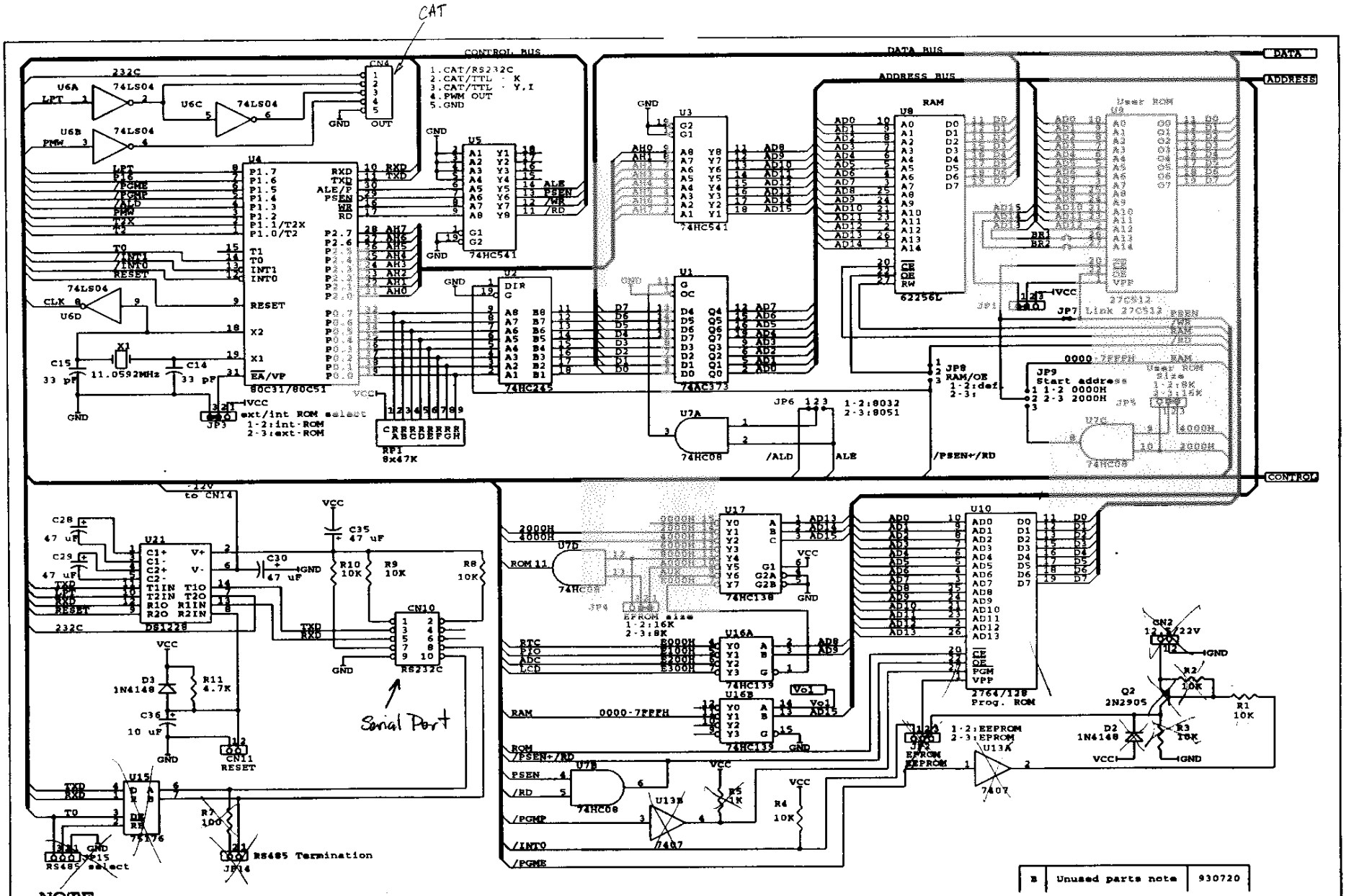


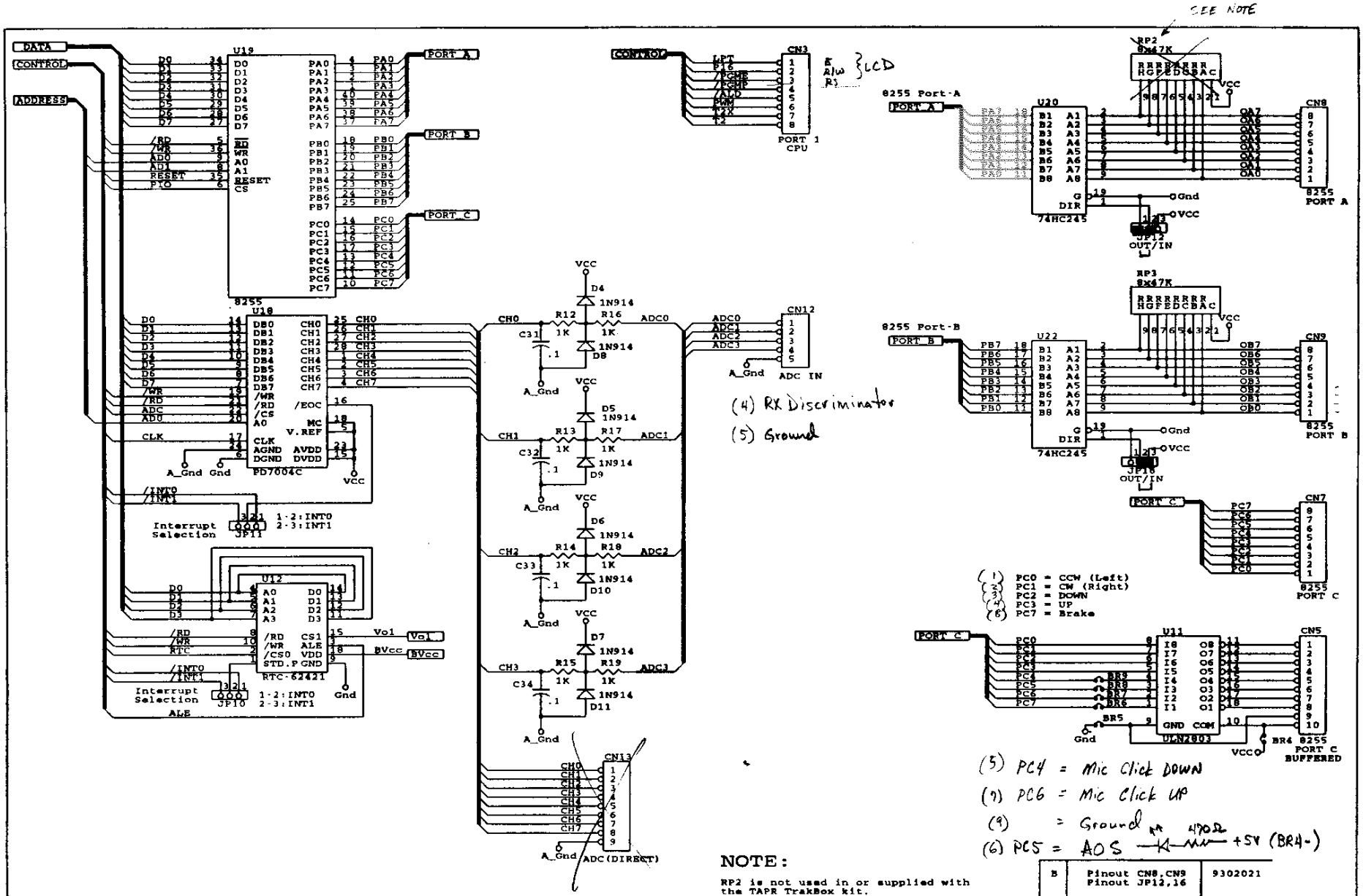
NOTE

The following components are not needed or used in the TrakBox configuration of this board and are not supplied with the TAPR kit:

CN2, D3, JP2, JP14, JP15, Q2, R1, R7, R8, R5, R7, U15, U13, U15

B	Unused parts note	930720

Title	TrakBox - CPU, Memory, Serial I/O	
Size: B	Document Number: 930701	REV: B
Date: August 27, 1993	Sheet 1 of 5	

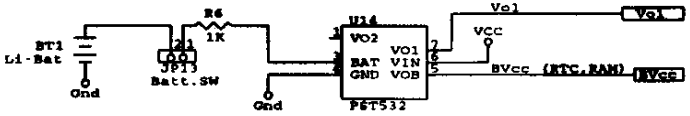


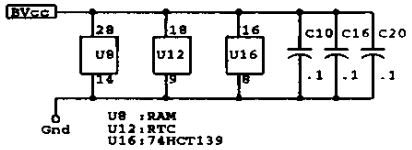
NOTE:

RP2 is not used in or supplied with the TAPR TrakBox kit.

