

HARRIS

Broadcast Communications Division 3200 Wismann Lane, Quincy, Illinois USA 62301

**HX-1V
EXCITER
988-2328-001**

**DWG. REV. H
939-7911-051**

J. FRANK

HX-1V EXCITER/VHF SYNTHESIZER
839-7911-051 DOCUMENTATION TREE DWG.

OVERALL DIAGRAMS
839-7900-541 EXCITER/VHF SYNTHESIZER WIRING DIAGRAM
839-7900-591 EXCITER/VHF SYNTHESIZER BLOCK DIAGRAM

VIDEO STAGES
843-5285-411 VIDEO INPUT/DIFF GAIN SCHEMATIC
839-7994-080 NOTCH DIPLEXER EQUALIZER SCHEMATIC (3 SHEETS)
839-7900-490 DIFF PHASE CORRECTOR SCHEMATIC

VIS/IF STAGES
839-7900-443 MODULATOR/DELAY COMP SCHEMATIC (3 SHEETS)
839-7900-491 VSB IF AGC SCHEMATIC
839-7900-444 LINEARITY/QUAD CORRECTOR SCHEMATIC (2 SHEETS)

SYNTHESIZER AND RF STAGES
839-7900-528 FREQ SYNTHESIZER BD #1 SCHEMATIC (2 SHEETS)
839-7900-529 FREQ SYNTHESIZER BD #2 SCHEMATIC (2 SHEETS)
839-7900-503 INTERNAL FREQ STD (OPTIONAL) SCHEMATIC
839-7900-023 FINAL AMP 1W SCHEMATIC

SUPPORT AND COMMON STAGES
839-7900-475 MOTHERBOARD SCHEMATIC
839-7900-504 EXCITER POWER SUPPLY SCHEMATIC (2 SHEETS)
839-7900-502 COMMON MOD REJECT FILTER SCHEMATIC
839-7900-172 EXCITER EXTENDER BD SCHEMATIC
839-7900-027 METER/CONTROL BD SCHEMATIC (2 SHEETS)

AURAL STAGES
839-7900-479 AURAL CONVERTOR SCHEMATIC (2 SHEETS)
839-7900-492 AURAL GROUP DELAY (OPTIONAL) SCHEMATIC

NOTE: DRAWINGS ARE IN NUMERICAL ORDER IN I.B. BOOK EXCEPT FIRST TWO DRAWINGS

NOTES

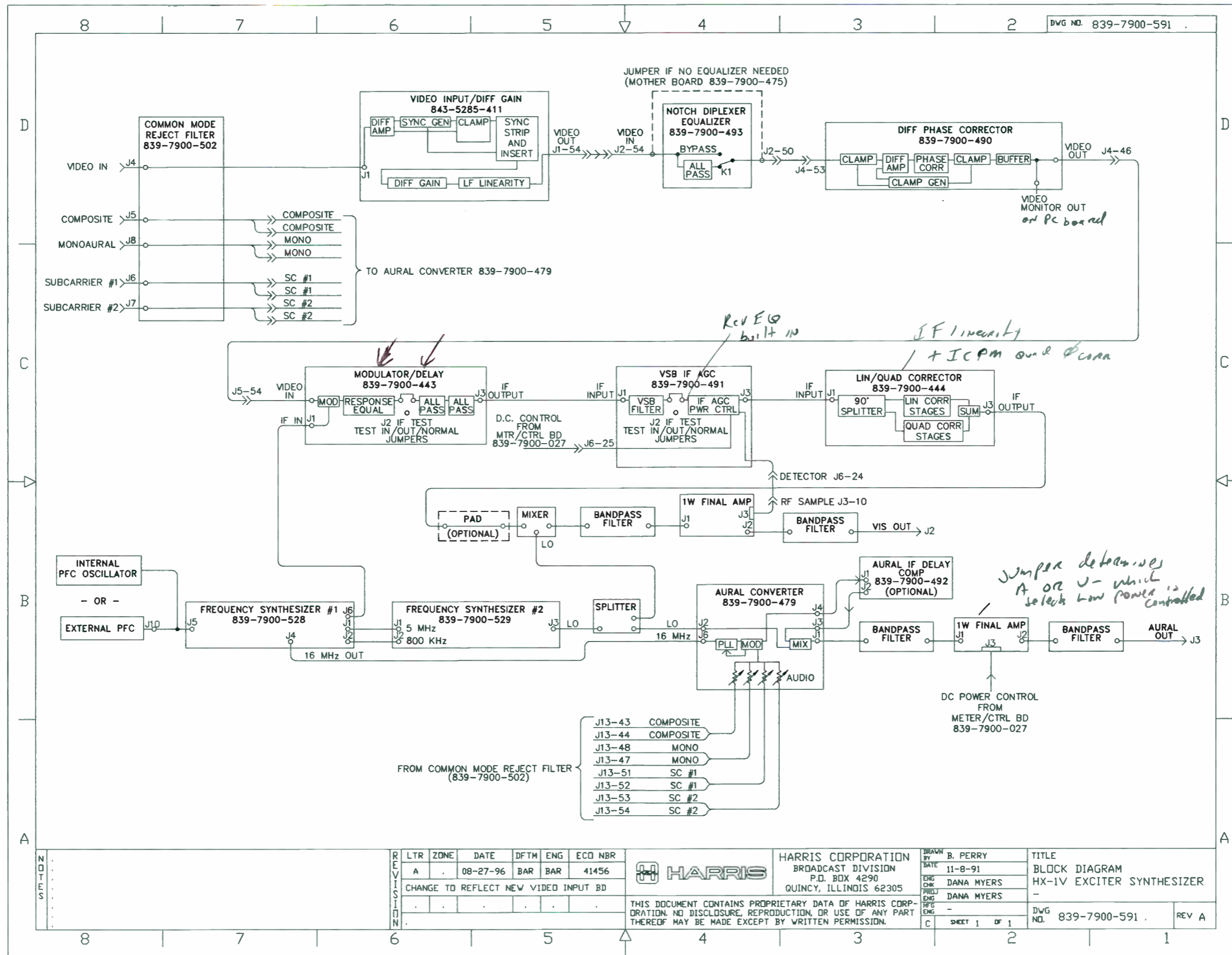
REVISION	LTR	ZONE	DATE	DFTM	ENG	ECD NBR
A	.		08-27-96	BAR	BAR	41456
NEW VIDEO INPUT BOARD						
B	.		3/00	CN	CN	45921
NEW NOTCH DIPLEXER EQ BD						

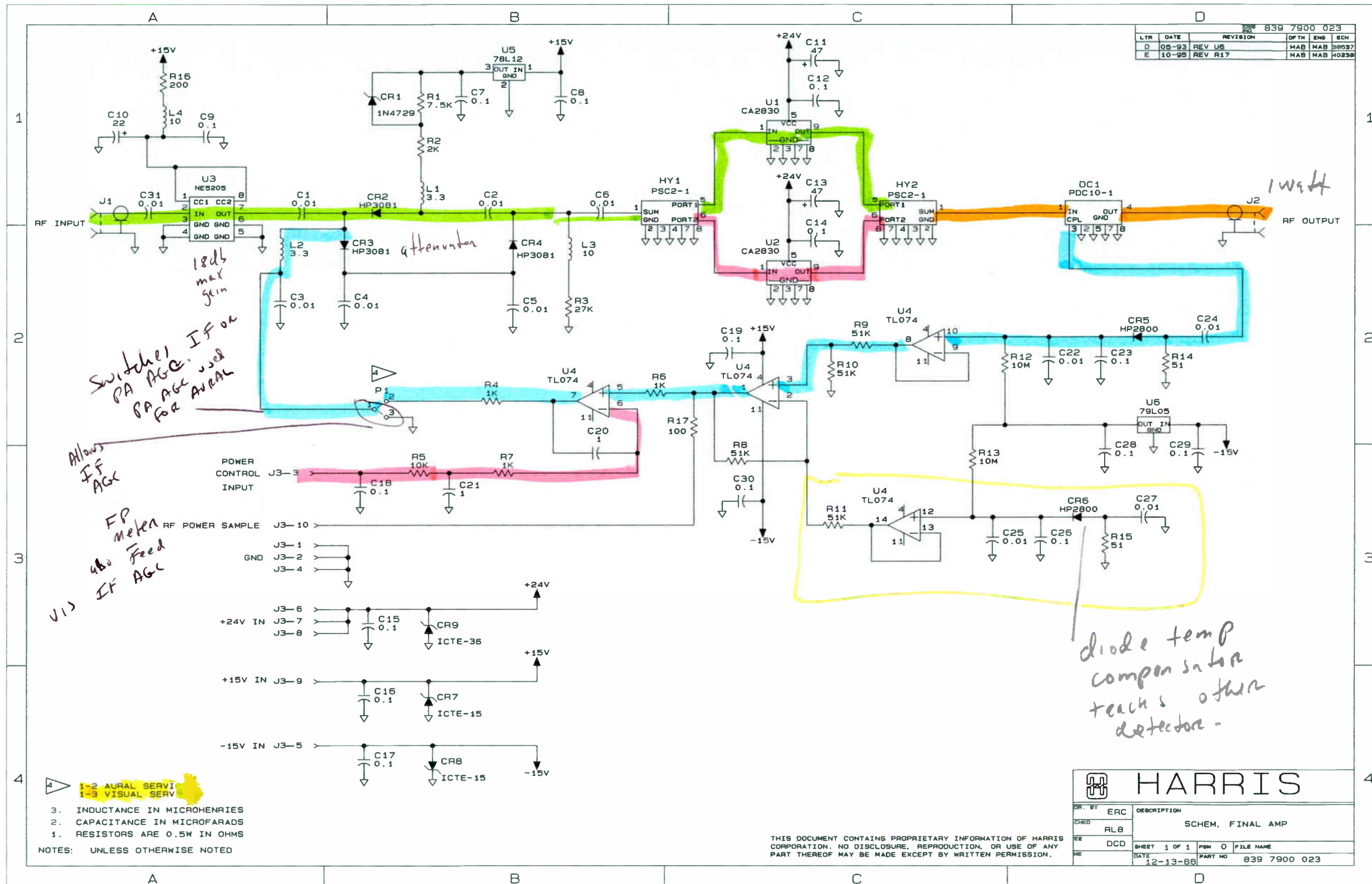


HARRIS CORPORATION
BROADCAST COMMUNICATIONS
P.O. BOX 4290
QUINCY, ILLINOIS 62305

DRAWN BY	B. PERRY
DATE	10-29-91
ENG CHK	DANA MYERS
PROJ ENG	DANA MYERS
RFG ENG	-
ENG	-
C	SHEET 1 OF 1

TITLE	DOCUMENTATION TREE
	HX-1V EXCITER SYNTHESIZER
	-
DWG NO.	839-7911-051
REV	B

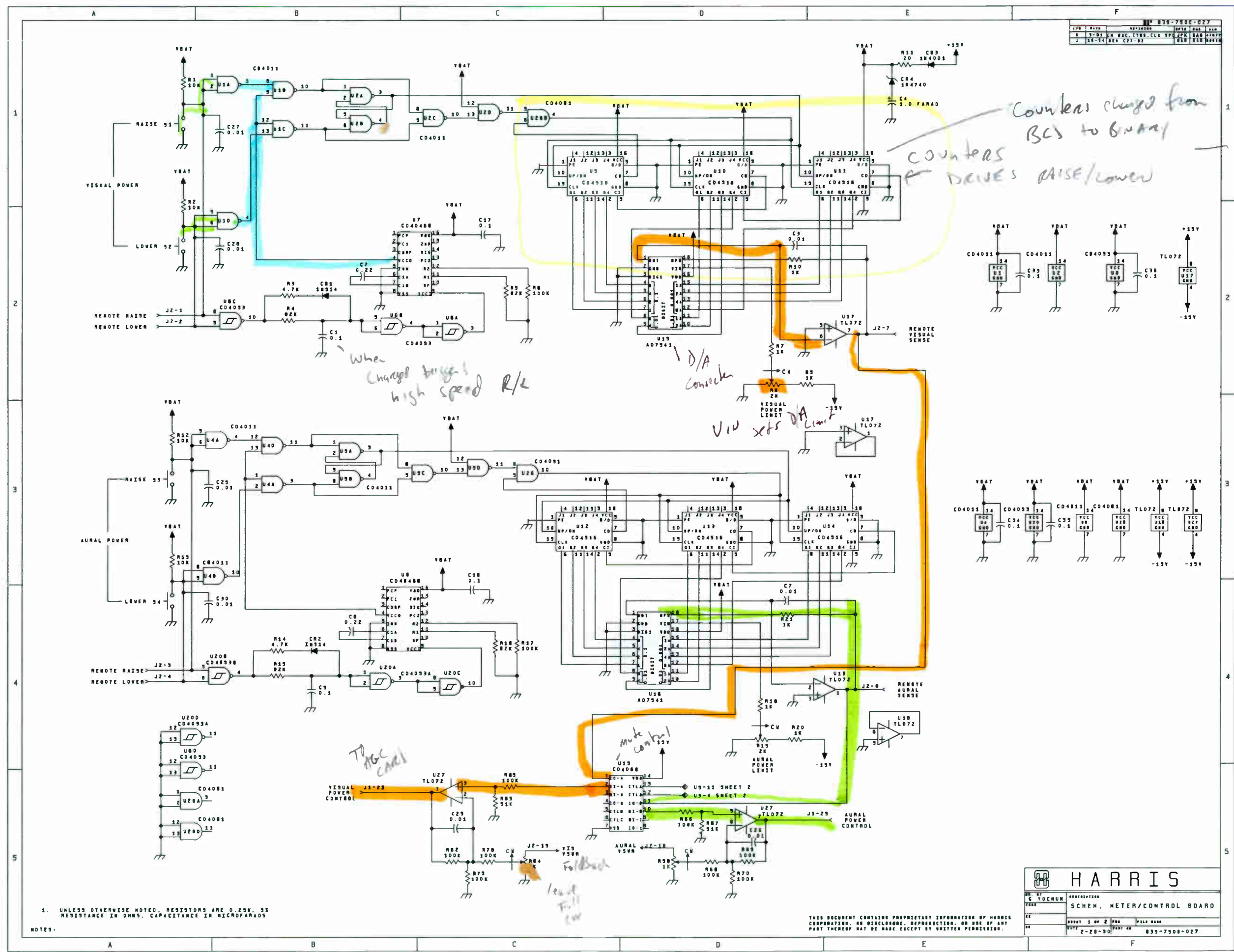




LTR	DATE	REVISION	DP	TR	ENG	ECH
D	06-93	REV U6			MAB	MAB 38937
E	10-95	REV R17			MAB	MAB 40238

HARRIS	
DR. BY ERC	DESCRIPTION SCHEM. FINAL AMP
CHKD RLB	
REV DCD	SHEET 1 OF 1
DATE 12-13-98	PART NO 839 7900 023

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REV	DATE	BY	CHKD	APP'D
K	3-53	CH	BAC	CTNS
J	12-54	REV	C27-32	

Counters changed from BCD to Binary
 Counters drives RAISE/LOWER

Mod Kit Available

When charged trigger high speed R/L

D/A Converter

Vin sets DA Limit

To R/C Cam

Foldback lead Full CW

1. UNLESS OTHERWISE NOTED, RESISTORS ARE 0.25W, 5% RESISTANCE IN OHMS, CAPACITANCE IN MICROFARADS

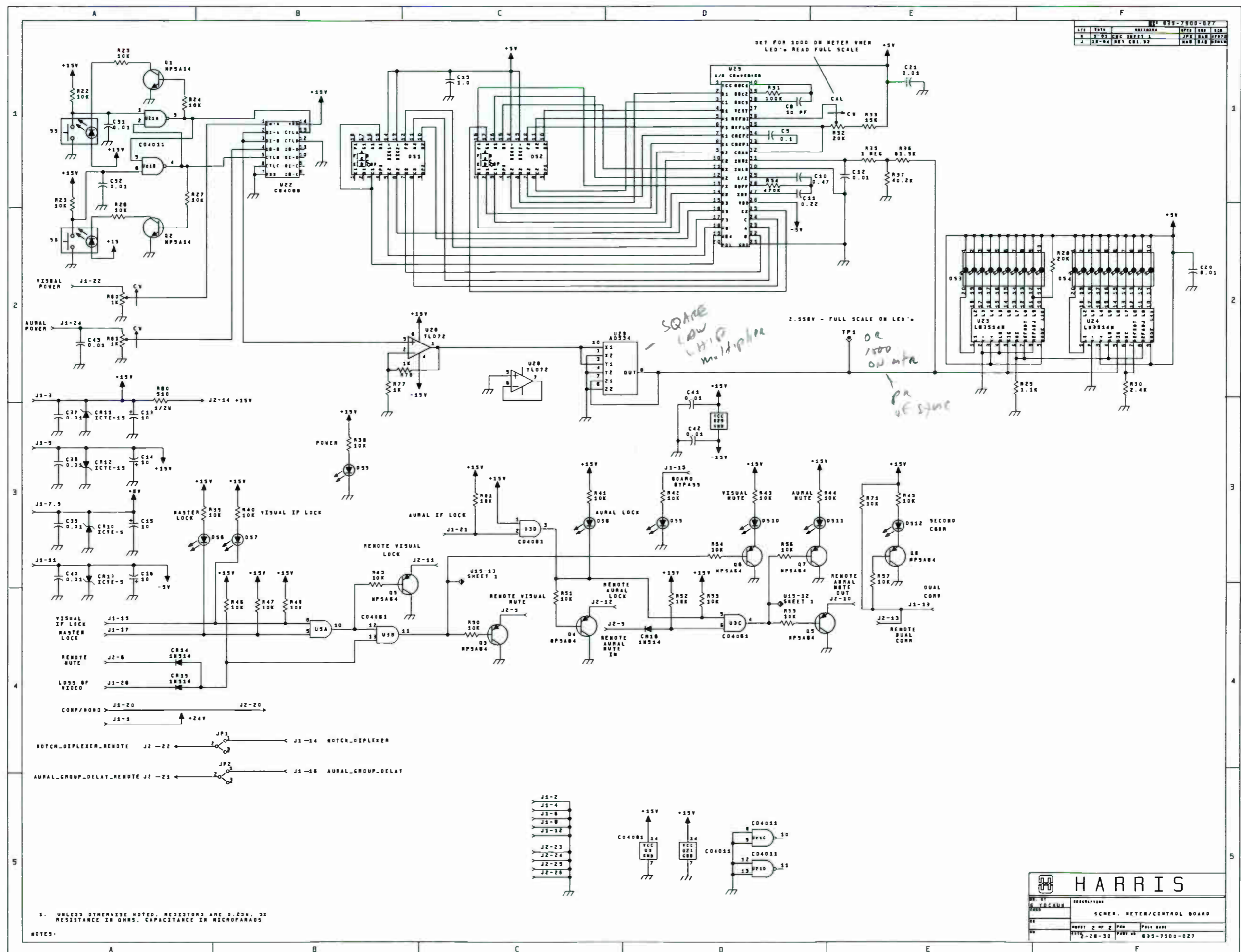
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HARRIS

