J1

C31

U10 8T26
O C110 O C100
C80 C90

U9 BA5 4
WB0

W6
W5

U8 BA5 3

OV14 C150
U7 BA5 2

C140
U6 BA5 1

C130
U5 MONITOR ROM

C120
R5 OO R6 OO C110

U4 6502

J2

U3 6850

OV13 OV10

U2 LA8304
R1 C10
OCR1
R3
C28 C20
C30

W2

U1 7416

R10
R11

C11

U19 8T26
C33
U18 7438
U17 7402
U16 74134
U15 TCM1
U14 7414

C19

555 U13
C7
OC170

U12 7412

C18

U11 7412B

C13

DOOR17

R14 R15 R16
OOR7b
C180

R25
R24
R23
R22
R21
R20

R28
R29
R30
R31
R32
R33

W7

U29 7428
U28 7484
U27 7418
U26 74LS138
U25 7411
U24 7411
U23 7474
U22 7412
U21 PR0M0
U20 7411

C21
C20
C25
C24

W8

C23

R17

R75

R26
W1b

U32 7411
U31 74245

C12

R18
R19

R35
R36
R37
R38
R39
R40
R41
R42
R43

WR

U42 2114
U43 2114
U44 2114
U45 2114
U46 2114
U47 2114
U48 2114
U49 2114

R74

C38

U41 7411

OC26
OC27

OV1b
OV12

R46
R17

C25

ADD JUMPER

ADD JUMPER

CUT

MODIFICATION FOR SERIAL SYSTEMS
REAR VIEW
DETAIL C-2

BAUD 75
BAUD 150
BAUD 300
BAUD 600
BAUD 1200
BAUD 2400
BAUD 4800
BAUD 9600

BAUD RATE JUMPER FOR SERIAL SYSTEMS
REAR VIEW
DETAIL C-3

ADD JUMPER

U1F — — U1G

MODIFICATION FOR SERIAL SYSTEMS
REAR VIEW
DETAIL C-4

U5F
7439D

ADD JUMPERS

CUT HERE

U6C
7493

U6D
7493
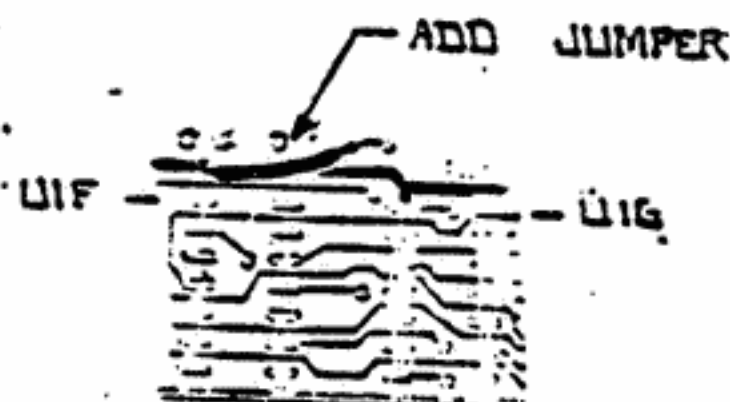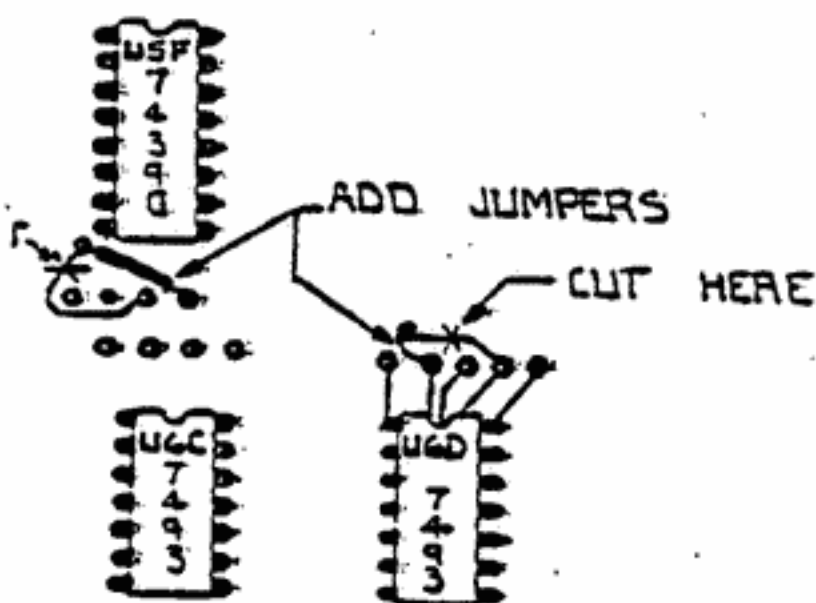
MODIFICATION FOR 8" FLOPPY
FRONT VIEW