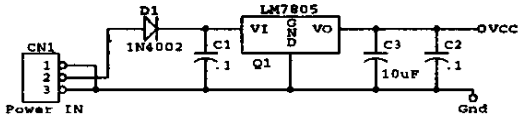
B	Pinout CN8,CN9 Pinout JP12,16	9302021
C	Part type U20 Part type U22 Note RP2/3	930720
D	Corrected CN8/9	930827

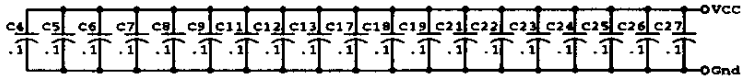
Title	TrakBox - Clock, A/D, I/O	
Size: B	Document Number: 930701	REV: D
Date: August 27, 1993	Sheet 2 of 5	





MOUNT ON HEATSINK

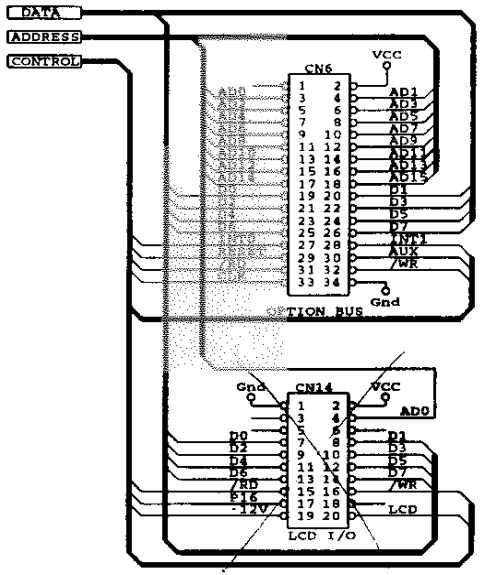




By-pass Caps all 0.1uF

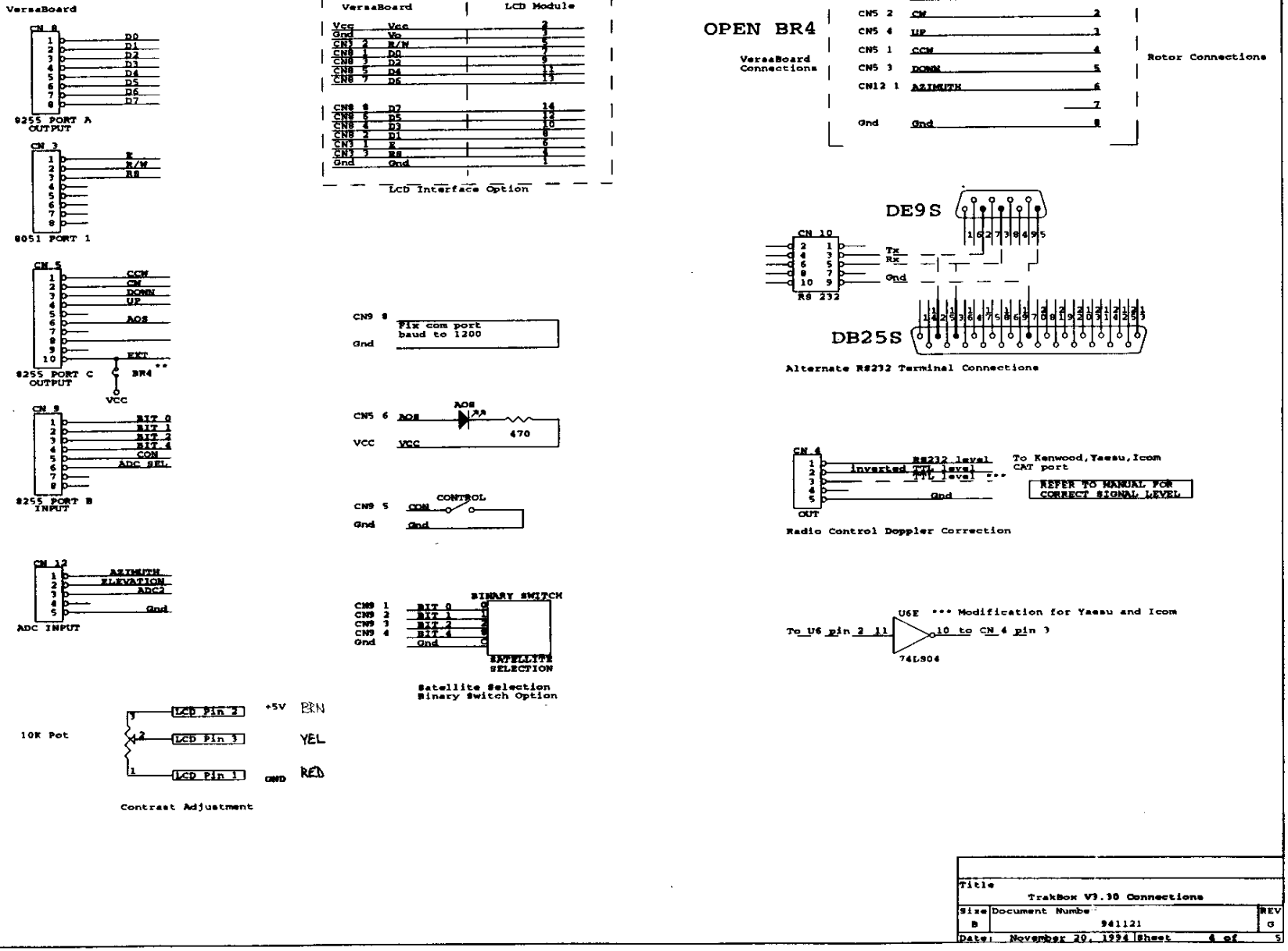