SCHEM. METER/CONTROL BOARD

2-28-50 835-7508-027

REV	DATE	BY	CHKD
1	11-01	WJG	WJG
2	11-01	WJG	WJG
3	11-01	WJG	WJG



1. UNLESS OTHERWISE NOTED, RESISTORS ARE 0.25W, 5% RESISTANCE IN OHMS, CAPACITANCE IN MICROFARADS

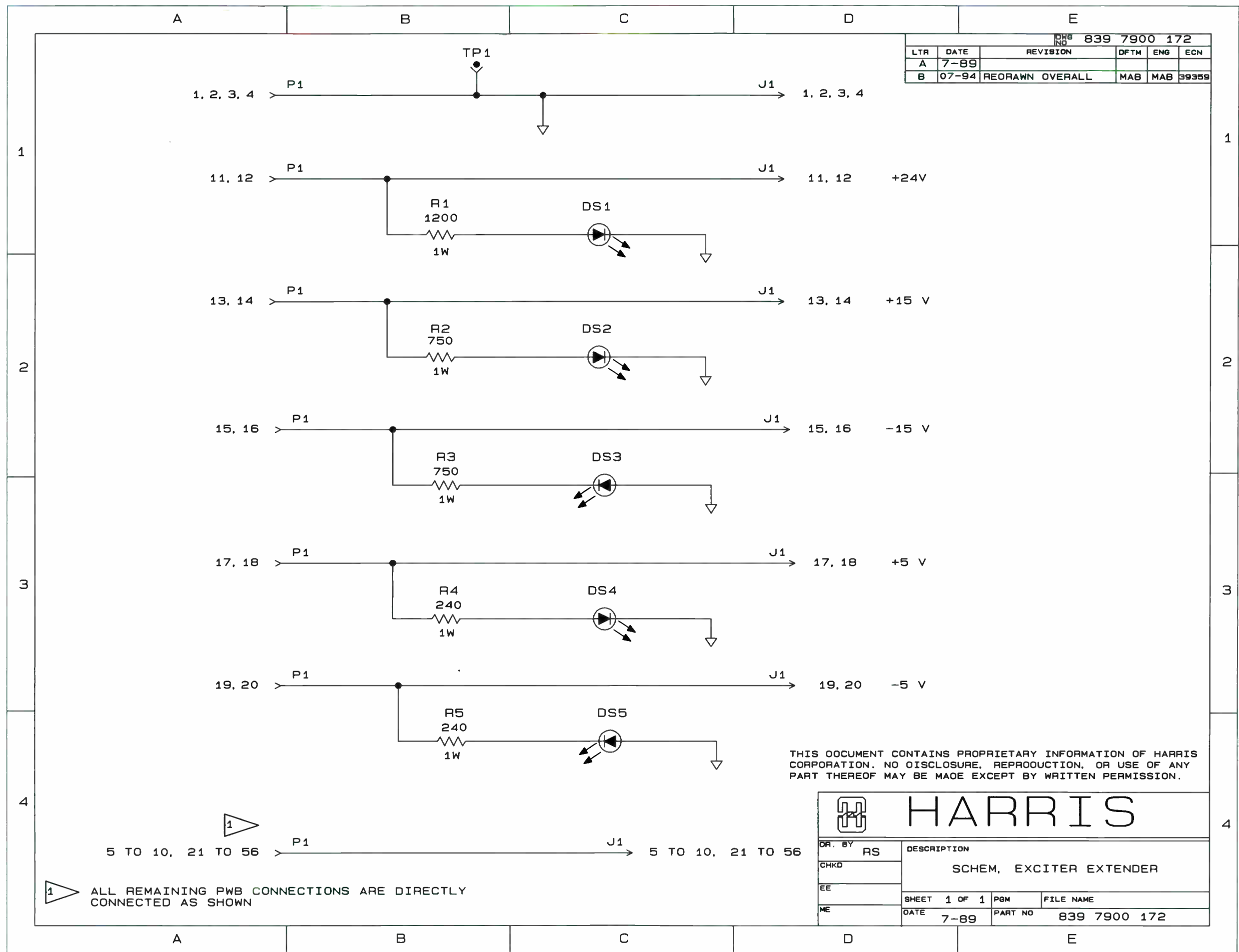
HARRIS

SCHEM. METER/CONTROL BOARD

REV 3

DATE 11-26-50

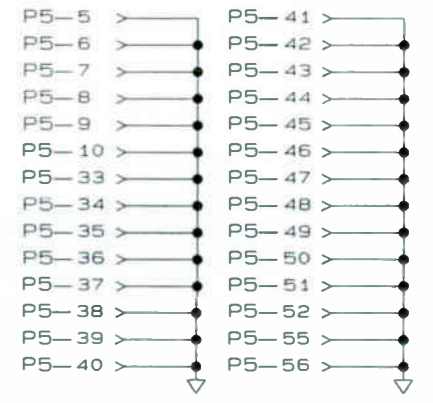
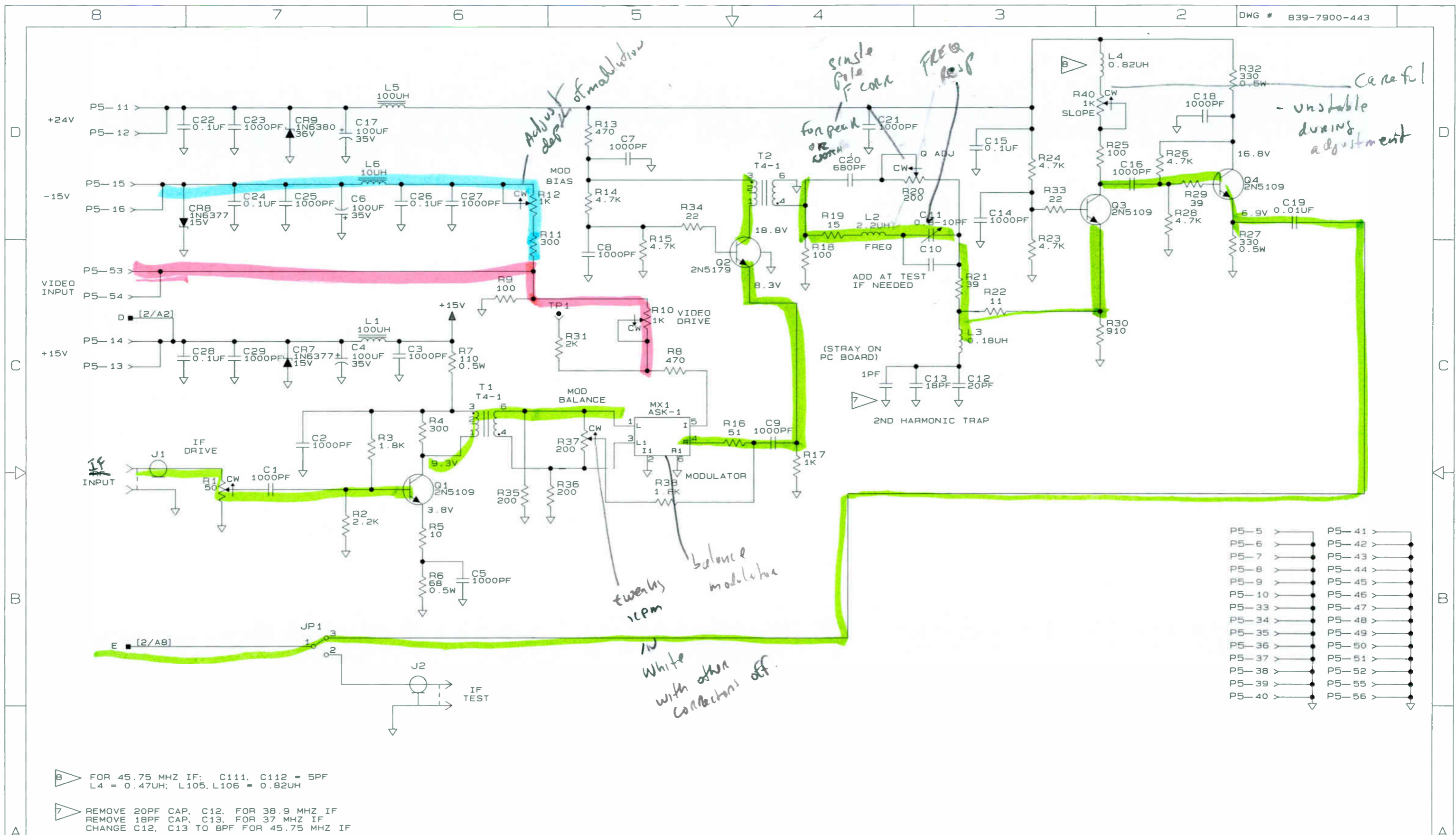
PART NO B35-7500-027



DRG NO 839 7900 172					
LTR	DATE	REVISION	DFTM	ENG	ECN
A	7-89				
B	07-94	REDRAWN OVERALL	MAB	MAB	39359

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		DESCRIPTION	
		SCHEM, EXCITER EXTENDER	
DR. BY RS	EE	SHEET 1 OF 1	PGM
CHKD	ME	DATE 7-89	FILE NAME
		PART NO	839 7900 172



▽ FOR 45.75 MHZ IF: C111, C112 = 5PF
 L4 = 0.47UH; L105, L106 = 0.82UH
 ▽ REMOVE 20PF CAP, C12, FOR 38.9 MHZ IF
 REMOVE 18PF CAP, C13, FOR 37 MHZ IF
 CHANGE C12, C13 TO 8PF FOR 45.75 MHZ IF

4. INDUCTANCE IN UH.
 3. CAPACITANCE IN UF.
 2. RESISTANCE IN OHMS.
 1. ALL RESISTORS ARE 1/2 WATT, 1%.

6. 5% RESISTORS MAY BE SUBSTITUTED FOR ANY RESISTOR UNLESS LABELED 1% ON THIS DOCUMENT.
 5. SHEET NUMBER ZONE
 (2/A1) CONTINUATION SYMBOL

REVISION	ZONE	DATE	DFTM	ENG	ECO NUM
E		3-1-00	DFD	DFD	45663
D		4-2-99	DFD	DFD	42214
					ADD NOTE 8. REVISE NOTE 7 & MX1
					REVISE MX1

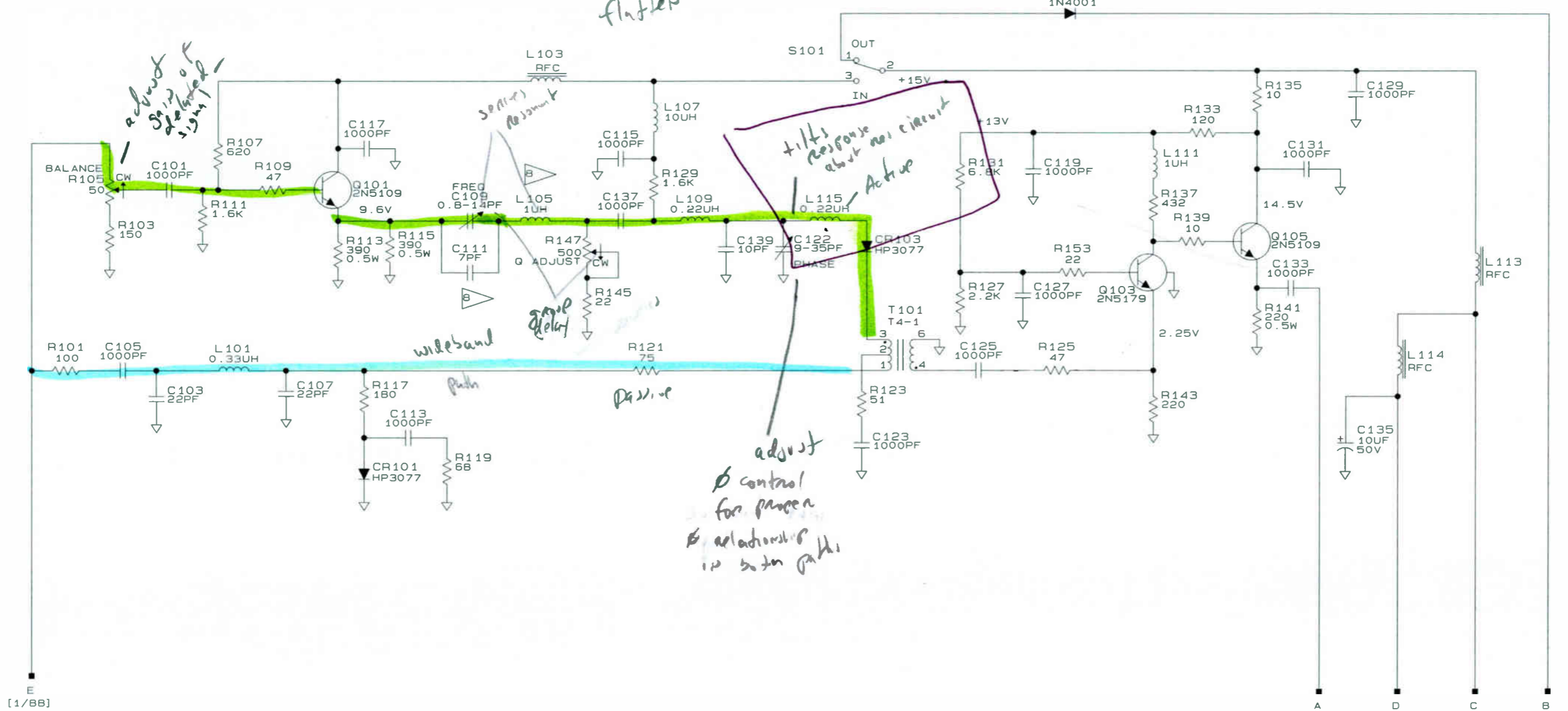
HARRIS CORPORATION
 BROADCAST SYSTEMS
 P.O. BOX 4290
 QUINCY, ILLINOIS 62305

DRAWN BY: RLB
 DATE: 1-24-89
 ENG CHK: RLM
 PROJ ENG MFG ENG

TITLE: SCHEM MOD/DELAY COMP
 DWG # 839-7900-443
 REV E

SHEET 1 OF 3

*Circuit
Used to
flatten
response*



FOR 45.75 MHZ IF: C111, C112 = 5PF
L4 = 0.47UH; L105, L106 = 0.82UH

4. INDUCTANCE IN UH.
3. CAPACITANCE IN UF.
2. RESISTANCE IN OHMS.
1. ALL RESISTORS ARE 1/2 WATT, 1%.

6. 5% RESISTORS MAY BE SUBSTITUTED FOR ANY RESISTOR UNLESS LABELED 1% ON THIS DOCUMENT.

5. SHEET NUMBER ZONE
(2/A1) CONTINUATION SYMBOL

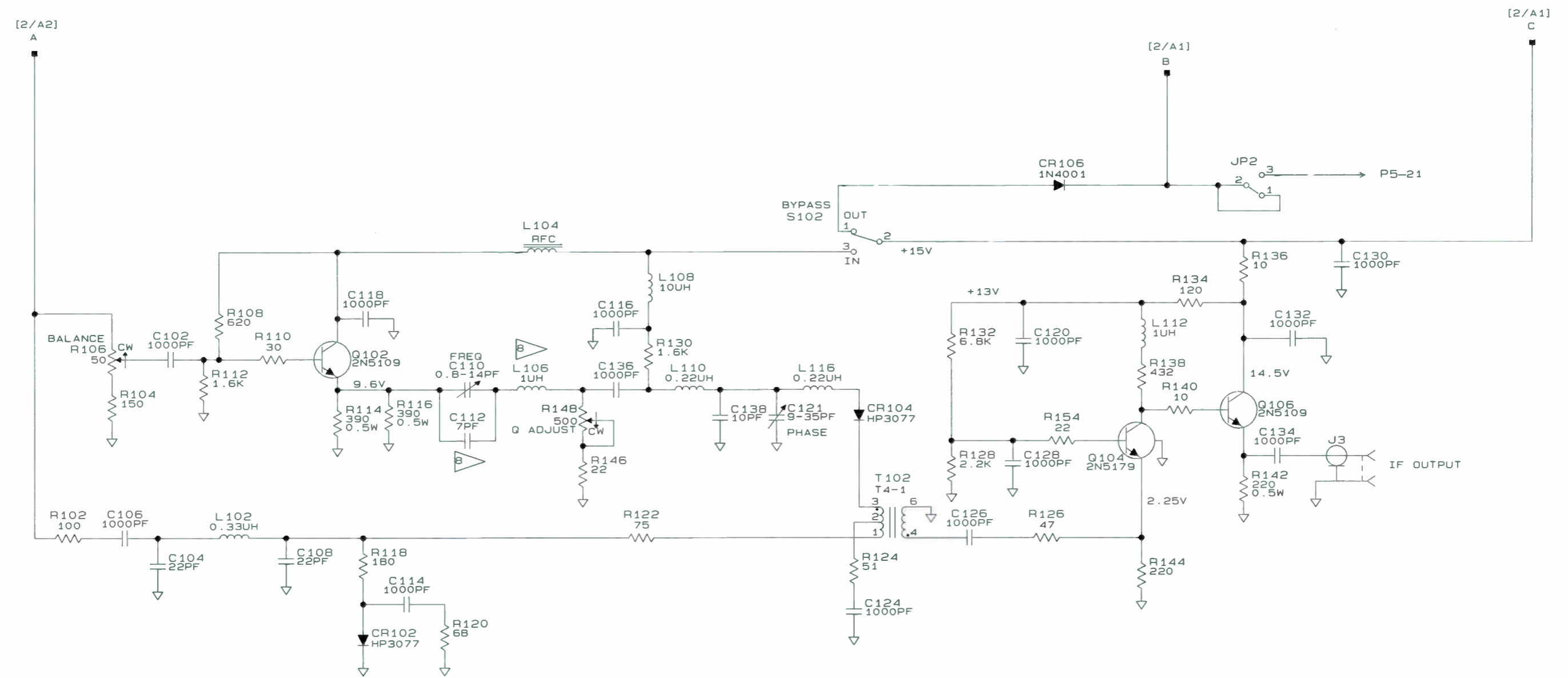
UNLESS OTHERWISE NOTED:

REVISION	LTR	ZONE	DATE	DFTM	ENG	ECO NUM
	D		4-2-99	DFD	DFD	42214
REVISE SHEET 1						
	E		3-1-00	DFD	DFD	45663
ADD NOTE B						

HARRIS
HARRIS CORPORATION
BROADCAST SYSTEMS
P.O. BOX 4290
QUINCY, ILLINOIS 62305

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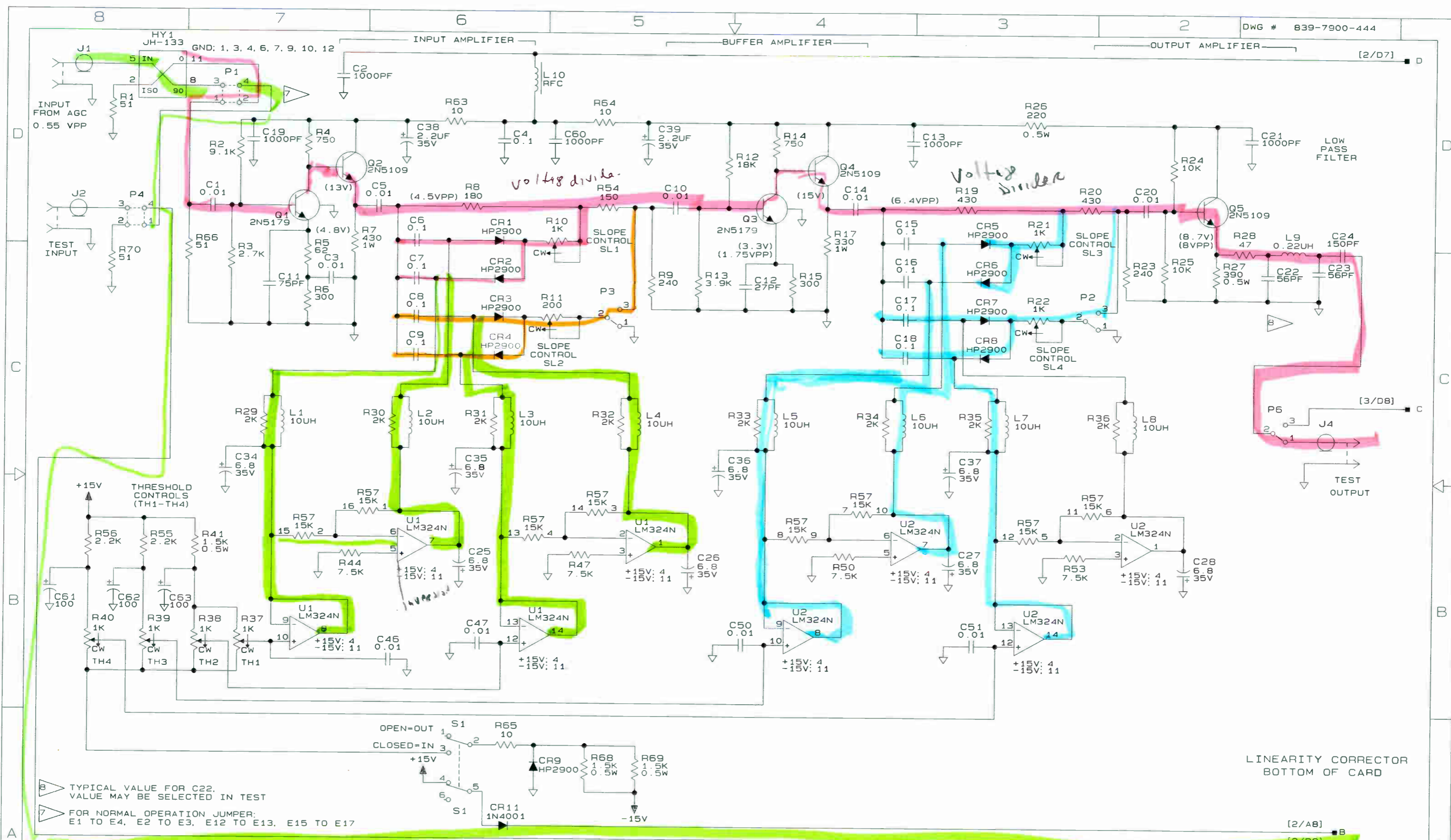
DRAWN BY	RLB	TITLE	
DATE	1-24-89	SCHEM MOD/DELAY COMP	
CHK	RLM	DWG #	B39-7900-443
PRJ		REV	E
ENG		SHEET 2 OF 3	