DETAIL D

ADD JUMPER

U5E

CUT HERE

U6D
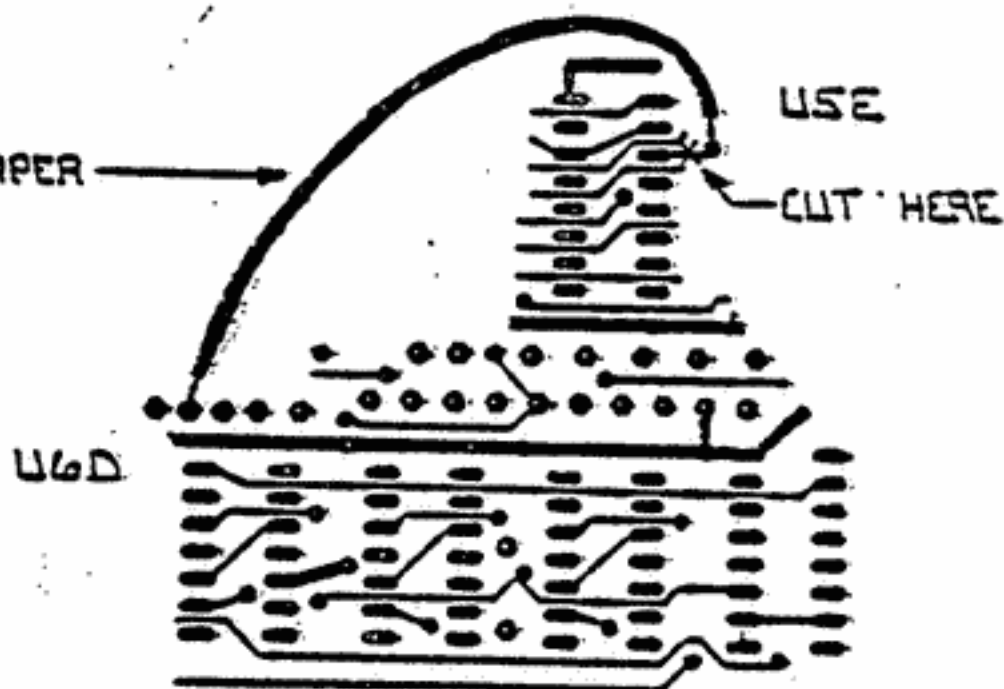
MODIFICATION FOR 8" FLOPPY
REAR VIEW
DETAIL D-1

9600 BAUD
4800 BAUD
2400 BAUD
1200 BAUD
600 BAUD
300 BAUD
150 BAUD
75 BAUD

BRG

U6B
7493

U6C
7493
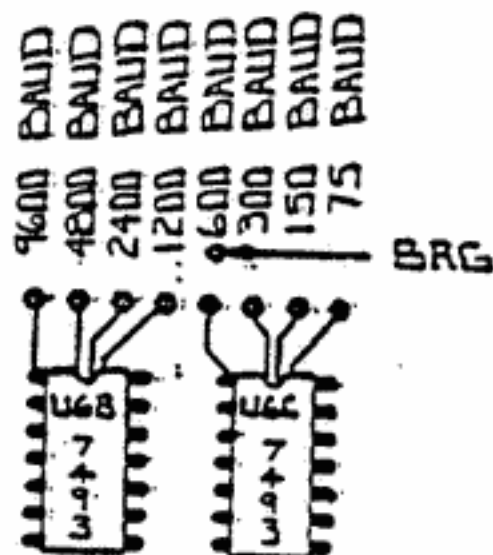
BAUD RATE JUMPERS
FRONT VIEW
DETAIL E