	U1	U2	U3	U4	U5	U6	U7	U8	U9	U10	U11	U12	U13	U14	U15	U16	U17	U18	U19	U20	U21	U22
+5V	20	20	20	40	20	14	14	*28	28	28	10	*18	14	6	8	*16	16	15	26	20	16	20
GND	10	10	10	20	10	7	7	14	14	14	9	9	7	4	5	8	8	6	7	10	15	10

*:BVcc BACKUP 3V

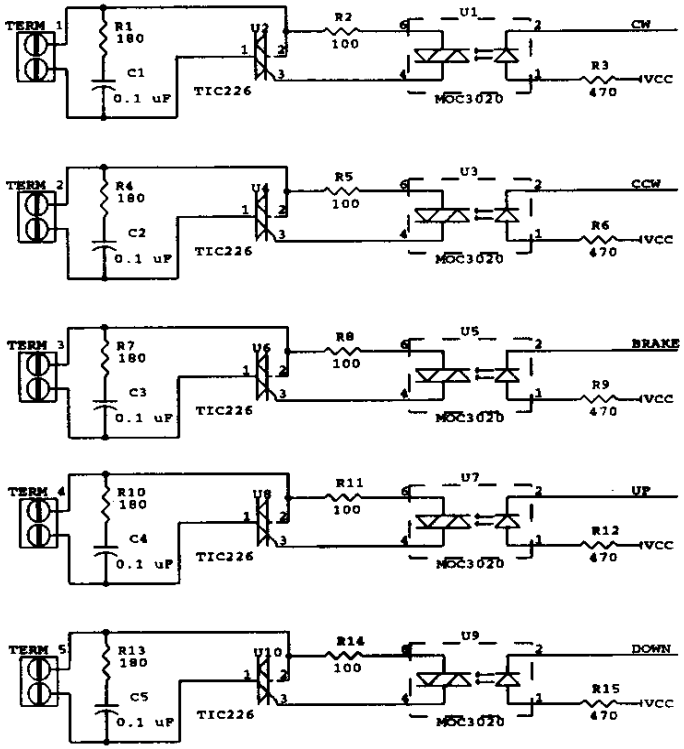


This LCD connection is not used with TrakBox V2.00

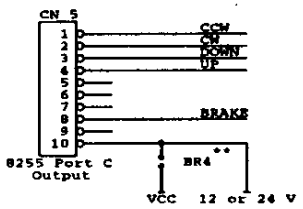
Title	TrakBox - Power, Reset and Expansion		
Size	Document Number		REV
B	930701		A
Date:	August 27, 1993	Sheet 3 of 5	