2nd section

FOR 45.75 MHZ IF: C111, C112 = 5PF
L4 = 0.47UH; L105, L106 = 0.82UH

NOTES	4. INDUCTANCE IN UH.	REVISION	LTR	ZONE	DATE	DFTM	ENG	ECO NUM		HARRIS CORPORATION BROADCAST SYSTEMS P.O. BOX 4290 QUINCY, ILLINOIS 62305	DRAWN BY RLB DATE 1-24-89	TITLE SCHEM MOD/DELAY COMP
	3. CAPACITANCE IN UF.		D		4-2-99	DFD	DFD	42214			ENG CHK RLM PRD J	
	2. RESISTANCE IN OHMS.		E		3-1-00	DFD	DFD	45663			ENG HFG ENG	
	1. ALL RESISTORS ARE 1/2 WATT, 1%.		REVISE SHEET 1		ADD NOTE B		SHEET 3 OF 3				DWG # 839-7900-443 REV E	



LINEARITY CORRECTOR
BOTTOM OF CARD

8 TYPICAL VALUE FOR C22.
VALUE MAY BE SELECTED IN TEST

7 FOR NORMAL OPERATION JUMPER:
E1 TO E4, E2 TO E3, E12 TO E13, E15 TO E17

- NOTES
- 4. INDUCTANCE IN UH.
 - 3. CAPACITANCE IN UF.
 - 2. RESISTANCE IN OHMS.
 - 1. ALL RESISTORS ARE 1/2 WATT, 1%.
 - 5. SHEET NUMBER ZONE
 - 6. 5% RESISTORS MAY BE SUBSTITUTED FOR ANY RESISTOR UNLESS LABELED 1% ON THIS DOCUMENT.
- UNLESS OTHERWISE NOTED:
- [2/A1] CONTINUATION SYMBOL

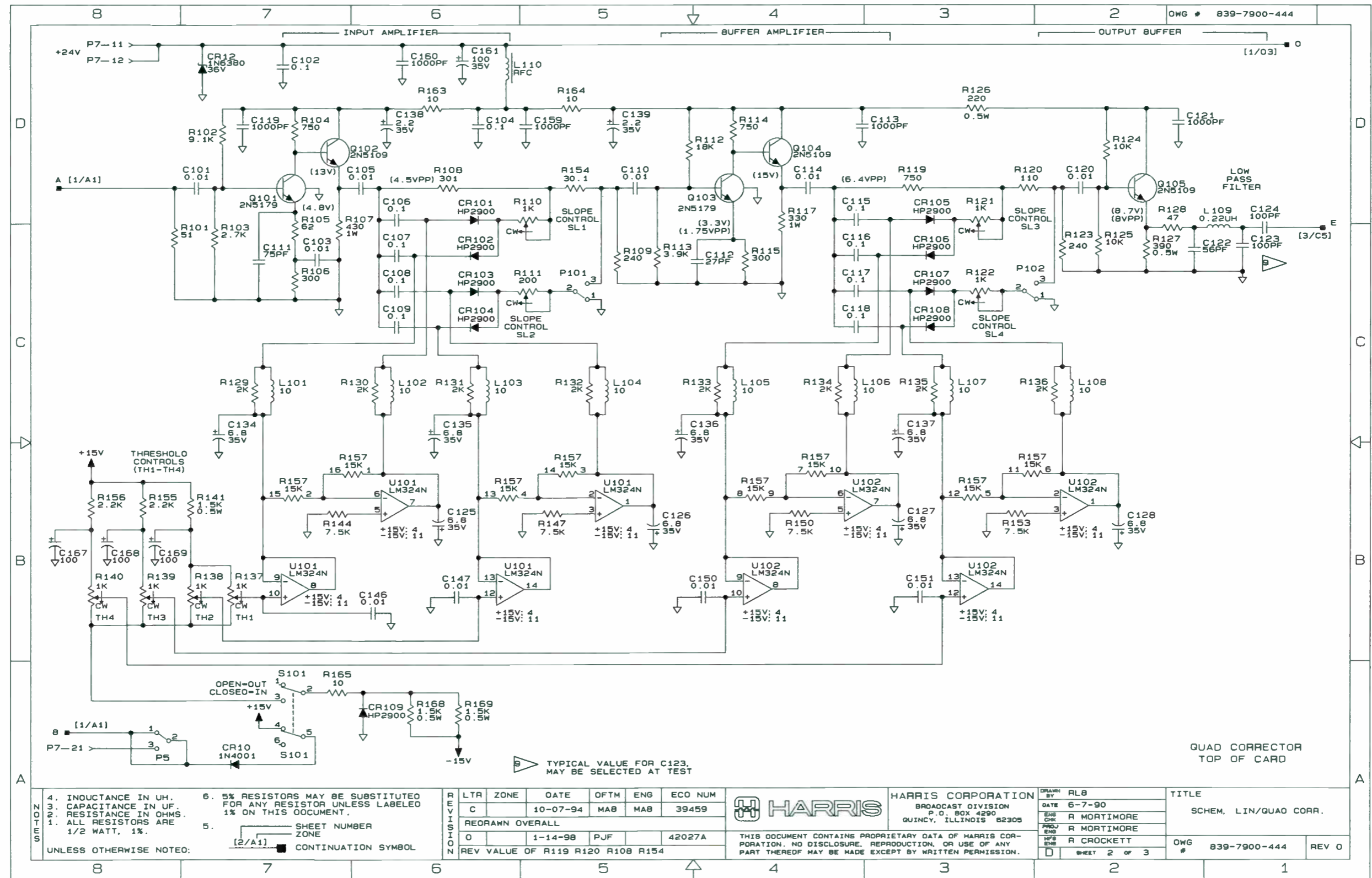
REV	DATE	BY	CHK	ECO NUM
C	10-07-94	MAB	MAB	39459
D	1-14-98	PJF		42027A

REVISION
REDAWNED OVERALL
REVISED SHT 2

HARRIS CORPORATION
BROADCAST DIVISION
P.O. BOX 4290
QUINCY, ILLINOIS 62305

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DRAWN BY	RLB	TITLE	SCHEM. LIN/QUAD CORR.
DATE	6-7-90	DWG #	839-7900-444
ENG CHK	R MORTIMORE	REV	D
PRDJ ENG	R MORTIMORE	SHEET	1 OF 3
MFG ENG	R CROCKETT		



OWG # 839-7900-444

[1/03]

[3/C5]

A [1/A1]

B [1/A1]

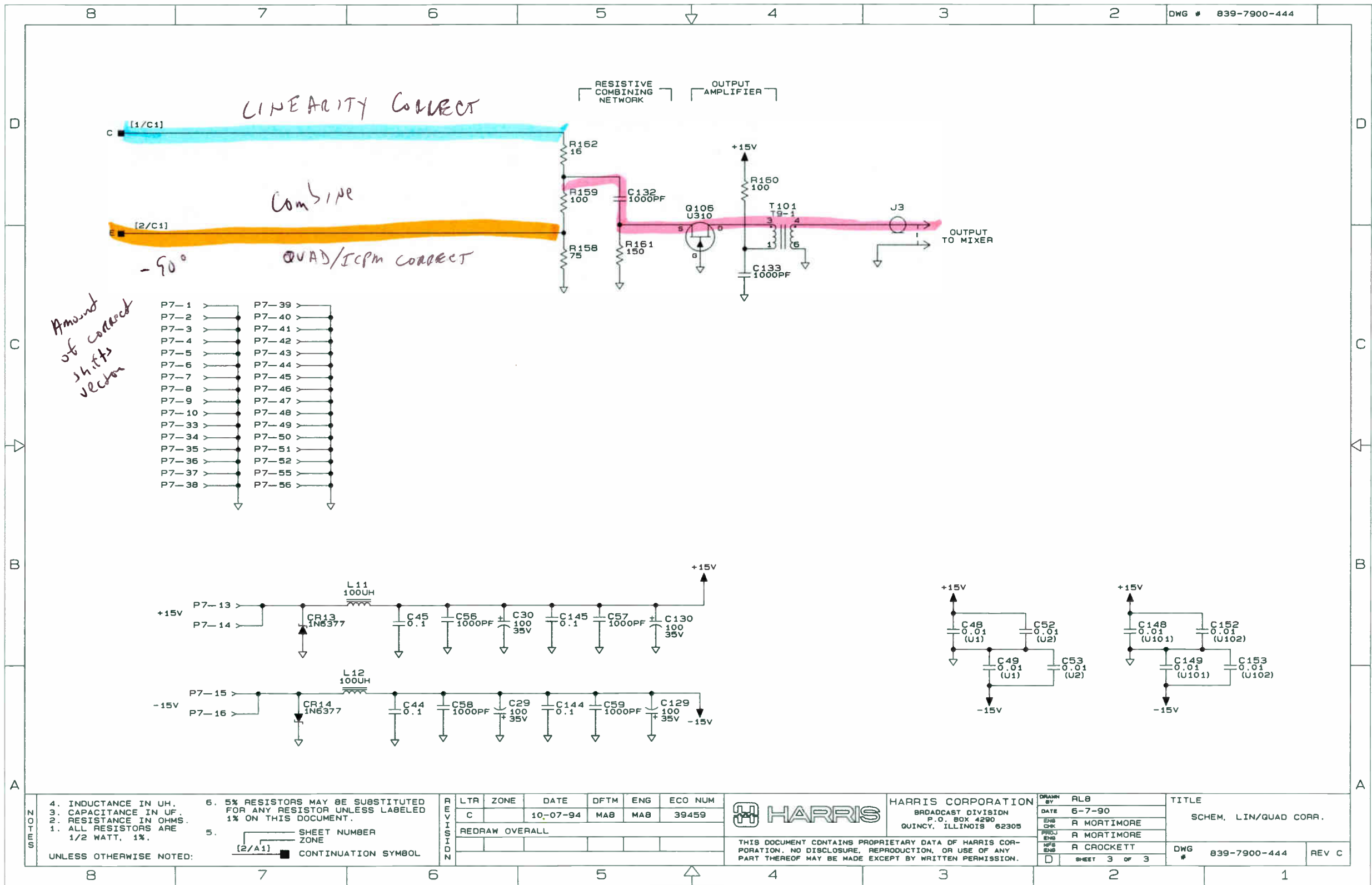
A [1/A1]

Ⓢ TYPICAL VALUE FOR C123, MAY BE SELECTED AT TEST

QUAD CORRECTOR TOP OF CARD

NOTES UNLESS OTHERWISE NOTED:	4. INDUCTANCE IN UH.	6. 5% RESISTORS MAY BE SUBSTITUTED FOR ANY RESISTOR UNLESS LABELED 1% ON THIS DOCUMENT.	LTR	ZONE	OATE	OFTM	ENG	ECO NUM	HARRIS CORPORATION BROADCAST DIVISION P. O. BOX 4290 QUINCY, ILLINOIS 62305	DRAWN BY RL8 DATE 6-7-90 ENG. CHK. R MORTIMORE PROJ. ENG. R MORTIMORE WFS. ENG. R CROCKETT	TITLE	SCHEM. LIN/QUAO CORR. OWG # 839-7900-444 REV 0
	3. CAPACITANCE IN UF.	5. SHEET NUMBER ZONE	C		10-07-94	MAB	MAB	39459		THIS DOCUMENT CONTAINS PROPRIETARY DATA OF HARRIS CORPORATION. NO DISCLOSURE, REPRODUCTION, OR USE OF ANY PART THEREOF MAY BE MADE EXCEPT BY WRITTEN PERMISSION.	SHEET 2 OF 3	
	2. RESISTANCE IN OHMS.	CONTINUATION SYMBOL	O		1-14-98	PJF		42027A				
	1. ALL RESISTORS ARE 1/2 WATT, 1%.		REV VALUE OF R119 R120 R108 R154									

Same as Lin Connector except for -90 - moves Verbe in summation



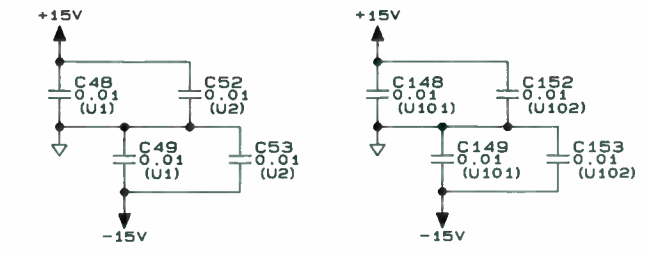
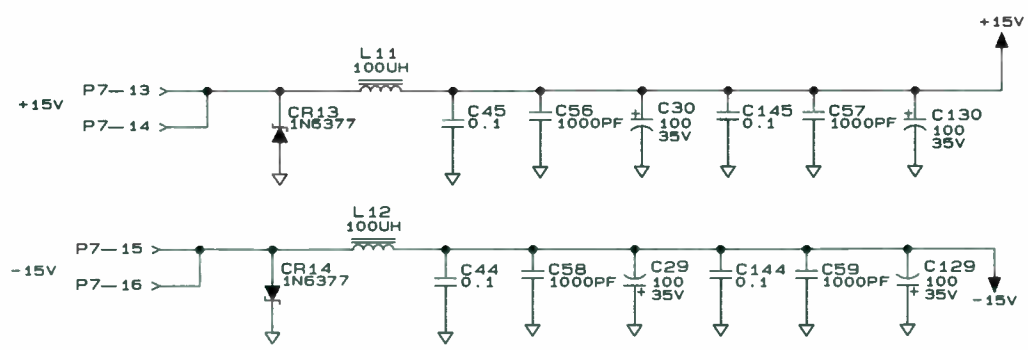
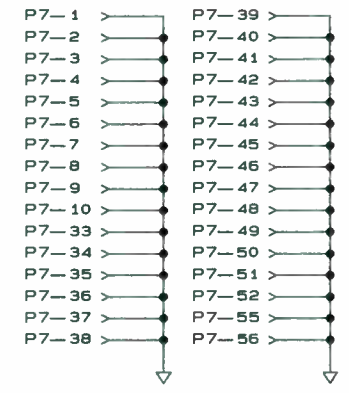
LINEARITY CORRECT

COMBINE

QUAD/ICPM CORRECT

-90°

Amount of correct shifts vector



- NOTES
- INDUCTANCE IN UH.
 - CAPACITANCE IN UF.
 - RESISTANCE IN OHMS.
 - ALL RESISTORS ARE 1/2 WATT, 1%.
 - 5% RESISTORS MAY BE SUBSTITUTED FOR ANY RESISTOR UNLESS LABELED 1% ON THIS DOCUMENT.
 - SHEET NUMBER ZONE
 - CONTINUATION SYMBOL
- UNLESS OTHERWISE NOTED: [2/A1]

REV	DESCRIPTION	LTR	ZONE	DATE	DFTM	ENG	ECO NUM
C	REDRAW OVERALL			10-07-94	MAB	MAB	39459

HARRIS

HARRIS CORPORATION
 BROADCAST DIVISION
 P.O. BOX 4290
 QUINCY, ILLINOIS 62305

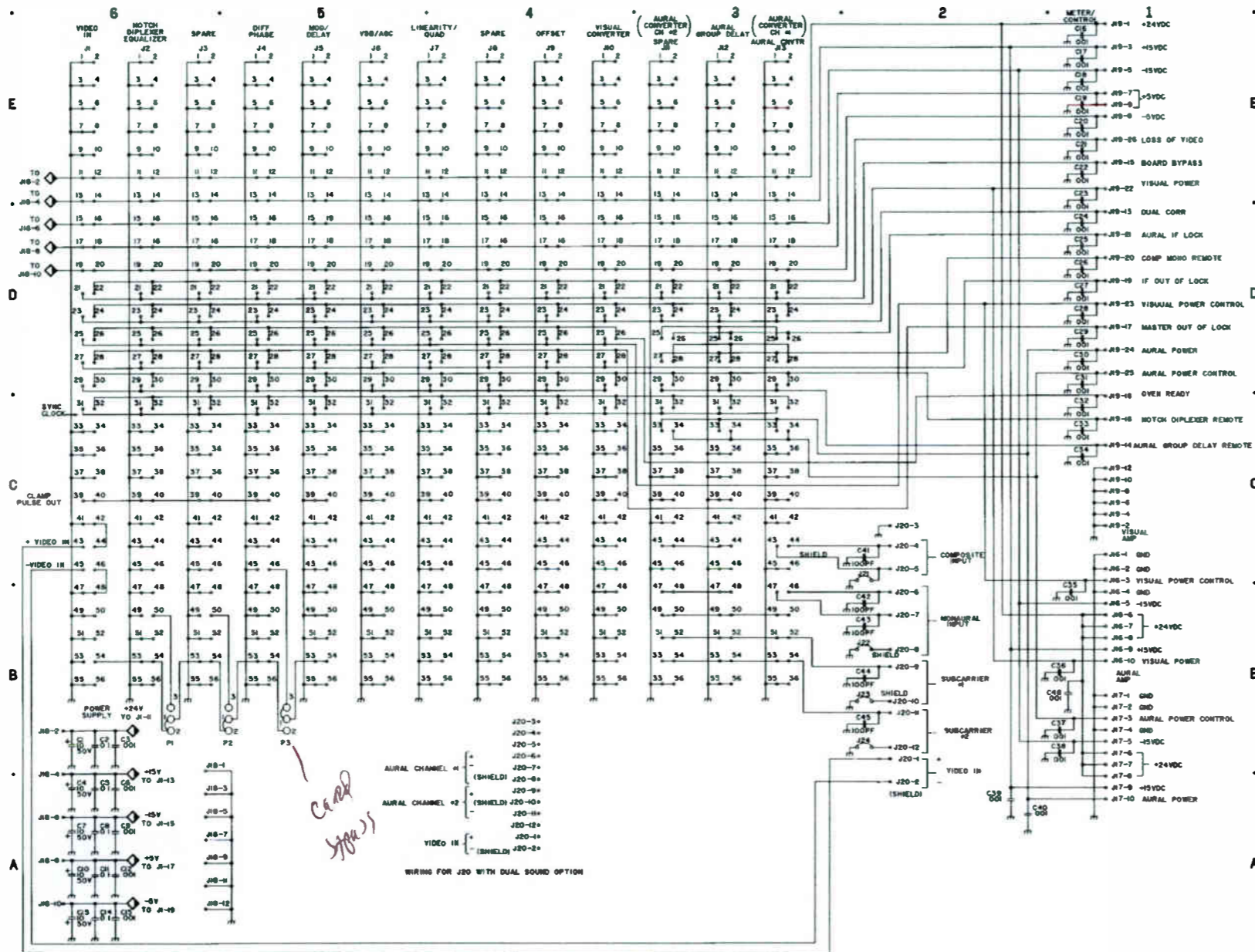
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DRAWN BY	RLB
DATE	6-7-90
ENG	A MORTIMORE
CHK	A MORTIMORE
APP	A MORTIMORE
DATE	
ENG	A CROCKETT
CHK	
APP	
DATE	

TITLE	SCHEM. LIN/QUAD CORR.
DWG #	839-7900-444
REV	C

REFERENCE DOCUMENTS	
PC. BOARD	NET LIST

DWG NO 839 7900 475		DFTM		ENG		ECN	
LTR	DATE	REVISION					
A	3/11/76	DELETED C46 AND C47	SEC	SEC	41133		

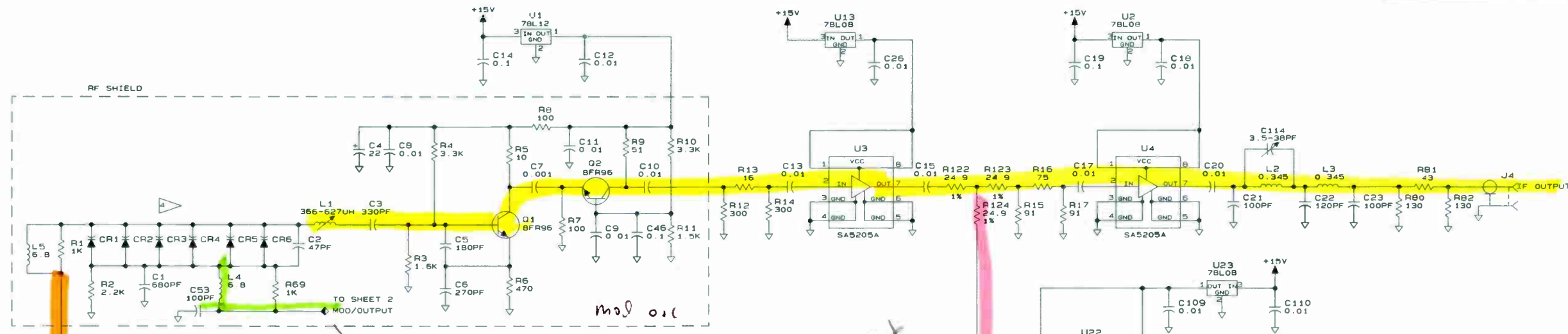


100% UNLESS NOTED DIMENSIONS IN MILLIMETERS H: .030 KH: .015 KHX: .005 ANGLES: 1° ALL DIMENSIONS UNLESS NOTED		H: .030 KH: .015 KHX: .005 ANGLES: 1° ALL DIMENSIONS UNLESS NOTED			
ALL DIM IN UNLESS NOTED THIS DOCUMENT CONTAINS PROPRIETARY DATA OF HARRIS CORPORATION. NO DISCLOSURE, REPRODUCTION, OR USE OF ANY PART THERE OF MAY BE MADE EXCEPT BY WRITTEN PERMISSION.		DR BY BEEVER 3-5-90 TITLE: SCHEM, MOTHERBOARD			
CHKD	ME	PROJ ENG	MFG	NEXT ASSY	SCALE
USED ON	FIN	DWG NO	839 7900		
		SHEET	475		