ADD JUMPER

CUT HERE

U4A 7417

U4B 7414

U3B U3A

ADD JUMPER →

U4A

CUT

ADD RESISTOR 62

ADD JUMPER

DUAL SIDED FLOPPY MODIFICATIONS.
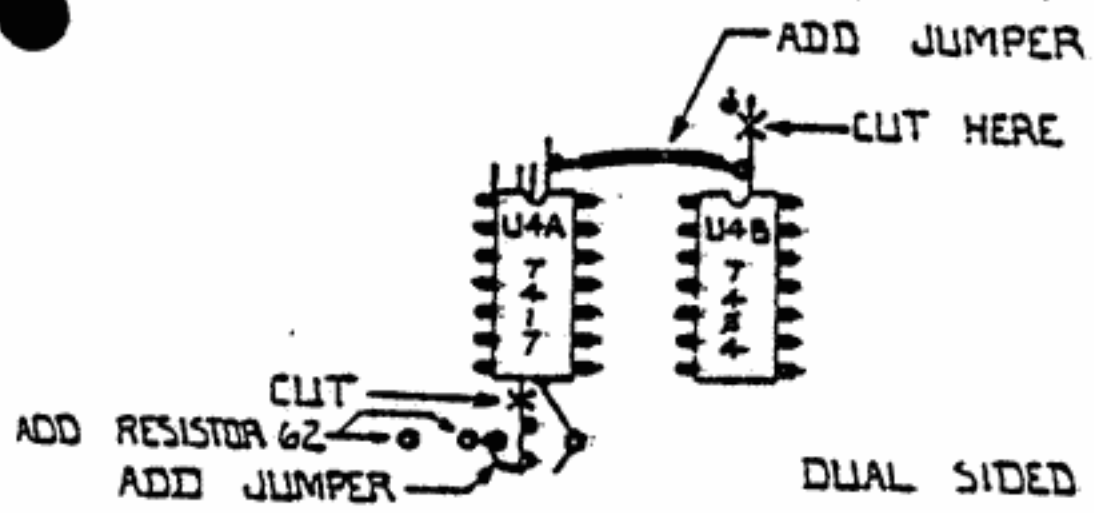
FRONT VIEW OF SDS BOARD
DETAIL A

REAR VIEW OF SDS BOARD
DETAIL A-1

CUT HERE

ADD JUMPER

U2C 7414

U2D

ADD JUMPERS

U3F CUT

CUT
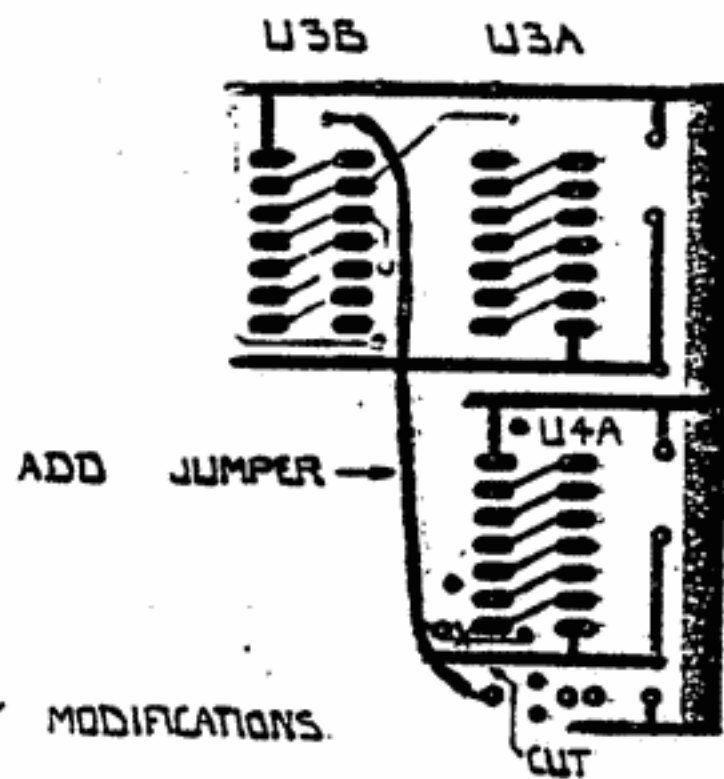
2716 E ROM MODIFICATIONS
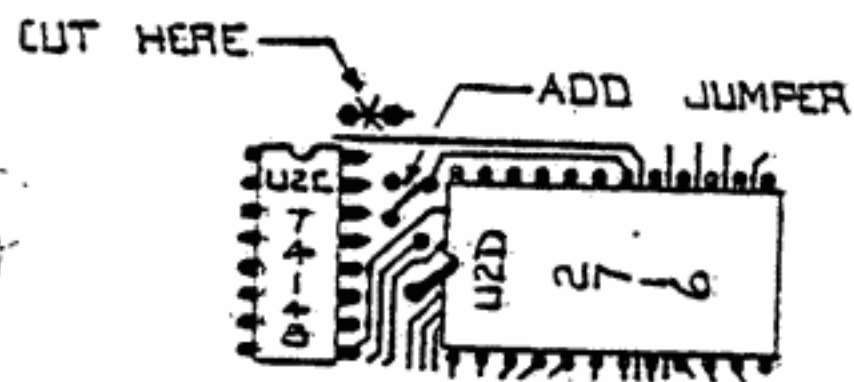
FRONT VIEW
DETAIL B

