-21 MC 4036 P
- IC 22-25 MC 1810 P
- IC 26 MC 846 P
- IC 27 MC 4012 P
- IC 28 MC 1820 P
- Q1 2N3865
- Q2-5 2N4248

TOLERANCES (EXCEPT AS NOTED)		BUCHLA ASSOCIATES	
DECIMAL	SCALE	DRAWN BY DB	
±	—	APPROVED BY	
FRACTIONAL	TITLE		
±	SCHEMAT. KEYBOARD ANALOG		
ANGULAR	DATE	DRAWING NUMBER	
±	10/4/71	BR370-3	

[ binary to n inverting decoder ] [ binary to 4421 inverting decoder ]

+3 line can be returned to



DATE	SYM	REVISION RECORD	AUTH.	DR.	CK.
		REPLACES D/A CONV.			
		CIRCUIT USED ON			
		SERIAL # 15 1-3			

- IC1, 8, MC1820P
- IC2, 9, MC7493P } Vcc
- IC3, 10, MC7490P } +10
- IC4, 5, 11, 12, 15, 16, 17, 18, 19, 20, 21, 22, 23, 741
- IC24, 5556 } Vcc
- IC6, 17, MC4012P } +10
- IC7, 14, 17, 19, MC1810P
- IC16, 20, 21, MC846P
- IC18, MC4012P

- Q2, 3, 5, 7, 9, 11, 1TS-32B5
- Q1, 4, 6, 8, 10, 2N4248
- Q12-20, 2N3566
- all D's, 1N457

- clock
  - analog
  - velocity
  - modifier
  - strobes
- (2.42k 11 0.1%)
- version 237 / 238
- R1, 2.4k 1.5k 1%
  - R2, 10.2k

note: IC's 4, 11, etc should be adj. to 0 with R's to + or -

TOLERANCES (EXCEPT AS NOTED)	BUCHTA ASSOCIATES		
DECIMAL	200 series	SCALE	DRAWN BY DB
±			APPROVED BY
FRACTIONAL	TITLE: SCH: KEYBOARD ANALOG		
±			
ANGULAR	DATE	DRAWING NUMBER	
±	12-12-71	E2370-3a	