SCH.ES.E97900.475



LTN	DATE	REVISION	DFW	ENG	ECH
1	10-95	ADD C17	MAB	MAB	38038
1	03-99	REV IC'S. CHART	DFD	DFD	2795



PROGRAM DATA FOR UB (U6 - MC12019)

IF	A5	A4	A3	A2	A1	A0	RA2	RA1	RA0	N9	N8	N7	N6	N5	N4	N3	N2	N1	N0
32.5 MHZ	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1	0
33.4 MHZ	0	0	1	1	0	0	0	0	1	0	1	0	0	0	0	1	0	1	1

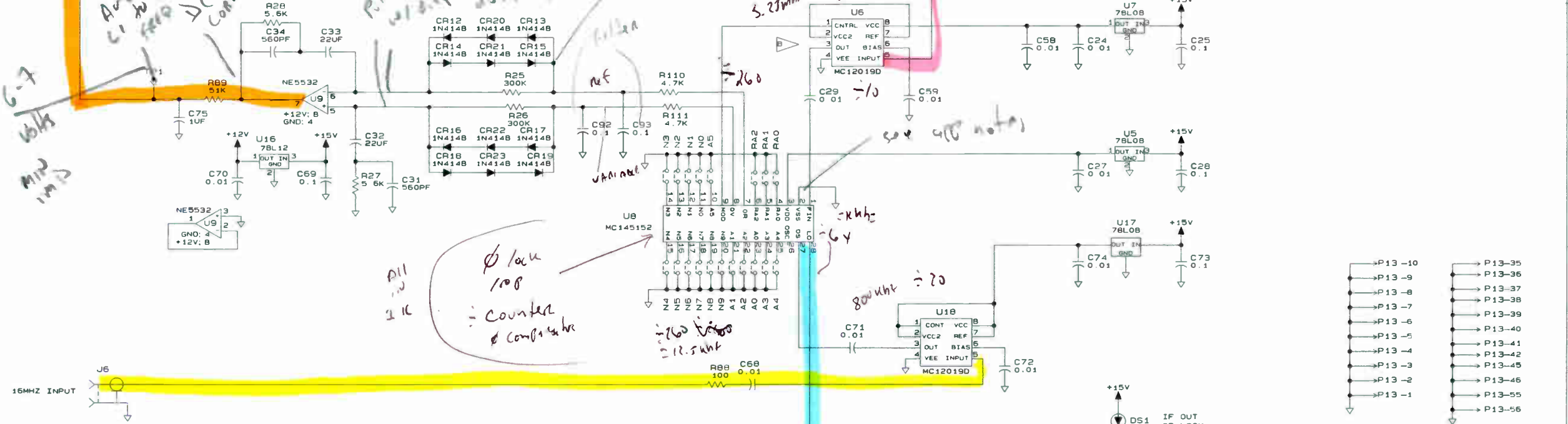
NOTE: WHEN U6=MC12019D
UB PIN 7 AND B MUST
BE JUMPED TOGETHER
0=JUMPER IN
1=JUMPER OUT

Adjust C1 to Control
Keep Vc Connection Voltage

6-7
100k
100k

Also trim with different data codes

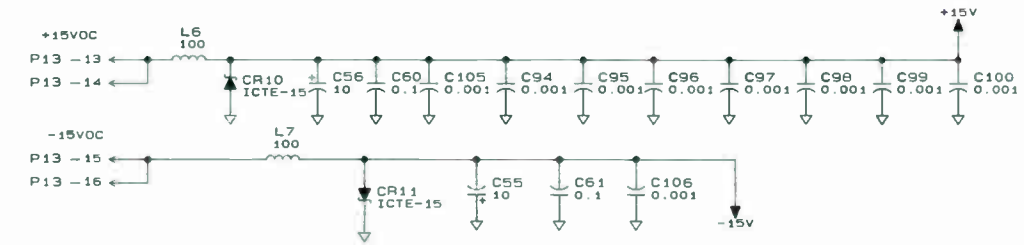
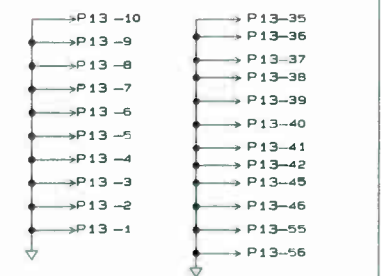
switches out 225 for each
Dual models
pre scaled



All in IC
100
= Counter
& Comparator

260 kHz
12.5 kHz

see 400 notes



CR1, CR2, CR3, CR4, CR5, CR6 ARE KV3901

3 INDUCTANCE IN HENRIES
2 CAPACITANCE IN MICROFARADS
1 RESISTORS ARE IN OHMS, 0.5W 5%
NOTE: UNLESS OTHERWISE NOTED ALL

PROGRAM DATA FOR UB (U6 - SP8799)

IF	A5	A4	A3	A2	A1	A0	RA2	RA1	RA0	N9	N8	N7	N6	N5	N4	N3	N2	N1	N0
32.5 MHZ	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	0
33.4 MHZ	0	0	0	0	1	0	0	0	1	0	1	0	0	0	0	1	0	1	1

0=JUMPER IN
1=JUMPER OUT

HARRIS

DR BY: JLB DESCRIPTION: SCHEM. AURAL CONVERTER

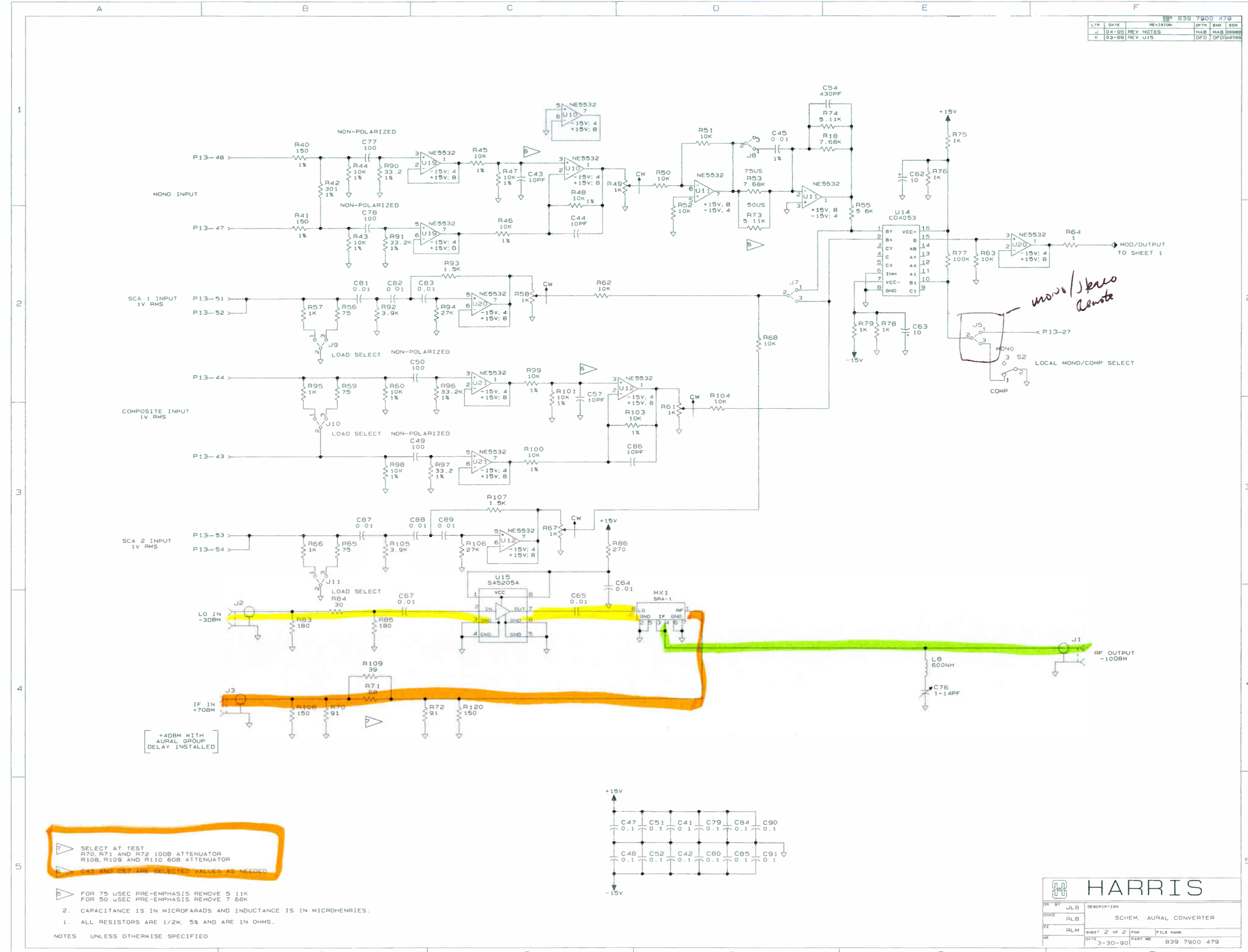
CHKD: RLB

DATE: 3-20-90 PART NO: 839 7900 479

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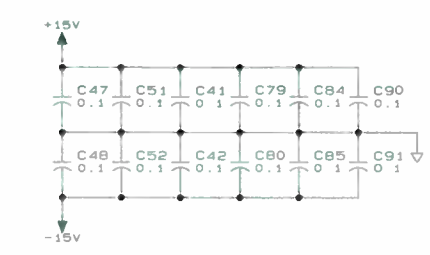
REV	DATE	BY	CHKD	APP'D
1	04-99	REV. NOTES	MLB	MLB
2	03-99	REV. U15	DFD	DFD



SELECT AT TEST
 R70, R71 AND R72 100Ω ATTENUATOR
 R108, R109 AND R110 50Ω ATTENUATOR
 C43 AND C67 ARE SELECTED VALUES AS NEEDED

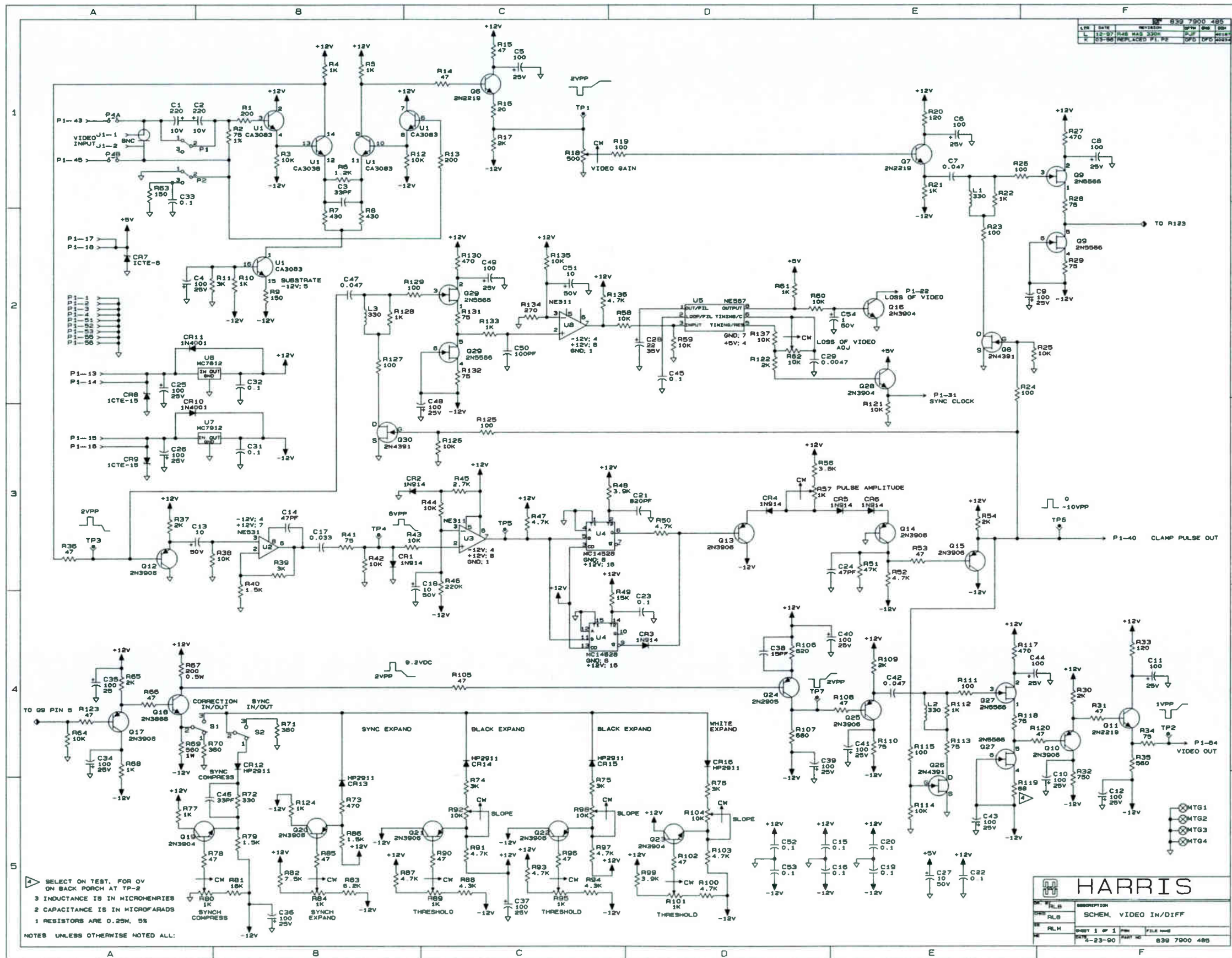
FOR 75 USEC PRE-EMPHASIS REMOVE 5.11K
 FOR 50 USEC PRE-EMPHASIS REMOVE 7.68K
 2. CAPACITANCE IS IN MICROFARADS AND INDUCTANCE IS IN MICROHENRIES.
 1. ALL RESISTORS ARE 1/2W, 5% AND ARE IN OHMS.

NOTES UNLESS OTHERWISE SPECIFIED



		SCHEM. AURAL CONVERTER	
		SHEET 2 OF 2	FILE NAME
DATE	3-30-90	PART NO	839 7900 479





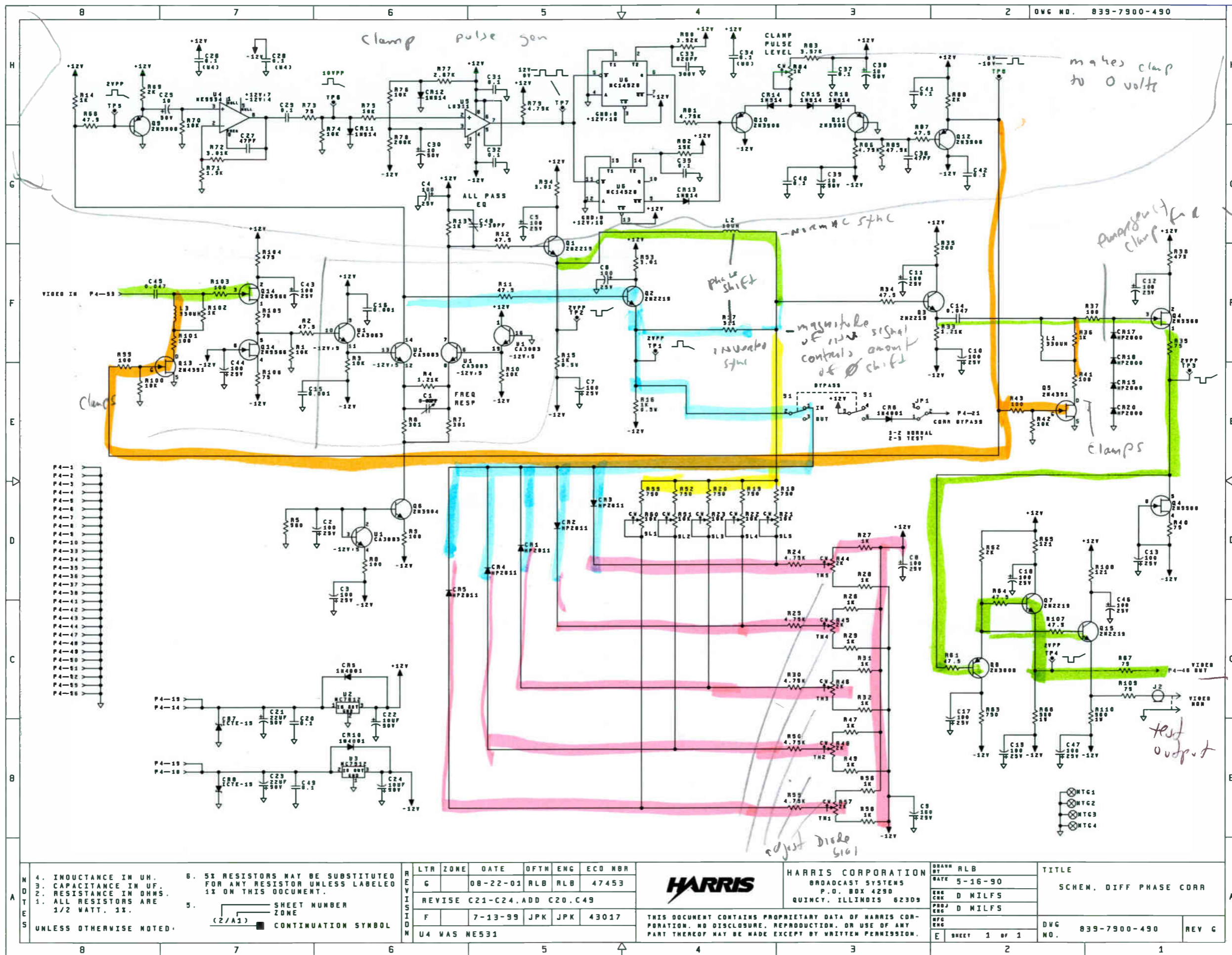
SELECT ON TEST, FOR OV ON BACK PORCH AT TP-2
 3 INDUCTANCE IS IN MICROHENRIES
 2 CAPACITANCE IS IN MICROFARADS
 1 RESISTORS ARE 0.25W, 5%

NOTES UNLESS OTHERWISE NOTED ALL:

HARRIS

FILE NO.	DESCRIPTION
RLB	SCHEM, VIDEO IN/DIFF
RLM	SHEET 1 OF 1
DATE	4-23-90
PART NO.	839 7900 485





4. INDUCTANCE IN UH.
 3. CAPACITANCE IN UF.
 2. RESISTANCE IN OHMS.
 1. ALL RESISTORS ARE 1/2 WATT, 1%.

5. 5% RESISTORS MAY BE SUBSTITUTED FOR ANY RESISTOR UNLESS LABELED 1% ON THIS DOCUMENT.
 SHEET NUMBER (2/A1)
 CONTINUATION SYMBOL