REAR VIEW
DETAIL B-1

U3E

MAKE 4 CUTS

ADD 2 JUMPERS

ADD 2 JUMPERS
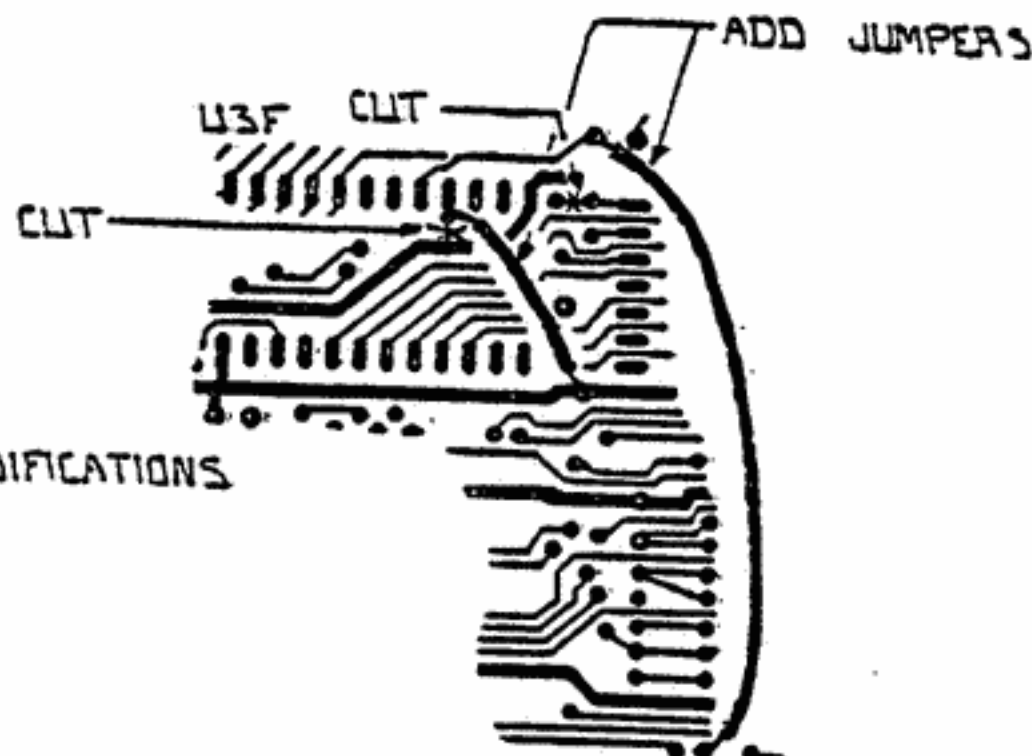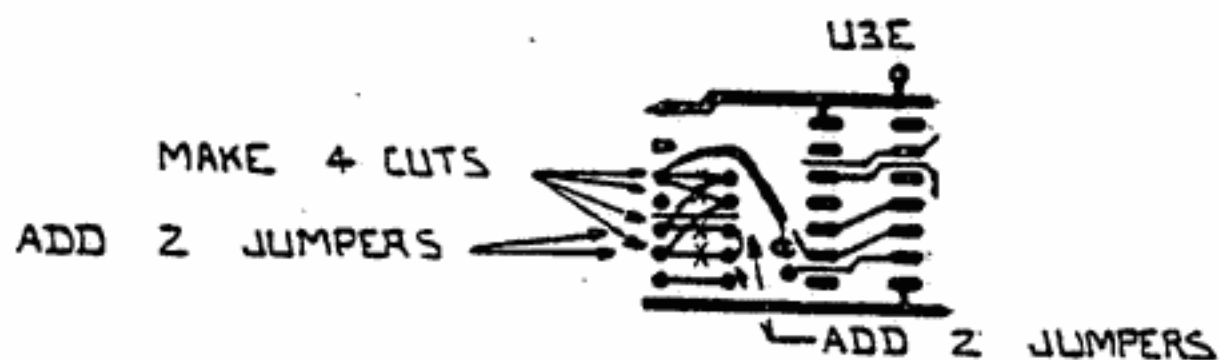
SERIAL SYSTEM MODIFICATIONS
REAR VIEW
DETAIL C-1

