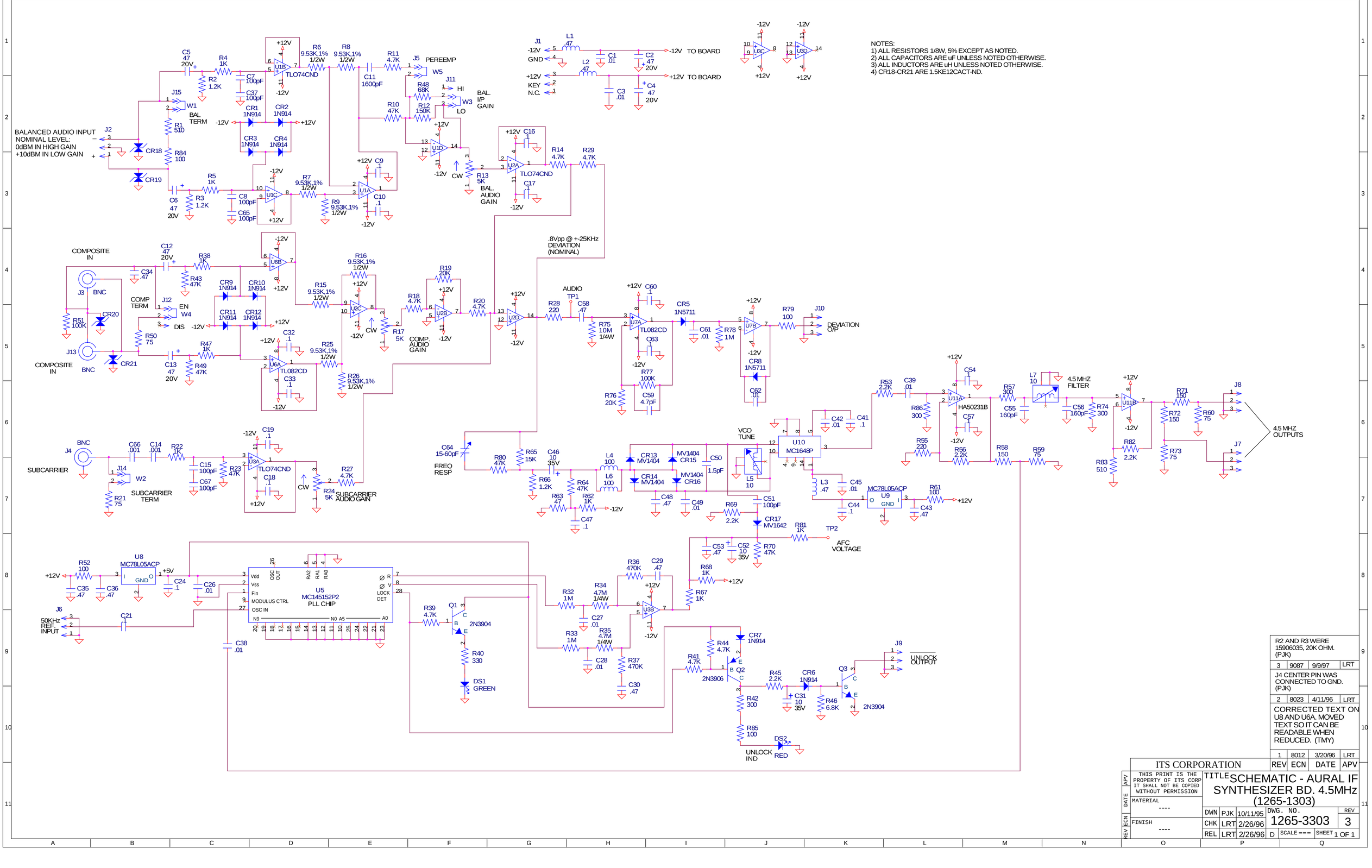

BALANCED AUDIO INPUT
NOMINAL LEVEL:
0dBM IN HIGH GAIN
+10dBM IN LOW GAIN
J2
CR18
CR19
R84 100
R1 510
J15
W1
BAL TERM
R2 1.2K
R3 1.2K
C5 47 20V
C6 47 20V
R4 1K
R5 1K
C7 100pF
C37 100pF
C8 100pF
C65 100pF
CR1 1N914
CR2 1N914
CR3 1N914
CR4 1N914
U1B TLO74CND
U1C
R6 9.53K,1% 1/2W
R7 9.53K,1% 1/2W
R8 9.53K,1% 1/2W
R9 9.53K,1% 1/2W
C9 .1
C10 .1
C11 1600pF
R10 47K
R11 4.7K
J5 PEREEMP
W5
R48 68K
R12 150K
J11
W3
HI
LO
BAL. I/P GAIN
U1D
R13 5K
BAL. AUDIO GAIN
CW
U2A TLO74CND
C16 .1
C17 .1
R14 4.7K
R29 4.7K
J1
L1 .47
L2 .47
C1 .01
C2 47 20V
C3 .01
C4 47 20V
-12V TO BOARD
+12V TO BOARD
GND
KEY
N.C.