REV	DATE	ENG	ECO	NBR
G	08-22-01	RLB	RLB	47453
F	7-13-99	JPK	JPK	43017

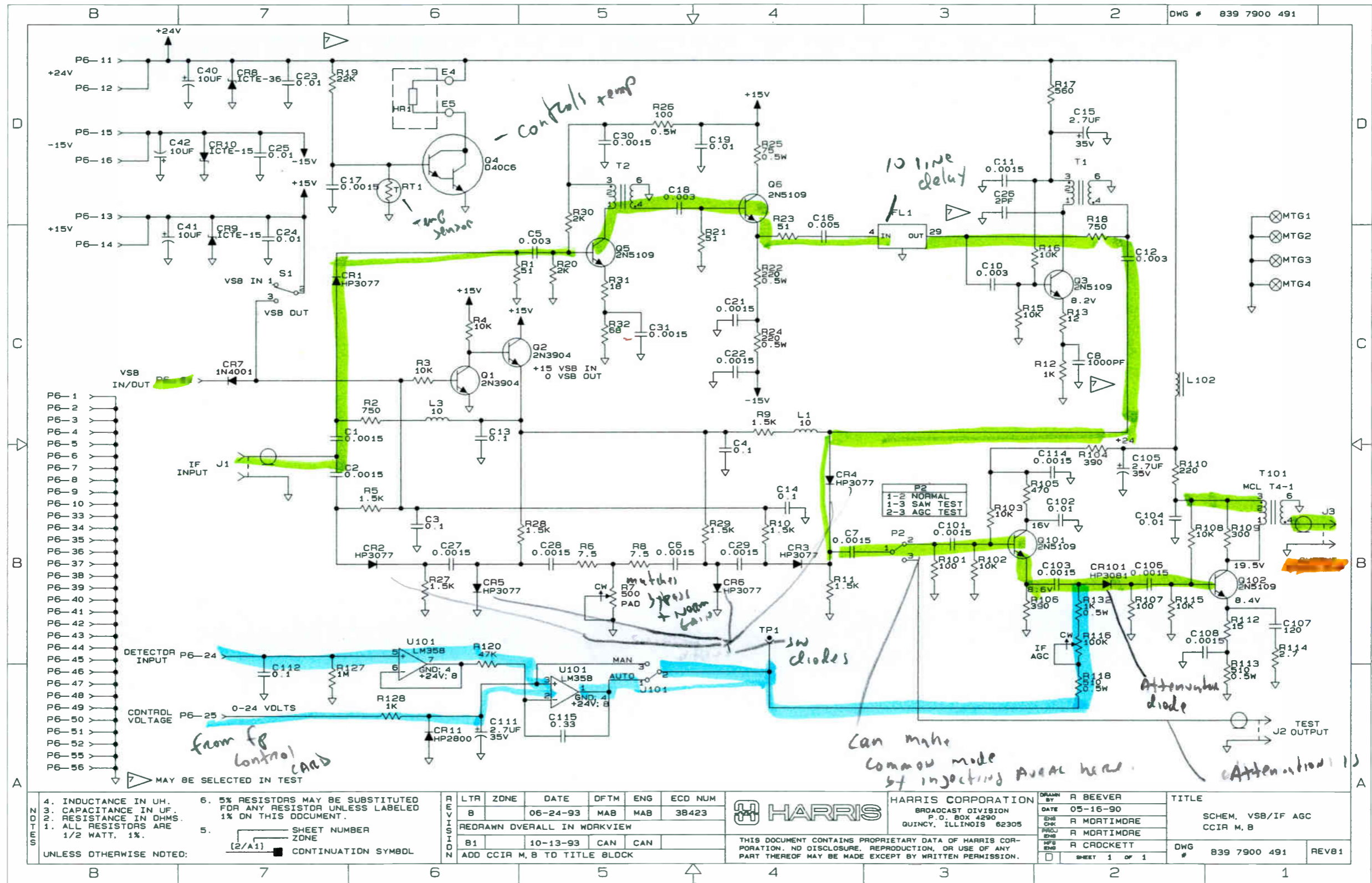
U4 WAS NE531

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 HARRIS CORPORATION
 BROADCAST SYSTEMS
 P.O. BOX 4290
 QUINCY, ILLINOIS 62309

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DRAWN BY: RLB
 DATE: 5-16-90
 CHK: D MILFS
 PROJ: D MILFS
 SHEET: 1 OF 1

TITLE: SCHEM. DIFF PHASE CORR
 DWG NO.: 839-7900-490
 REV: C



4. INDUCTANCE IN UH.
 3. CAPACITANCE IN UF.
 2. RESISTANCE IN OHMS.
 1. ALL RESISTORS ARE 1/2 WATT, 1%.

6. 5% RESISTORS MAY BE SUBSTITUTED FOR ANY RESISTOR UNLESS LABELED 1% ON THIS DOCUMENT.
 5. SHEET NUMBER ZONE
 [2/A1] CONTINUATION SYMBOL

REV	DATE	DFTM	ENG	ECD NUM
B	06-24-93	MAB	MAB	38423
REDRAWN OVERALL IN WORKVIEW				
B1	10-13-93	CAN	CAN	
ADD CCIR M, B TO TITLE BLOCK				

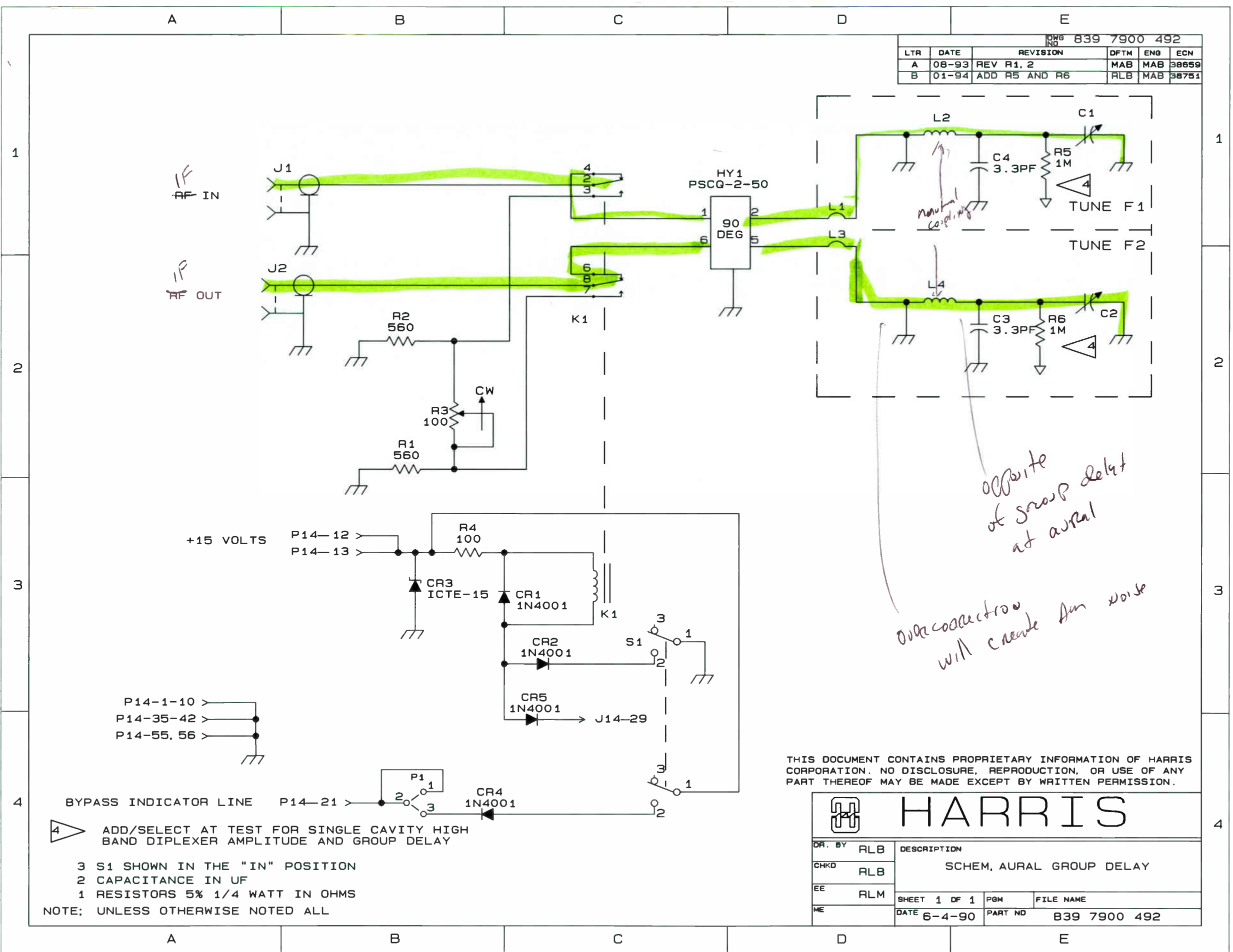
HARRIS CORPORATION
 BROADCAST DIVISION
 P. O. BOX 4290
 QUINCY, ILLINOIS 62305

DESIGNED BY: R BEEVER
 DATE: 05-16-90
 CHECKED BY: R MORTIMORE
 DRAWN BY: R MORTIMORE
 DATE: 05-16-90
 INSP BY: R CROCKETT

TITLE: SCHEM. VSB/IF AGC
 CCIR M, B
 DWG # 839 7900 491
 REV 81

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LTR		DATE	REVISION	DFTM	ENG	ECN
A		08-93	REV R1, 2	MAB	MAB	38659
B		01-94	ADD R5 AND R6	RLB	MAB	38751



opposite of group delay at aural

overcoupling will create Am noise

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HARRIS

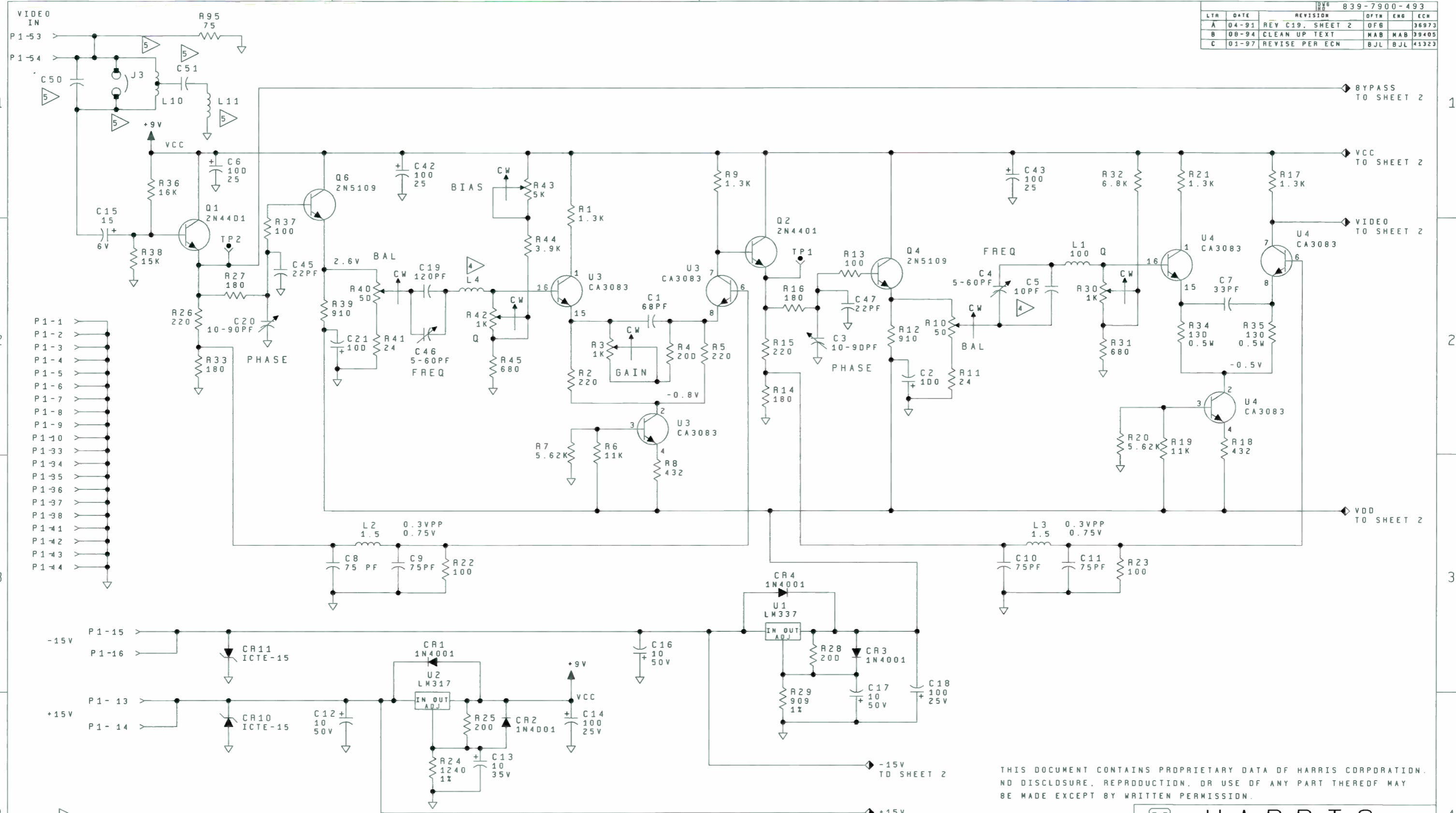
DR. BY	RLB	DESCRIPTION			
CHKD	RLB	SCHEM, AURAL GROUP DELAY			
EE	RLM	SHEET 1 OF 1	PGM	FILE NAME	
ME		DATE 6-4-90	PART NO	B39 7900 492	

ADD/SELECT AT TEST FOR SINGLE CAVITY HIGH BAND DIPLEXER AMPLITUDE AND GROUP DELAY

- 3 S1 SHOWN IN THE "IN" POSITION
 - 2 CAPACITANCE IN UF
 - 1 RESISTORS 5% 1/4 WATT IN OHMS
- NOTE: UNLESS OTHERWISE NOTED ALL



REV 839-7900-493					
LTR	DATE	REVISION	DFW	ENG	ECN
A	04-91	REV C19, SHEET 2	DFG		36973
B	08-94	CLEAN UP TEXT	MAB	MAB	39405
C	01-97	REVISE PER ECN	BJL	BJL	41323



- P1-1
- P1-2
- P1-3
- P1-4
- P1-5
- P1-6
- P1-7
- P1-8
- P1-9
- P1-10
- P1-33
- P1-34
- P1-35
- P1-36
- P1-37
- P1-38
- P1-41
- P1-42
- P1-43
- P1-44

4 VALUES SELECTED AT FINAL TEST

3 INDUCTANCE IS MICRO-HENRYS

2 CAPACITANCE IN MICRO-FARADS

1 RESISTORS ARE 1/4 WATT 5%

NOTES: UNLESS OTHERWISE NOTED ALL

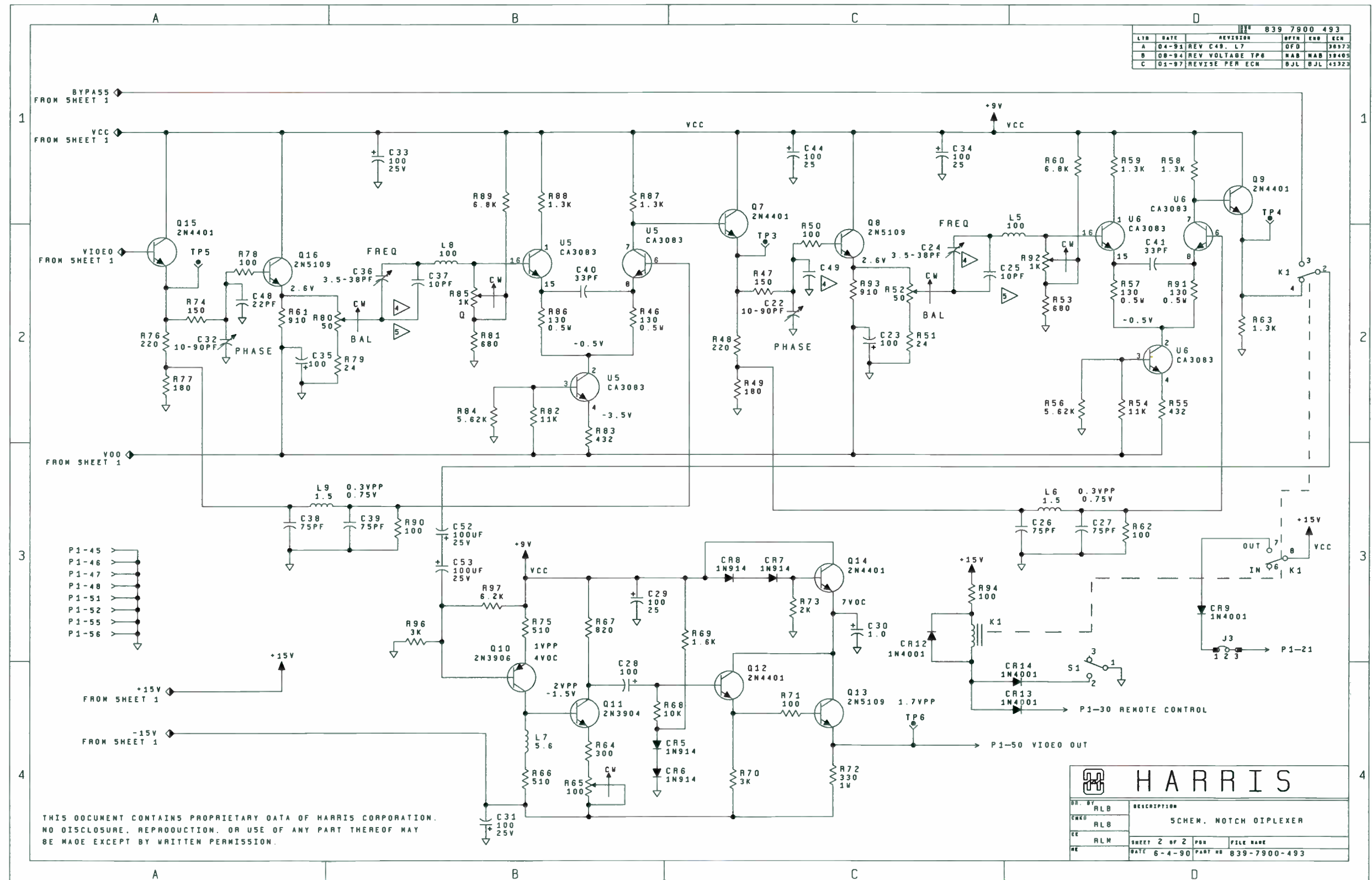
5 FOR STANDARD NOTCH DIPLEXER INSTALL J3 (CCIR COMPONENTS NOT USED)
FOR M DIPLEXER REMOVE J3 AND INSTALL CCIR COMPONENTS C50, C51, L10, L11, C25, C37
AS REQUIRED PER SYSTEM.