COLOR FREQ

R12 4.7KΩ

10-55 pf C18

X2 3.579545 MHz

NOTE: THIS CIRCUITRY IS USED ONLY FOR COLOR
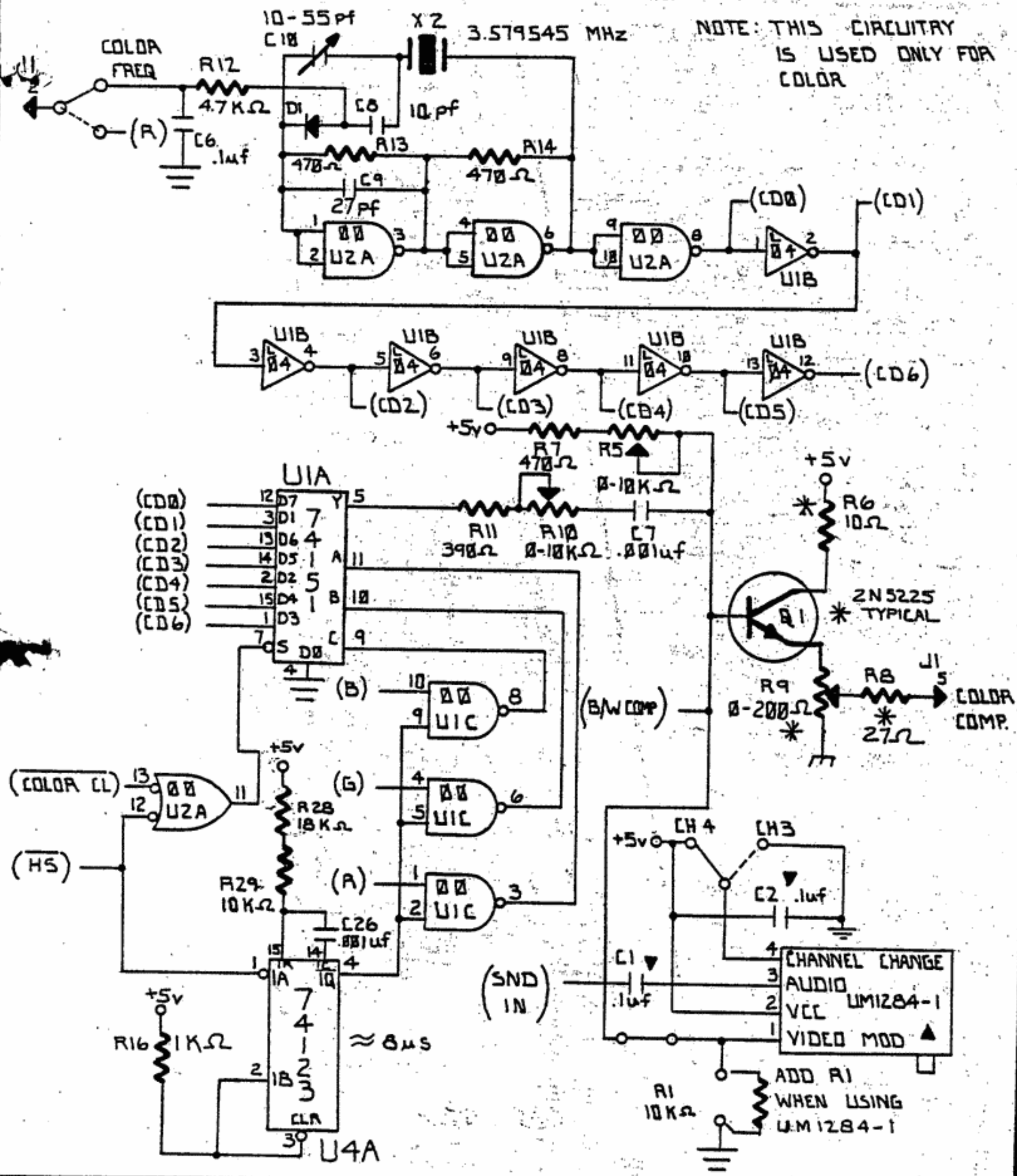
(R)