U3C
U3D
NOTES:
1) ALL RESISTORS 1/8W, 5% EXCEPT AS NOTED.
2) ALL CAPACITORS ARE uF UNLESS NOTED OTHERWISE.
3) ALL INDUCTORS ARE uH UNLESS NOTED OTHERWISE.
4) CR18-CR21 ARE 1.5KE12CACT-ND.
COMPOSITE IN
J3 BNC
J13 BNC
CR20
CR21
R51 100K
R50 75
COMP TERM
J12
W4
EN
DIS
C12 47 20V
C13 47 20V
C34 .47
R38 1K
R43 47K
R47 1K
R49 47K
CR9 1N914
CR10 1N914
CR11 1N914
CR12 1N914
U6B
U6A TL082CD
C32 .1
C33 .1
R15 9.53K,1% 1/2W
R16 9.53K,1% 1/2W
R25 9.53K,1% 1/2W
R26 9.53K,1% 1/2W
U2C
R17 5K
CW
R18 4.7K
R19 20K
U2B
COMP. AUDIO GAIN
R20 4.7K
U2D
.8Vpp @ +-25KHz DEVIATION (NOMINAL)
AUDIO TP1
C58 .47
R28 220
R75 10M 1/4W
U7A TL082CD
C60 .1
C63 .1
R77 100K
C59 4.7pF
R76 20K
CR5 1N5711
C61 .01
R78 1M
U7B
CR8 1N5711
C62 .01
R79 100
J10
DEVIATION O/P
J4 BNC
SUBCARRIER
J14
W2
SUBCARRIER TERM
R21 75
C66 .001
C14 .001
R22 1K
C15 100pF
C67 100pF
R23 47K
U3A TLO74CND
C19 .1
C18 .1
R27 4.7K
R24 5K
CW
SUBCARRIER AUDIO GAIN
C64 15-60pF
FREQ RESP
R80 47K
R65 15K
C46 10 35V
R66 1.2K
R64 47K
R63 47
R62 1K
C47 .1
L4 100
L6 100
CR13 MV1404
CR14 MV1404
MV1404 CR15
MV1404 CR16
C50 1.5pF
C48 .47
C49 .01
L5 10
VCO TUNE
U10 MC1648P
C42 .01
C41 .1
L3 .47
C45 .01
C44 .1
R69 2.2K
C51 100pF
CR17 MV1642
R81 1K
TP2
AFC VOLTAGE
C53 .47
C52 10 35V
R70 47K
R53 2.2K
C39 .01
R86 300
R55 220
R56 2.2K
U11A HA50231B
C54 .1
C57 .1
R57 300
C55 160pF
R58 150
R59 75
L7 10
4.5 MHZ FILTER
C56 160pF
R74 300
U11B
R82 2.2K
R83 510
R71 150
R72 150
R73 75
R60 75
J8
J7
4.5 MHZ OUTPUTS
U8 MC78L05ACP
R52 100
C35 .47
C36 .47
C24 .1
+5V
J6
50KHz REF. INPUT
C21 .1
C38 .01
C26 .01
U5 MC145152P2 PLL CHIP
Vdd
Vss
Fin
MODULUS CTRL
OSC IN
OSC OUT
RA2
RA1
RA0
R
V
LOCK DET
N9
N0
A5
A0
R36 470K
C29 .47
R32 1M
R34 4.7M 1/4W
C27 .01
R33 1M
R35 4.7M 1/4W
C28 .01
R37 470K
C30 .47
U3B
R68 1K
R67 1K
Q1 2N3904
R39 4.7K
R40 330
DS1 GREEN
R41 4.7K
R44 4.7K
CR7 1N914
Q2 2N3906
R45 2.2K
CR6 1N914
C31 10 35V
R42 300
R46 6.8K
Q3 2N3904
R85 100
DS2 RED
UNLOCK IND
J9
UNLOCK OUTPUT
R2 AND R3 WERE 15906035, 20K OHM. (PJK)
3 9087 9/9/97 LRT
J4 CENTER PIN WAS CONNECTED TO GND. (PJK)
2 8023 4/11/96 LRT
CORRECTED TEXT ON U8 AND U6A. MOVED TEXT SO IT CAN BE READABLE WHEN REDUCED. (TMY)
1 8012 3/20/96 LRT
ITS CORPORATION
REV ECN DATE APV
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MATERIAL ----
FINISH ----
TITLE SCHEMATIC - AURAL IF SYNTHESIZER BD. 4.5MHz (1265-1303)
DWN PJK 10/11/95
CHK LRT 2/26/96
REL LRT 2/26/96
DWG. NO. 1265-3303
REV 3
D
SCALE ---
SHEET 1 OF 1