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DR. BY	RLB	DESCRIPTION	
CHKD	RLB	SCHEM. NOTCH DIPLEXER	
EE	RLM	SHEET 1 OF 2	PBN FILE NAME
ME		DATE 6-4-90	PART NO 839-7900-493

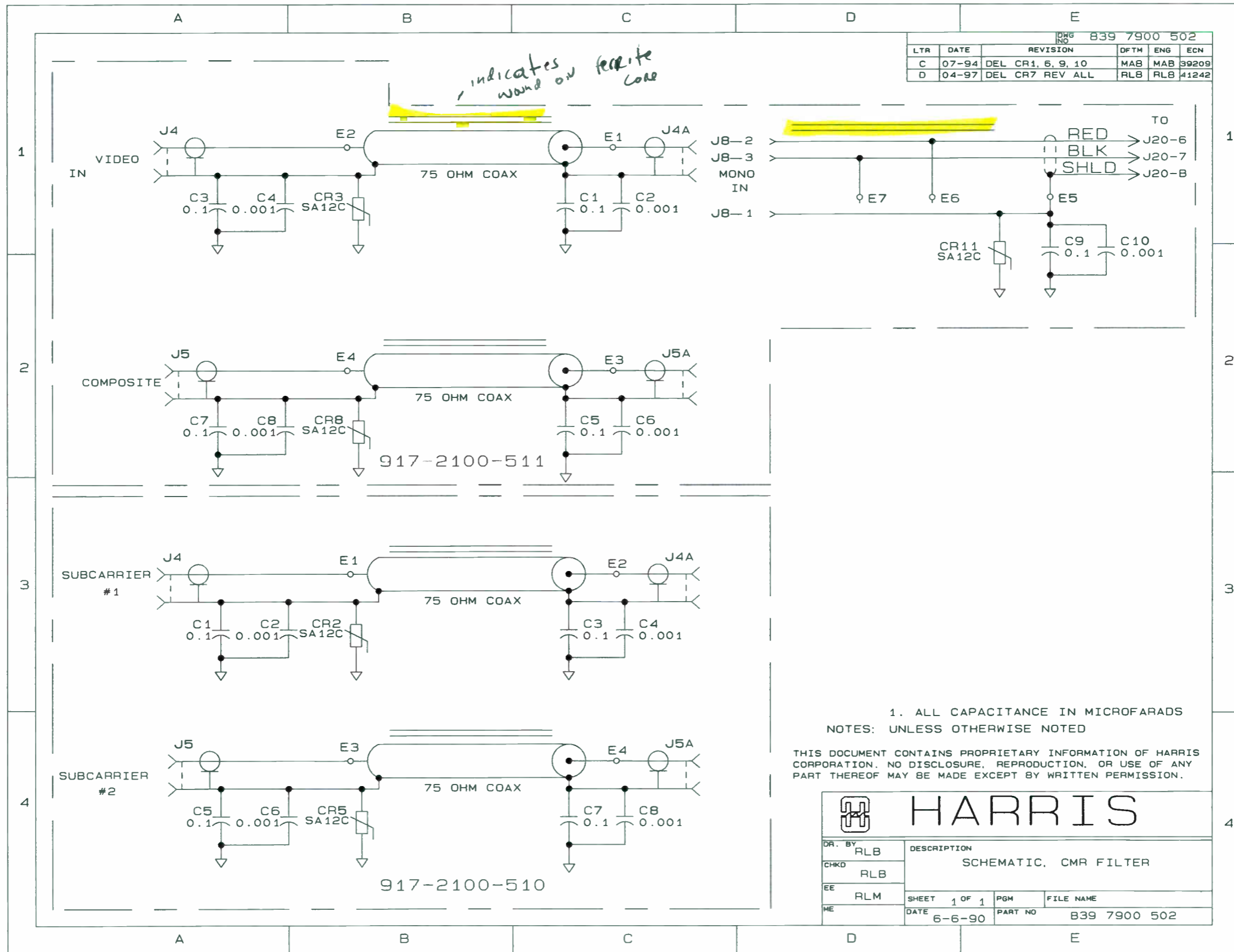


839 7900 493				
LIB	DATE	REVISION	BY	ECH
A	04-94	REV C49, L7	QFD	38573
B	08-94	REV VOLTAGE TP6	NAB	NAB 18405
C	01-97	REVISE PER ECH	BJL	BJL 41322



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HARRIS	
DR. BY	RLB
CHKD.	RLB
EE	RLM
RE	
DESCRIPTION	
SCHEN. NOTCH DIPLEXER	
SHEET 2 OF 2	FILE NAME
DATE 6-4-90	PART NO 839-7900-493



1. ALL CAPACITANCE IN MICROFARADS
 NOTES: UNLESS OTHERWISE NOTED

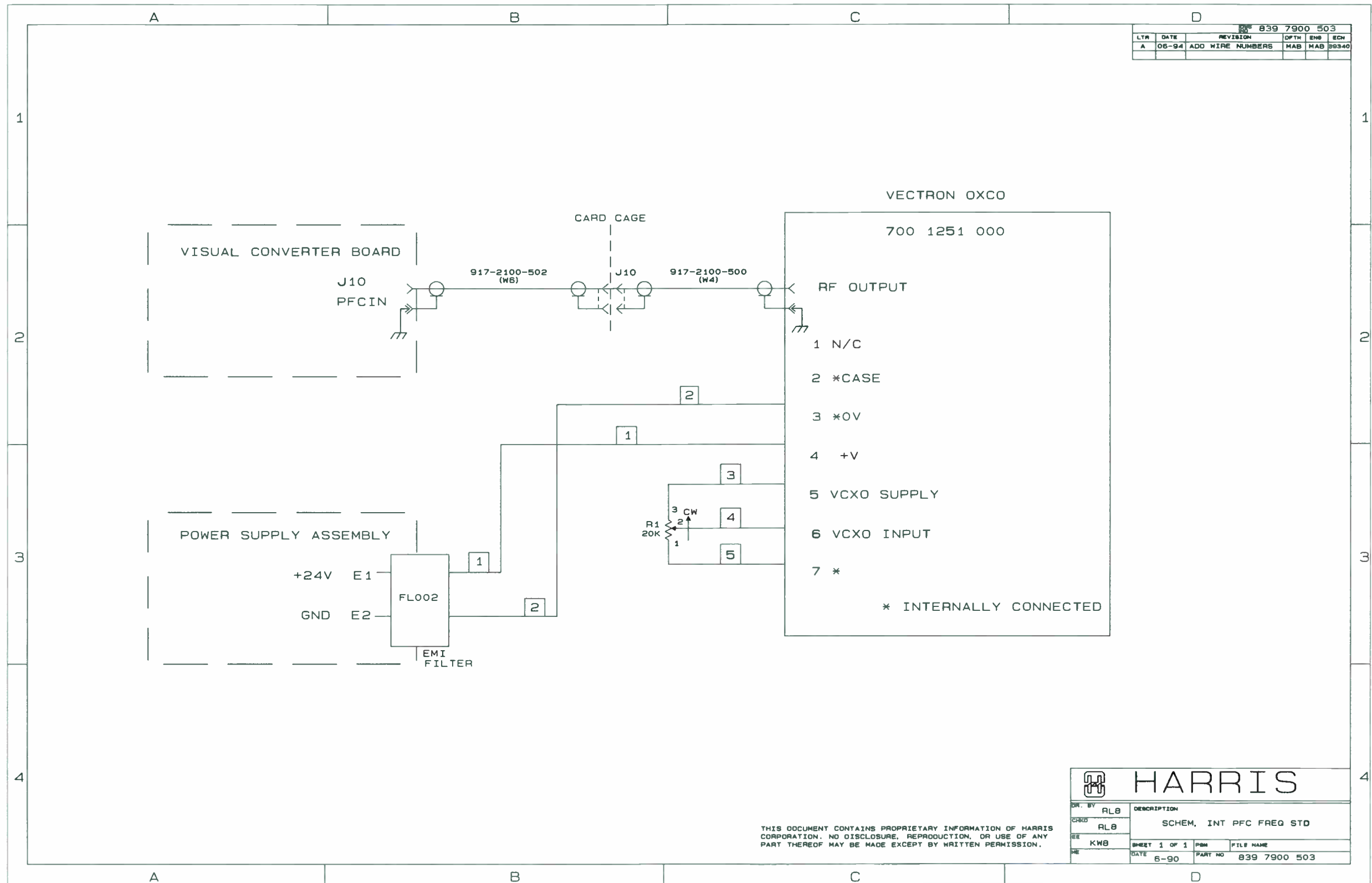
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HARRIS

DR. BY	RLB	DESCRIPTION			
CHKD	RLB	SCHEMATIC, CMR FILTER			
EE	RLM	SHEET 1 OF 1	PGM	FILE NAME	
ME		DATE 6-6-90	PART NO	839 7900 502	



839 7900 503					
LTR	DATE	REVISION	DPTH	ENR	ECN
A	06-94	ADD WIRE NUMBERS	MAB	MAB	89340

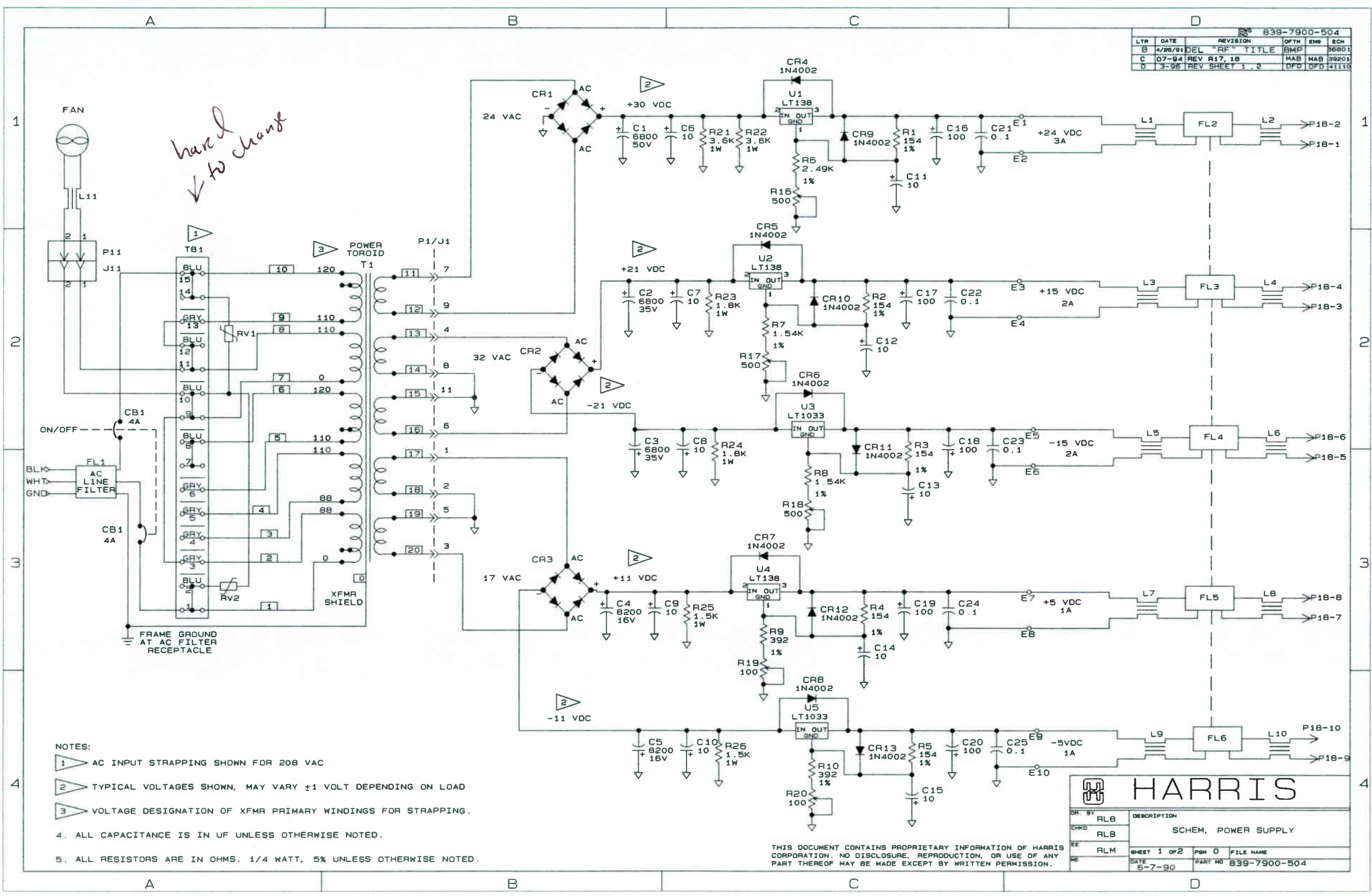


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		HARRIS	
DR. BY	RLB	DESCRIPTION	
CRD	RLB	SCHEM. INT PFC FREQ STD	
EE	KWB	SHEET 1 OF 1	FILE NAME
DE		DATE 6-90	PART NO 839 7900 503



839-7900-504					
LYR	DATE	DEL	REV	TITLE	BY
B	4/26/91				BMR
C	07-94		R17, 18		MAB
D	3-98		REV SHEET 1, 2		DFD



- NOTES:
- 1 AC INPUT STRAPPING SHOWN FOR 208 VAC
 - 2 TYPICAL VOLTAGES SHOWN, MAY VARY ±1 VOLT DEPENDING ON LOAD
 - 3 VOLTAGE DESIGNATION OF XFMR PRIMARY WINDINGS FOR STRAPPING.
 - 4. ALL CAPACITANCE IS IN UF UNLESS OTHERWISE NOTED.
 - 5. ALL RESISTORS ARE IN OHMS. 1/4 WATT, 5% UNLESS OTHERWISE NOTED.

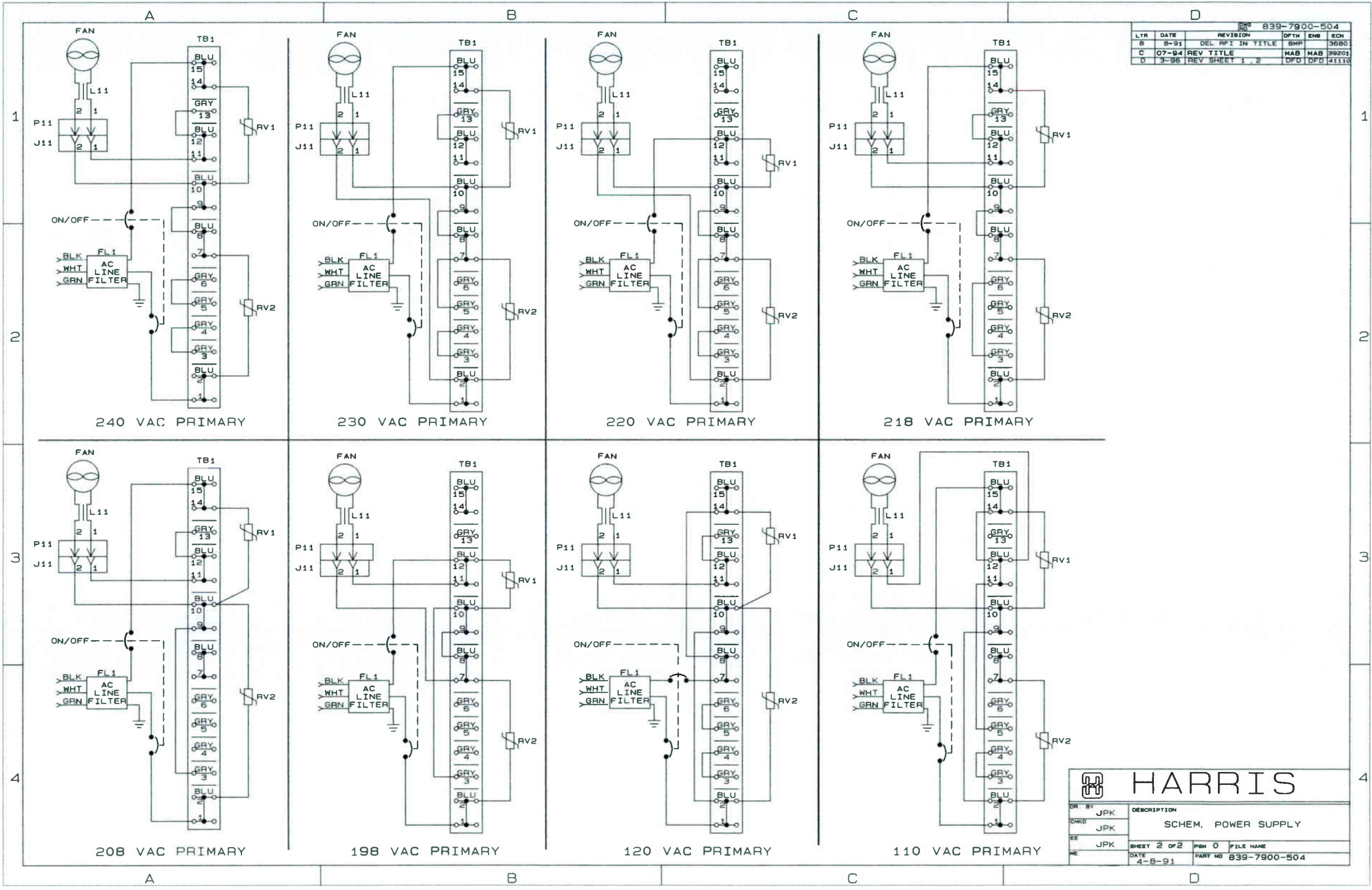
HARRIS

DRN BY	RLB	DESCRIPTION
CHKD	RLB	SCHEM. POWER SUPPLY
EE	RLM	SHEET 1 OF 2
RE		DATE 6-7-90
		PAGE 0
		FILE NAME
		PART NO 839-7900-504

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839-7900-504					
LYR	DATE	REVISION	OPM	ENR	ECN
B	8-91	DEL RFI IN TITLE	BHR		36901
C	07-94	REV TITLE	MAB	MAB	39201
D	3-96	REV SHEET 1, 2	DFD	DFD	41110

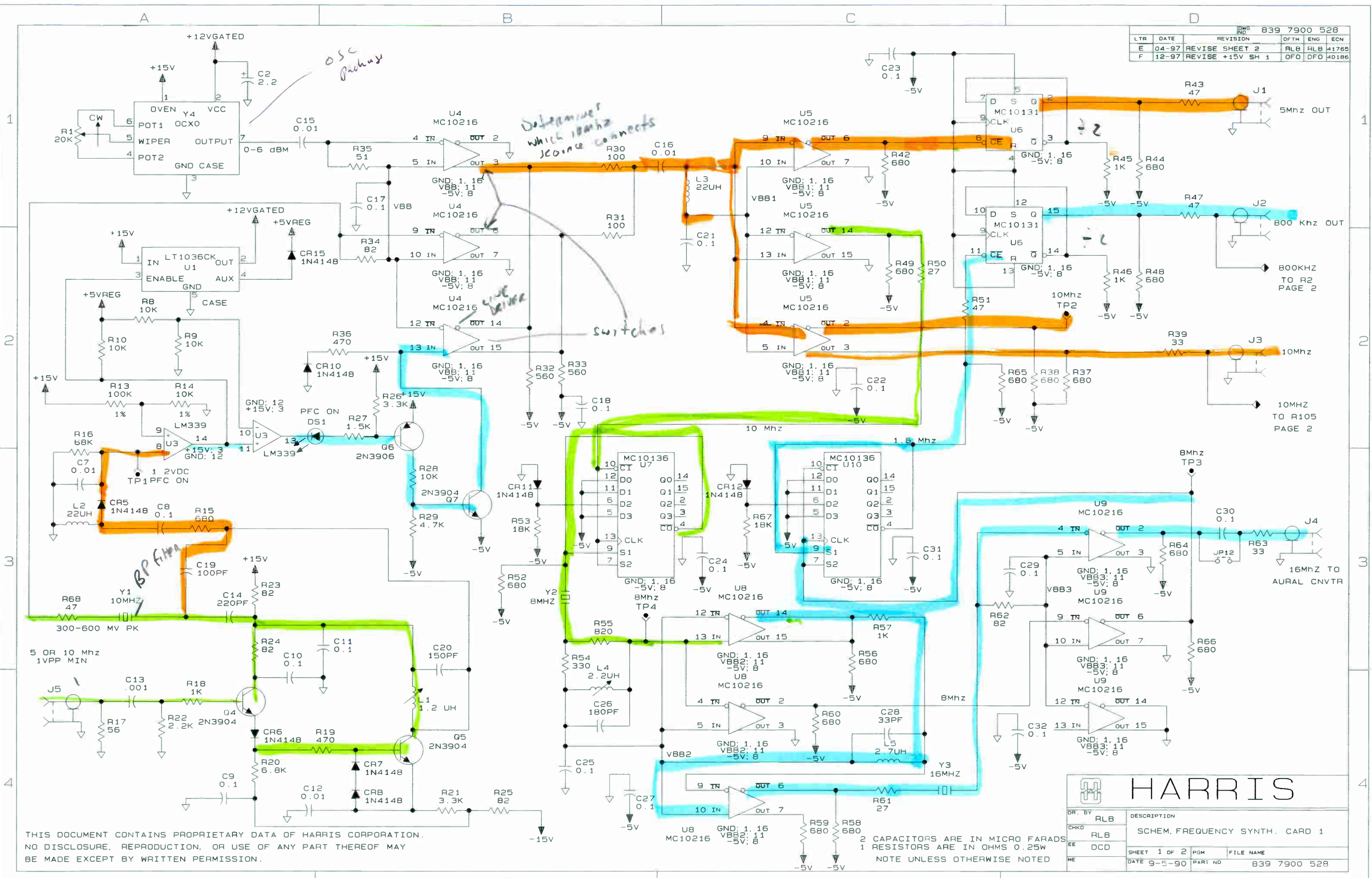


HARRIS

DR. BY	JPK	DESCRIPTION
CHKD	JPK	SCHEM. POWER SUPPLY
EE	JPK	SHEET 2 OF 2
RE	JPK	DATE 4-8-91
		PAGE 0 FILE NAME
		PART NO 839-7900-504



REVISED		839 7900 528			
LTR	DATE	REVISION	DFTM	ENG	ECN
E	04-97	REVISE SHEET 2	RLB	HLB	41765
F	12-97	REVISE +15V SH 1	OFO	OFO	40186