C6 .1uf

D1 C8 10 pf

R13 470Ω

R14 470Ω

C9 27 pf

U2A 00

U2A 00

U2A 00

(CD0) (CD1)

U1B 04

U1B 04

U1B 04

U1B 04

U1B 04

U1B 04

(CD2) (CD3) (CD4) (CD5) (CD6)

+5v R7 470Ω R5 0-10KΩ

+5v R6 10Ω

U1A

(CD0) 12 D7 Y 5
(CD1) 3 D1
(CD2) 13 D6 4
(CD3) 14 D5 A 11
(CD4) 2 D2 5
(CD5) 15 D4 B 10
(CD6) 1 D3
7 S D0 C 9
4

R11 390Ω R10 0-10KΩ C7 .001uf

2N5225 TYPICAL

Q1

(B) U1C 00 10 8

(G) U1C 00 4 6

(A) U1C 00 1 3

(B/W COMP)

R9 0-200Ω R8 27Ω

J1 5 COLOR COMP.

(COLOR CL) 13 12 U2A 00 11

(HS)

R28 18KΩ

R29 10KΩ

+5v

C26 .001uf

U4A 74123 ≈ 8µs

1A 1Q
2 1B
3 CLR

R16 1KΩ +5v

+5v CH4 CH3

C2 .1uf

C1 .1uf

(SND IN)

CHANNEL CHANGE
3 AUDIO UM1284-1
2 VCC
1 VIDEO MOD

ADD R1 WHEN USING UM1284-1

R1 10KΩ

NOTE: DELETE COMPONENTS DENOTED WITH ▲ WHEN USING UHF CONVERTER
DELETE COMPONENTS DENOTED WITH ✳ WHEN USING VHF MODULATER

Ohio Scientific BASIC for the 6502, 8K version 3.2

Commands

CONT	LIST	NEW	NULL	RUN

Statements

CLEAR	DATA	DEF	DIM	END	FOR
GOTO	GOSUB	IF...GOTO	IF...THEN	INPUT	LET
NEXT	ON...GOTO	ON...GOSUB	POKE	PRINT	READ
REM	RESTORE	RETURN	STOP		

Expressions

Operators

-, +, *, /, ↑, NOT, AND, OR, ><, <>, >=, <=, ≠   RANGE 10-32 to 10+32

Variables

A, B, C, ..., Z and two letter variables
The above can all be subscripted when used in an array
String variables use above names plus $, eg. A$

Functions

ABS(X)	ATN(X)	COS(X)	EXP(X)	FRE(X)	INT(X)
LOG(X)	PEEK(I)	POS(I)	RND(X)	SGN(X)	SIN(X)
SPC(I)	SQR(X)	TAB(I)	TAN(X)	USR(I)	

String Functions

ASC(X$)	CHR$(I)	FRE(X$)	LEFT$(X$,I)	LEN(X$)	MID$(X$,I,J)
RIGHT$(X$,I)		STR$(X)		VAL(X$)	

Special Characters

⊙ Erases line being typed, then provides carriage return, line feed.
← Erases last character typed.
CR Carriage Return -- must be at the end of each line
: Separates statements on a line.
CONTROL/C Execution or printing of a list is interrupted at the end of a line.
   "BREAK IN LINE XXXX" is printed, indicating line number of next statement
   to be executed or printed.
CONTROL/O   No outputs occur until return made to command mode. If an Input
   statement is encountered, either another CONTROL/O is typed, or an error occurs.
? Equivalent to PRINT