VersaBoard
CN 8
D0
D1
D2
D3
D4
D5
D6
D7
8255 PORT A
OUTPUT
CN 3
E
R/W
RS
8051 PORT 1
CN 5
CCW
CW
DOWN
UP
AOS
EXT
8255 PORT C
OUTPUT
BR4
**
VCC
CN 9
BIT 0
BIT 1
BIT 2
BIT 4
CON
ADC SEL
8255 PORT B
INPUT
CN 12
AZIMUTH
ELEVATION
ADC3
Gnd
ADC INPUT
LCD DISPLAY HITACHI 44780 COMPATABLE
VersaBoard
LCD Module
Vcc
Gnd
R/W
D0
D1
D2
D3
D4
D5
D6
D7
E
RS
LCD Interface Option
CN9 8
Fix com port
baud to 1200
Gnd
CN5 6
AOS
470
VCC
CN9 5
CONTROL
COM
Gnd
BINARY SWITCH
CN9 1
CN9 2
CN9 3
CN9 4
Gnd
BIT 0
BIT 1
BIT 2
BIT 4
SATELLITE
SELECTION
Satellite Selection
Binary Switch Option
10K Pot
LCD Pin 2
LCD Pin 3
LCD Pin 1
+5V
GND
BRN
YEL
RED
Contrast Adjustment
ROTOR CONNECTIONS KENPRO KR-5400A and KR-5600A
OPEN BR4
VersaBoard
Connections
CN12 2
ELEVATION
CN5 2
CW
CN5 4
UP
CN5 1
CCW
CN5 3
DOWN
CN12 1
AZIMUTH
Gnd
Rotor Connections
DE9S
DB25S
CN 10
Tx
Rx
Gnd
RS 232
Alternate RS232 Terminal Connections
CN 4
RS232 level
inverted TTL level
TTL level ***
Gnd
OUT
To Kenwood, Yaesu, Icom
CAT port
REFER TO MANUAL FOR
CORRECT SIGNAL LEVEL
Radio Control Doppler Correction
To U6 pin 2 11
U6E
74LS04
10 to CN 4 pin 3
*** Modification for Yaesu and Icom
Title
TrakBox V9.30 Connections
Size
B
Document Numbe
941121
REV
G
Date: November 20, 1994
Sheet 4 of 5

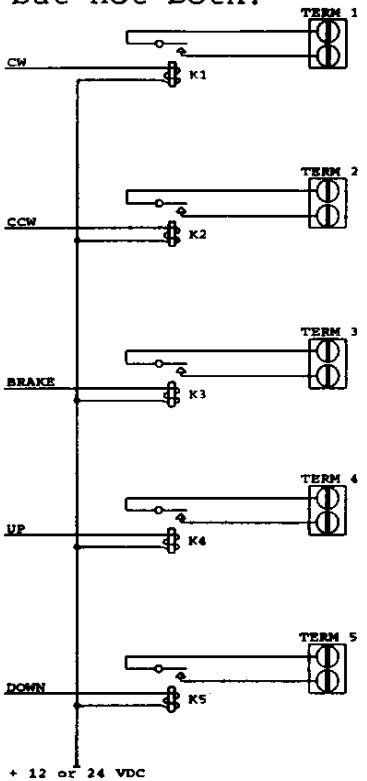
NOTE: Use the TRIAC INTERFACE or the RELAY INTERFACE, but not both.



Triac Interface



** BR4 must be open for voltages other than VCC.



Relay Interface

Title: TrakBox Rotator Interfaces		
Size: B	Document Number: 930701	REV: A
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