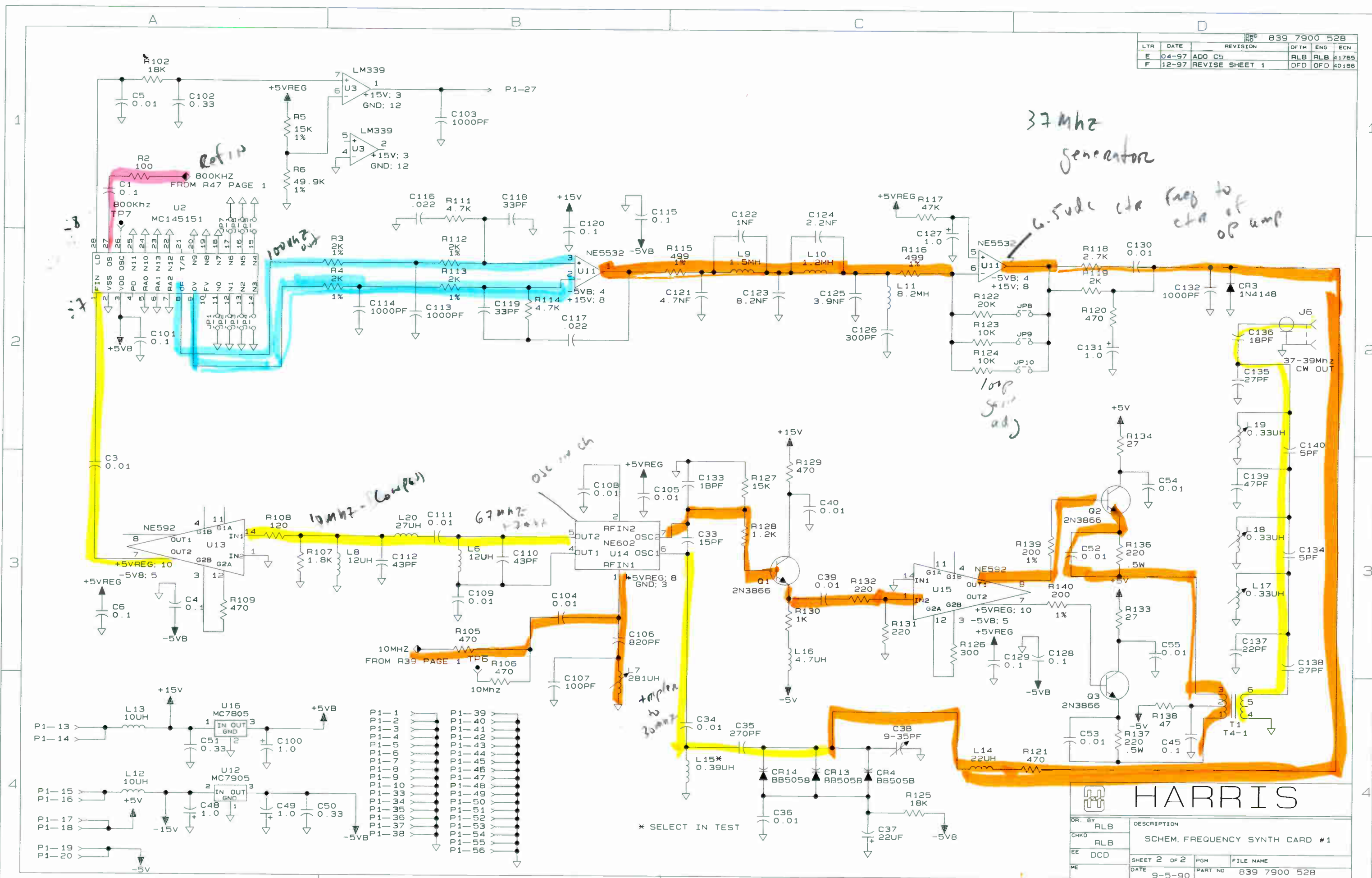
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HARRIS

DR. BY	RLB	DESCRIPTION
CHKD	RLB	SCHEM. FREQUENCY SYNTH. CARD 1
EE	DCD	SHEET 1 OF 2 PGM FILE NAME
ME		DATE 9-5-90 PART NO 839 7900 528



REV. 839 7900 528		DATE	REVISION	OF TM	ENG	ECN
E	04-97	ADD C5		RLB	RLB	11765
F	12-97	REVISE SHEET 1		OFD	OFD	40186

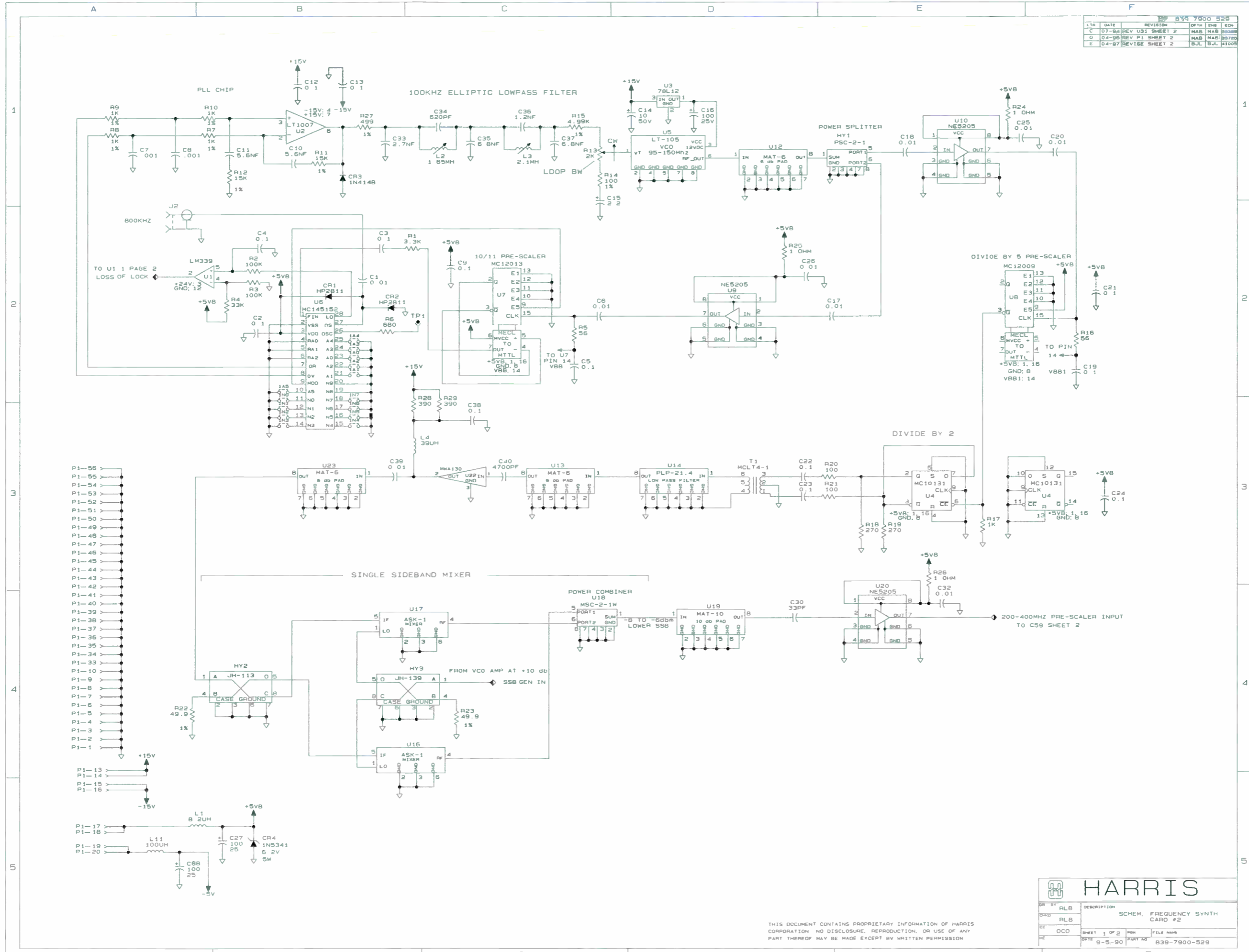


HARRIS

DR. BY	RLB	DESCRIPTION			
CHKD	RLB	SCHEM. FREQUENCY SYNTH CARD #1			
EE	DCD	SHEET 2 OF 2	PGM	FILE NAME	
ME		DATE 9-5-90	PART NO	839 7900 528	



REVISED	DATE	REVISION	BY	CHK
C	07-84	REV U31 SHEET 2	MAB	MAB
D	04-85	REV P1 SHEET 2	MAB	MAB
E	04-87	REVISE SHEET 2	BJL	BJL

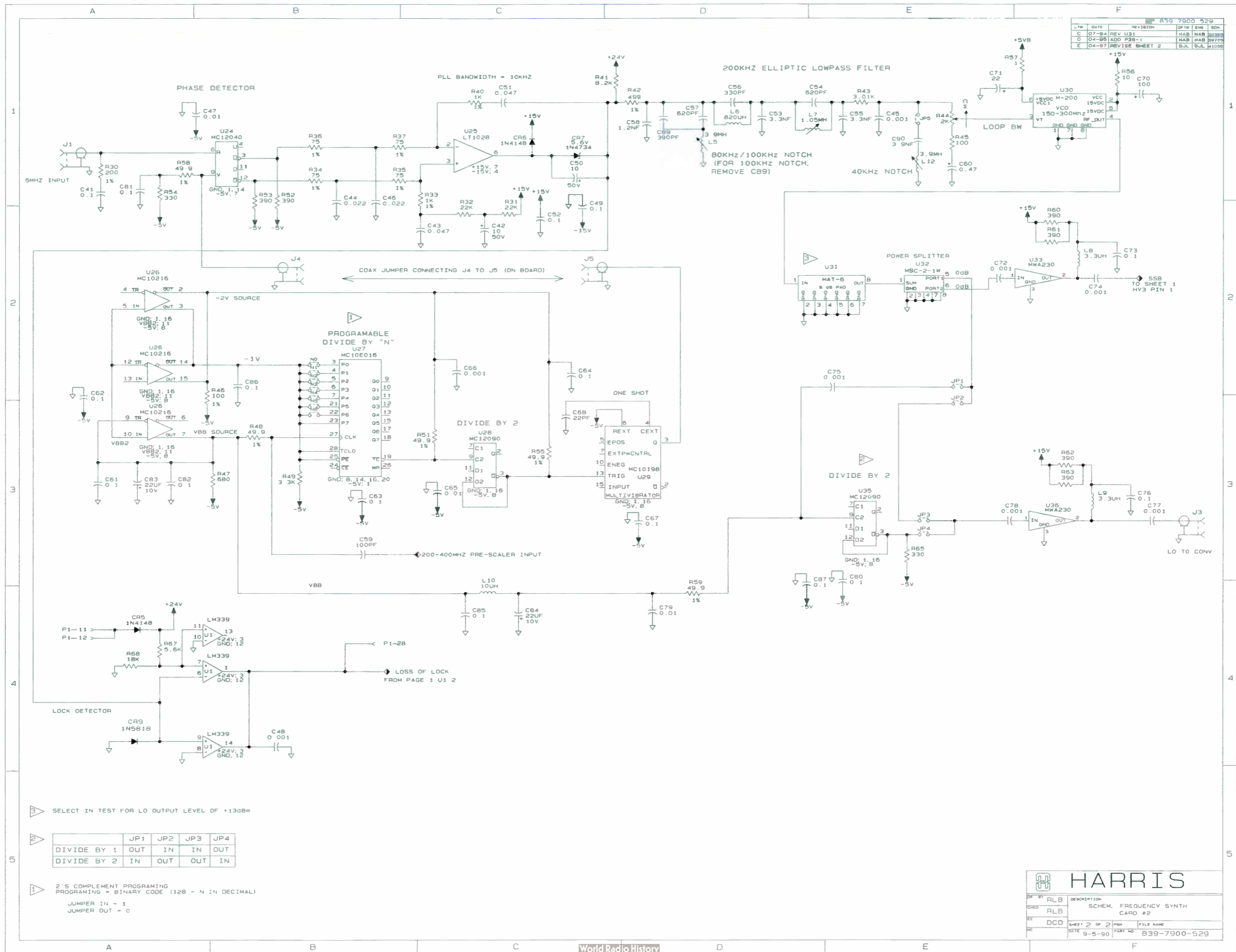


HARRIS

DRN BY	RLB	DESCRIPTION
DRS	RLB	SCHEM. FREQUENCY SYNTH
CHK	OCO	CARD #2
DATE	9-5-90	SHEET 1 OF 2
REV		FILE NAME
		PART NO
		839-7900-529

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LT#	DATE	REV	BY	QTY	ENG	60h
C	07-84	REV U31	MAB	MAB	MAB	
D	04-85	ADD P2B-1	MAB	MAB	MAB	
E	04-87	REVISE SHEET 2	B.J.	B.J.	M1008	



SELECT IN TEST FOR LO OUTPUT LEVEL OF +13dBm

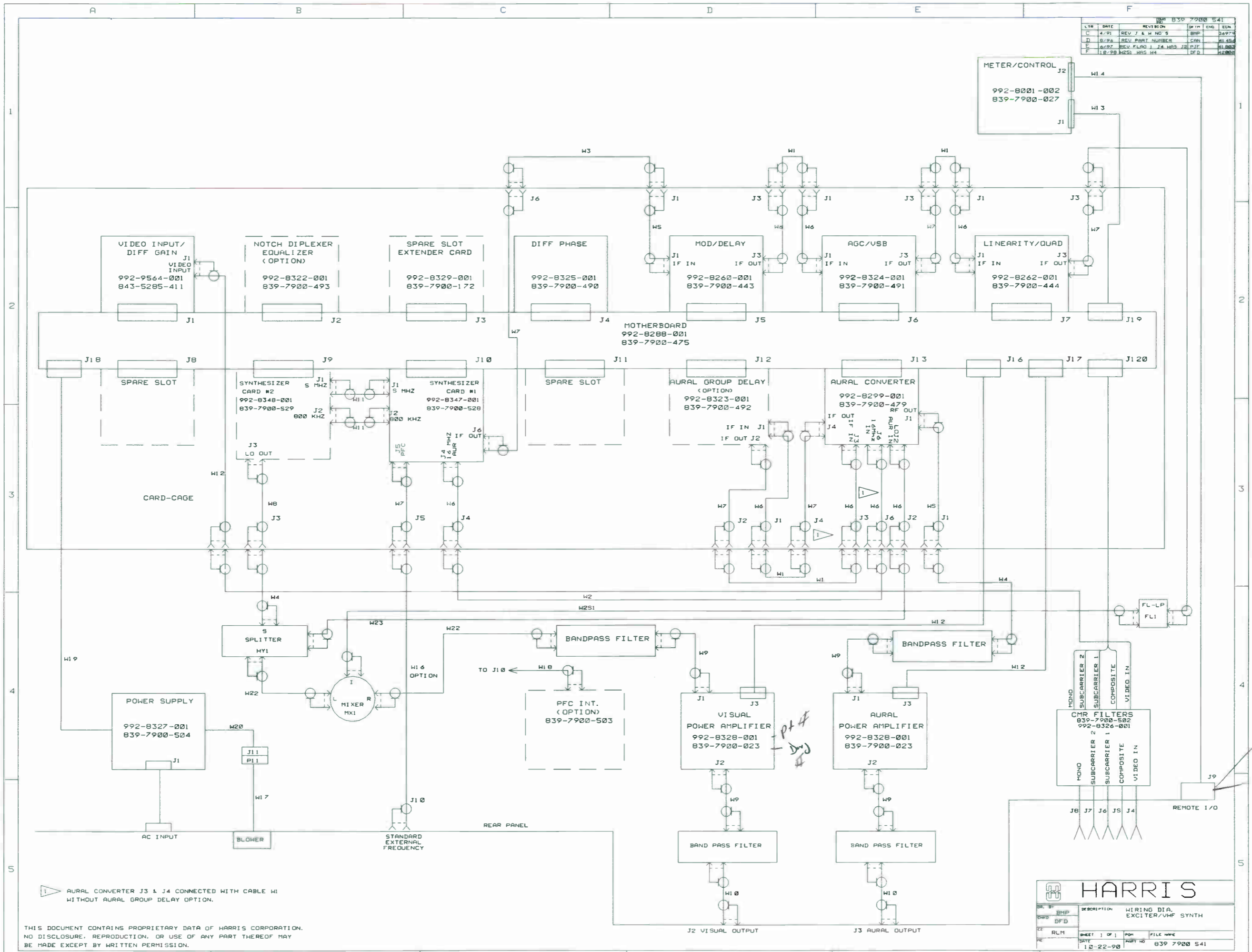
	JP1	JP2	JP3	JP4
DIVIDE BY 1	OUT	IN	IN	OUT
DIVIDE BY 2	IN	OUT	OUT	IN

3'S COMPLEMENT PROGRAMMING
PROGRAMMING = BINARY CODE (128 - N IN DECIMAL)
JUMPER IN = 1
JUMPER OUT = 0

HARRIS

DR BY	RLB	DESCRIPTION	SCHEM. FREQUENCY SYNTH
CHKD	RLB		CARD #2
DES	DCD	SHEET 2 OF 2	FILE NAME
DATE	9-5-90	DATE	839-7900-529





LT#	DATE	REVISION	DRN	ENG	ESN
C	4/91	REV J & M NO 5	BMP		36970
D	8/96	REV PART NUMBER	CDN		41454
E	8/97	REV FLAG 1, 14, HD3, J2, P17			41454
F	10/99	HD3, HD5, HD4			42000

▶ AURAL CONVERTER J3 & J4 CONNECTED WITH CABLE W1 WITHOUT AURAL GROUP DELAY OPTION.

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HARRIS

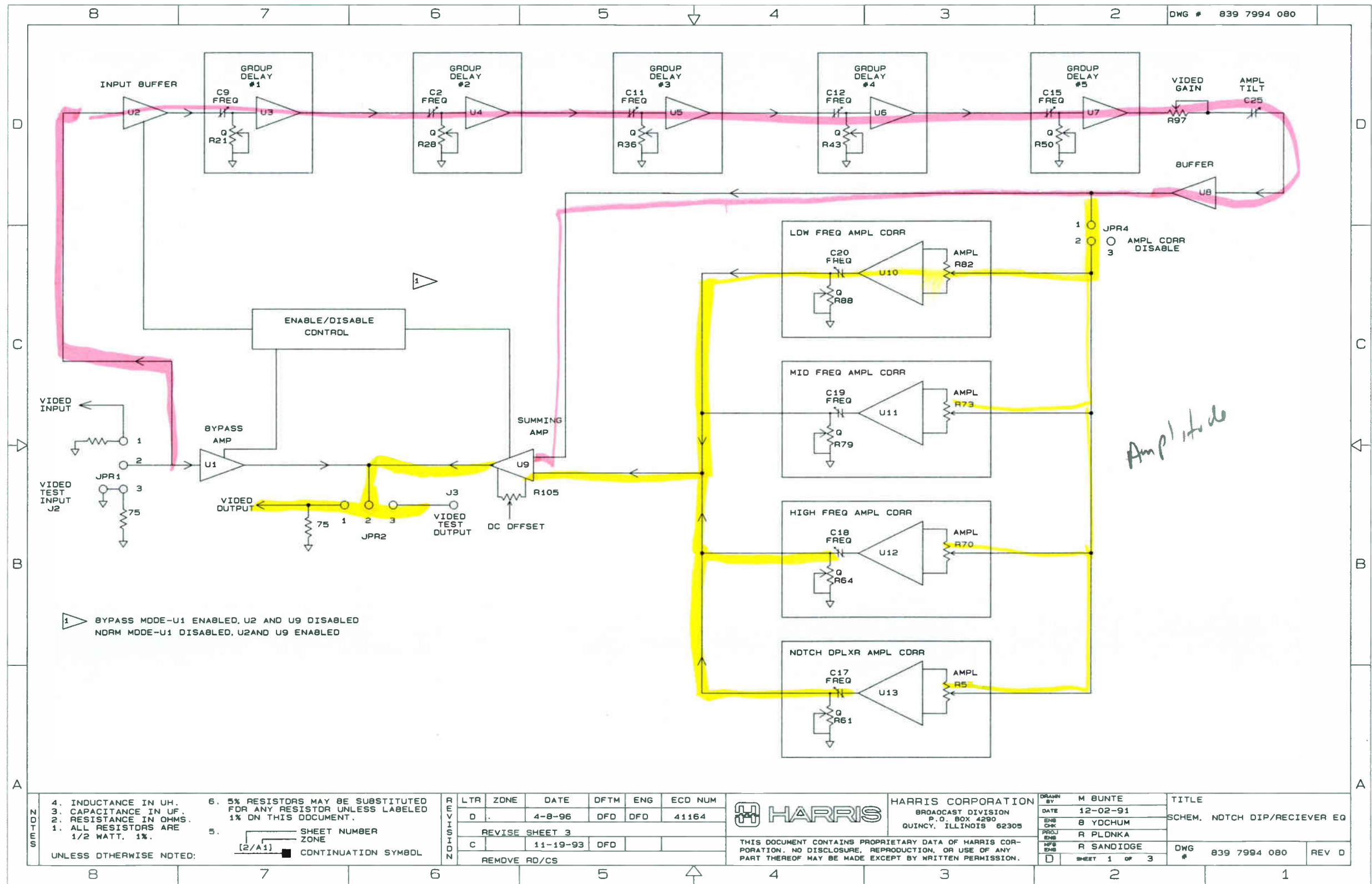
DR. BY	BMP	DESCRIPTION	WIRING DIA. EXCITER/VHF SYNTH
CHKD	DFD		
DATE	10-22-90	PAGE	FILE NAME
REV		PART NO	839 7900 S41

*carefull!!
removing*

Must stay connected - Don't put screws in

Delay

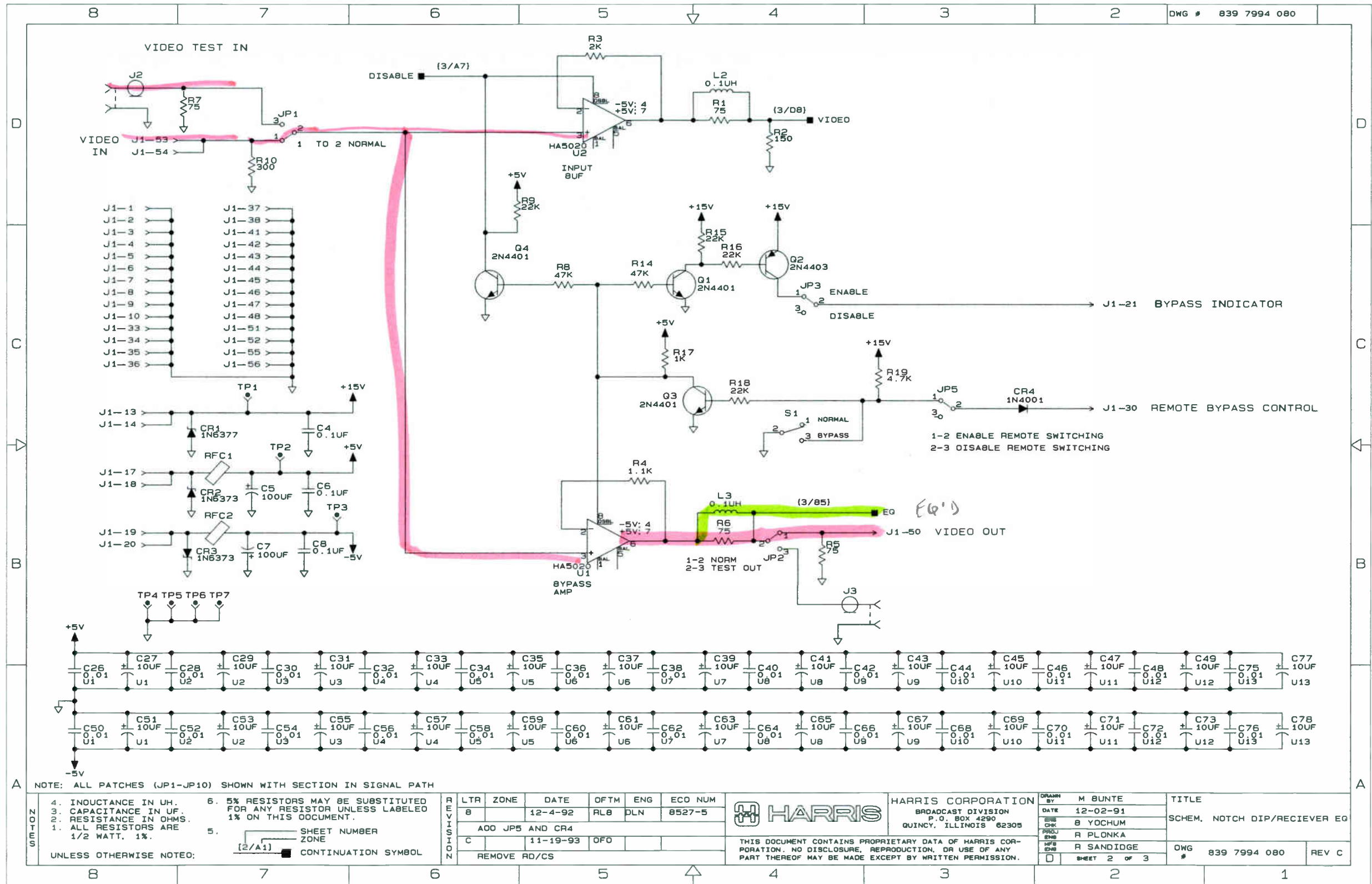
Amplitude + Delay kept separate to avoid interaction



Amplitude

Video Connector





NOTE: ALL PATCHES (JP1-JP10) SHOWN WITH SECTION IN SIGNAL PATH

- 4. INDUCTANCE IN UH.
- 3. CAPACITANCE IN UF.
- 2. RESISTANCE IN OHMS.
- 1. ALL RESISTORS ARE 1/2 WATT, 1%.
- 5. SHEET NUMBER ZONE [2/A1] CONTINUATION SYMBOL
- 6. 5% RESISTORS MAY BE SUBSTITUTED FOR ANY RESISTOR UNLESS LABELED 1% ON THIS DOCUMENT.

REVISION	LTR	ZONE	DATE	OFTM	ENG	ECO NUM
B			12-4-92	RLB	DLN	8527-5
C			11-19-93	DFD		
						REMOVE RD/CS



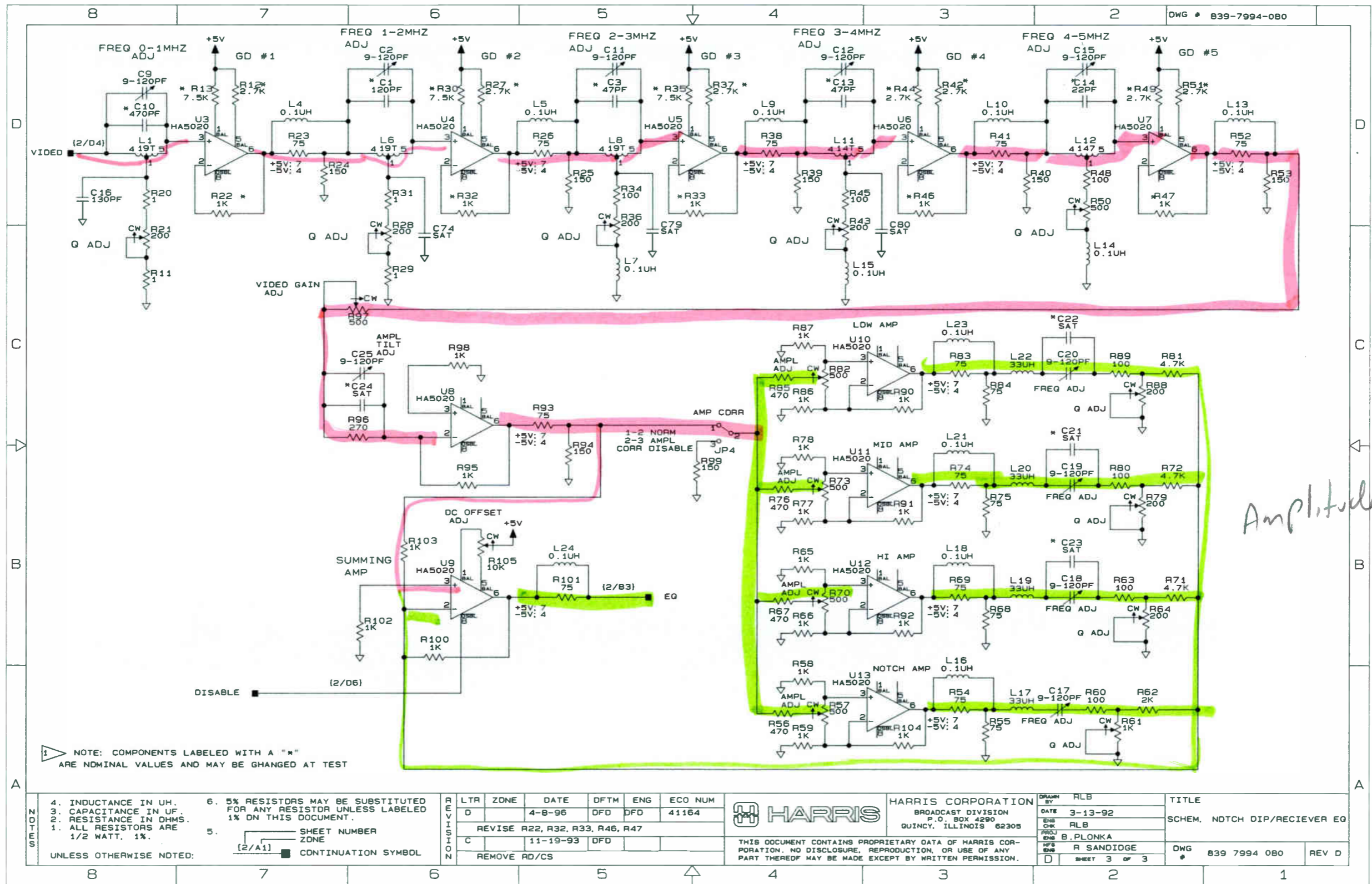
HARRIS CORPORATION
BROADCAST DIVISION
P.O. BOX 4290
QUINCY, ILLINOIS 62305

DESIGNED BY	M BUNTE
DATE	12-02-91
CHKD BY	B YOCHUM
PRD BY	R PLONKA
APP BY	R SANDIDGE
DATE	
DRW	
SHEET	2 OF 3

TITLE	SCHEM. NOTCH DIP/RECEIVER EQ
DWG #	839 7994 080
REV	C



Delay - passive delay eq paper



NOTE: COMPONENTS LABELED WITH A "*" ARE NOMINAL VALUES AND MAY BE CHANGED AT TEST

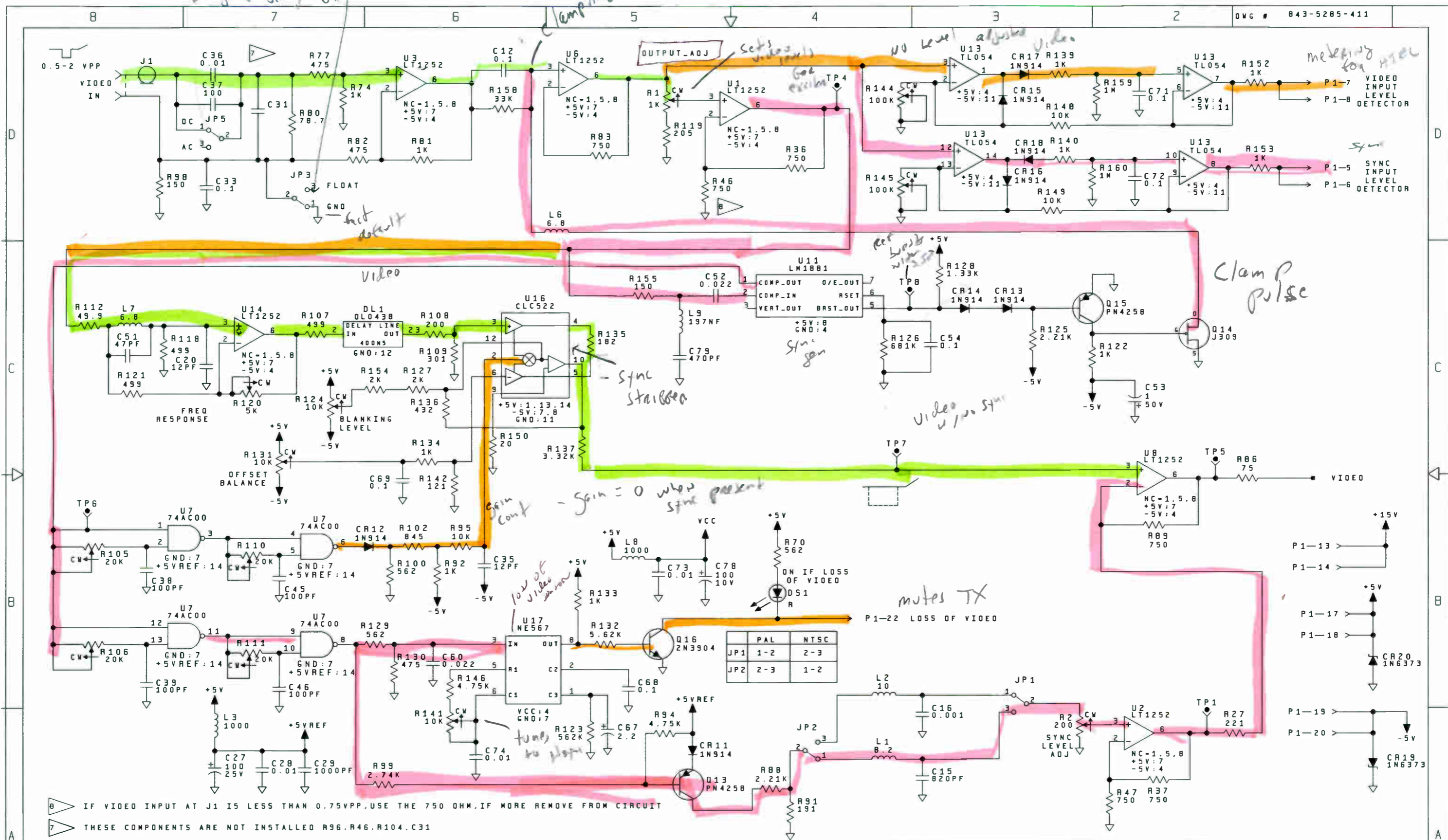
- NOTES
- INDUCTANCE IN UH.
 - CAPACITANCE IN UF.
 - RESISTANCE IN OHMS.
 - ALL RESISTORS ARE 1/2 WATT, 1%.
 - 5% RESISTORS MAY BE SUBSTITUTED FOR ANY RESISTOR UNLESS LABELED 1% ON THIS DOCUMENT.
 - SHEET NUMBER ZONE [2/A1] CONTINUATION SYMBOL

REV	DATE	DFTM	ENG	ECO NUM
D	4-8-96	DFD	DFD	41164
REVISE R22, R32, R33, R46, R47				
C	11-19-93	DFD		
REMOVE RD/CS				

HARRIS CORPORATION
 BROADCAST DIVISION
 P.O. BOX 4290
 QUINCY, ILLINOIS 62305

DATE	BY	TITLE
3-13-92	RLB	SCHEM. NOTCH DIP/RECEIVER EQ
	RLB	
	B. PLONKA	
	R SANDIDGE	
		DWG # 839 7994 080
		REV D





- NOTES
1. ALL RESISTORS ARE 1/2 WATT, 1%.
 2. RESISTANCE IN OHMS.
 3. CAPACITANCE IN UF.
 4. INDUCTANCE IN UH.

5. SHEET NUMBER ZONE (2/A1) CONTINUATION SYMBOL
6. 5% RESISTORS MAY BE SUBSTITUTED FOR ANY RESISTOR UNLESS LABELED 1% ON THIS DOCUMENT.

REV	DATE	ENG	ECO NUM
F	5-30-97	DFD BAR	41810
G	2-1-00	DFD DFD	45075

ADD RESISTORS: CHANGE VALUES - SHT 1 & 2
REVISE U13

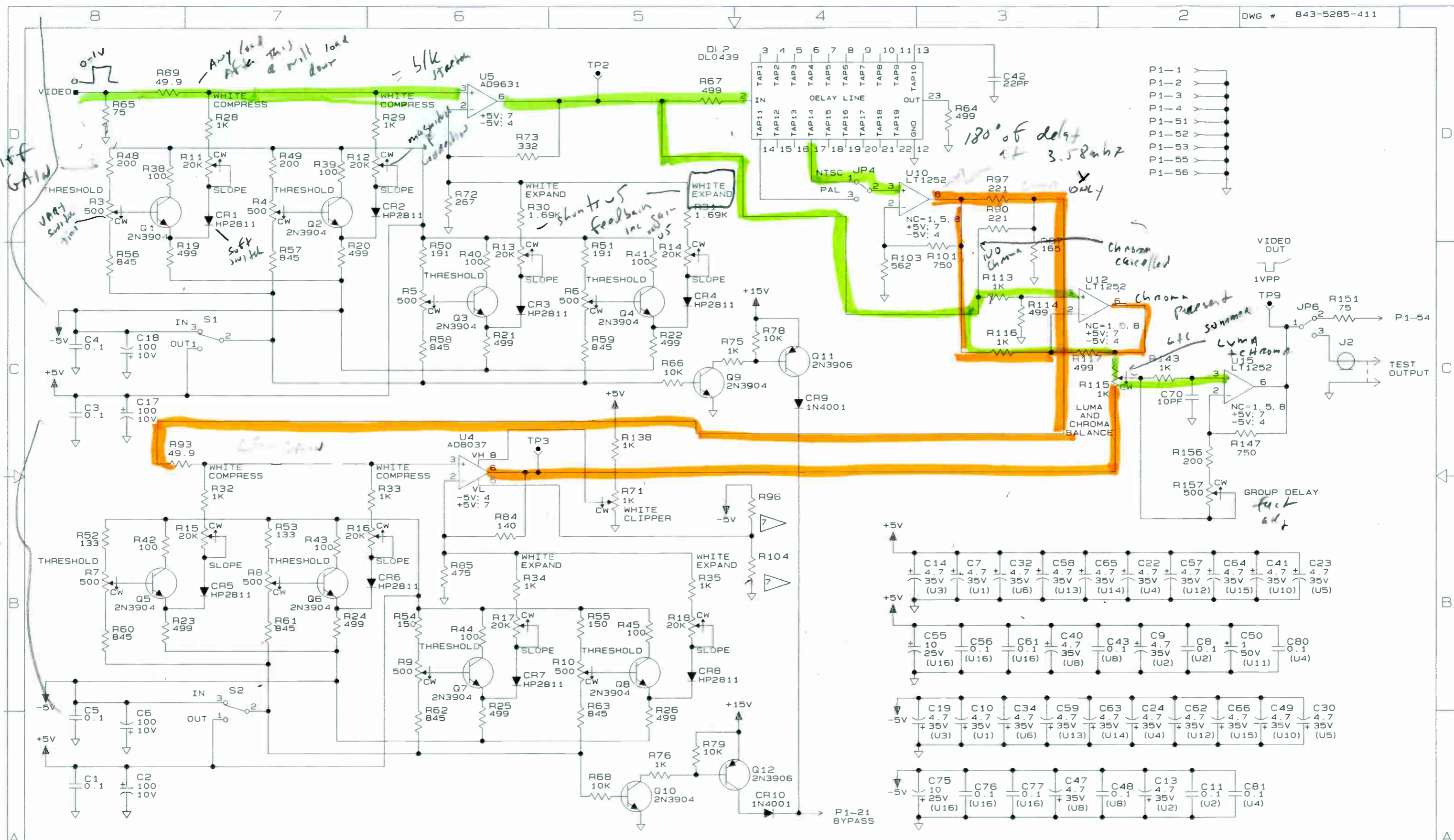
HARRIS CORPORATION
BROADCAST SYSTEMS
P.O. BOX 4290
QUINCY, ILLINOIS 62305

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DATE	ENG	CHK	PRJ	ENG	HFC	ENG
3-12-96	K. TRAN			K. TRAN		

DRAWN BY: DAVIOWSON
TITLE: SCH. VIDEO OFF GAIN LFL CORRECTION
DWG # 843-5285-411
REV G





DIFF GAIN

LF GAIN

180° of delay
at 3.58MHz

Chroma cancelled

Chroma present

Luma + Chroma

Luma and Chroma Balance

fact

- NOTES
1. ALL RESISTORS ARE 1/2 WATT, 1%.
 2. RESISTANCE IN OHMS.
 3. CAPACITANCE IN UF.
 4. INDUCTANCE IN UH.
 5. SHEET NUMBER ZONE
 6. 5% RESISTORS MAY BE SUBSTITUTED FOR ANY RESISTOR UNLESS LABELED 1% ON THIS DOCUMENT.
- UNLESS OTHERWISE NOTED: (2/A1) CONTINUATION SYMBOL

REV	DATE	DFTM	ENG	ECO NUM
F	5-30-97	DFD	BAR	41810
REVISE RESISTOR VALUES				
G	2-1-00	DFD	DFD	45075
REVISE SHEET 1				

HARRIS

HARRIS CORPORATION
 BROADCAST SYSTEMS
 P.O. BOX 4290
 QUINCY, ILLINOIS 62305

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DRAWN BY	DAVIDSON	TITLE	SCH. VIDEO DIFF GAIN
DATE	3-12-96	LFI CORRECTION	
ENG CHK	K. TRAN	DWG #	843-5285-411
PROJ ENG	K. TRAN	REV	G
MEG		SHEET	2 OF 2



