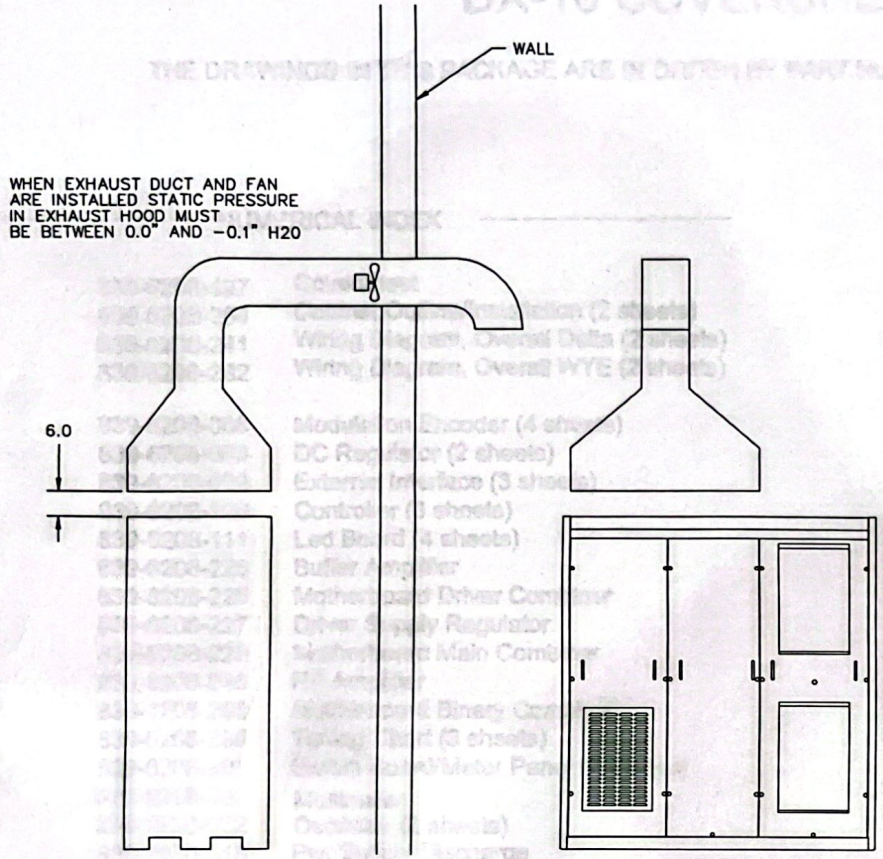
			839 6208 264			
.	B	4/4/90	DELETED HIGH PRESSURE PORTS	DR	.	35260
.	C	5-3-1997	REVISED FASTENERS	SEC	SEC	41759
.	D	1-18-2000	CHANGED LOGO	VRM	SJS	45659



SIDE VIEW

REAR VIEW

AC POWER REQUIREMENTS:

197–281 VAC, 3 PHASE, 48 TO 63 HZ
3–WIRE DELTA,

OR 341–468 VAC, 3 PHASE, 48 TO 63 HZ
4–WIRE WYE.

(INPUT TERMINAL #4 AWG MAX WIRE SIZE)

POWER CONSUMPTION:

18 KW OR LESS AT 10 KW OUTPUT,
100% SINE WAVE MODULATION

TOTAL DISSIPATION AT 10KW OUTPUT,
100% SINE WAVE MODULATION:

3,000 WATTS
OR 10,300 BTUH.
(CABINET HEAT RADIATION LESS THAN
300 WATTS OR 1,030 BTUH)

FORCED CONVECTION AIR FLOW THROUGH TRANSMITTER:

AT 60 HZ AC POWER
1300 CFM,

AT 50 HZ AC POWER
900 CFM.

NOISE LEVEL MEASURED ONE METER FROM FLOOR AND ONE METER FROM TRANSMITTER:

FRONT	63 dBA
RIGHT SIDE	65 dBA
LEFT SIDE	65 dBA
REAR	72 dBA

TOTAL VOLUME:

CUBIC FEET	107.25
CUBIC METERS	3.04

WEIGHT:

1535 LBS
696 KGS

3 INLET AIR TEMPERATURE MUST NOT EXCEED 50 DEGREES CENTIGRADE AT SEA LEVEL. DERATE AT 2 DEGREES CENTIGRADE PER 1,000 FEET ELEVATION.

2 EXHAUST SYSTEM SHOWN ON THIS DRAWING IS A SUGGESTED INSTALLATION. IF EXISTING TRANSMITTER SITE PRECLUDES THE USE OF THIS SYSTEM,CONSULTATION WITH A HVAC CONTRACTOR AND/OR HARRIS ENGINEERING DEPARTMENT IS REQUIRED.

1 IF EXHAUST AIR IS DUCTED FROM TRANSMITTER HALL, A FILTERED INLET AIR MAKE–UP SYSTEM MUST BE INSTALLED TO PREVENT THE TRANSMITTER FROM BECOMING AIR–STARVED AND OVERHEATED.

UNLESS NOTED:
DIMENSIONS ARE IN INCHES
TOLERANCES:
.X ± .030
.XX ± .015
.XXX ± .005
ANGLES ± 1 DEG.

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BROADCAST COMMUNICATIONS
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QUINCY, ILLINOIS 62305

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DR. BY CR 6-25-87	TITLE
ENG. CHK. GJK 12/1/87	CABINET OUTLINE,DX10
PROJ. ENG. MR 12/1/89	.
MFG. ENG. MR 12/1/89	.
MATL. . .	SHEET 2 OF 2
	DWG. NO. 839 6208 264

DX-10 COVERSHEET INDEX

THE DRAWINGS IN THIS PACKAGE ARE IN ORDER BY PART NUMBER, EXCEPT FOR THE FIRST FOUR DRAWINGS

NUMERICAL INDEX

839-6208-427	Coversheet
839-6208-264	Cabinet Outline/Installation (2 sheets)
839-6208-241	Wiring Diagram, Overall Delta (2 sheets)
839-6208-282	Wiring Diagram, Overall WYE (2 sheets)
839-6208-088	Modulation Encoder (4 sheets)
839-6208-089	DC Regulator (2 sheets)
839-6208-099	External Interface (3 sheets)
839-6208-100	Controller (3 sheets)
839-6208-111	Led Board (4 sheets)
839-6208-225	Buffer Amplifier
839-6208-226	Motherboard Driver Combiner
839-6208-227	Driver Supply Regulator
839-6208-229	Motherboard Main Combiner
839-6208-246	RF Amplifier
839-6208-268	Motherboard Binary Combiner
839-6208-285	Tuning Chart (3 sheets)
839-6208-301	Switch Board/Meter Panel (2 sheets)
839-6208-302	Multimeter
839-7930-032	Oscillator (2 sheets)
839-7930-518	Pwr Supply Discharge
839-7953-001	Output Sample Board
839-8222-078	Frequency Determined Chart
843-5155-851	Oscillator, Auto (2 sheets)
843-5400-081	Power Distribution Sch
843-5400-101	Output Monitor (3 sheets)
843-5400-431	A/D Converter (3 sheets)
843-5400-447	Analog Input (2 sheets)
843-5400-641	PWA, AD7525KN Replacement

ALPHABETICAL INDEX

843-5400-431	A/D Converter (3 sheets)
843-5400-447	Analog Input (2 sheets)
839-6208-225	Buffer Amplifier
839-6208-264	Cabinet Outline/Installation (2 sheets)
839-6208-100	Controller (3 sheets)
839-6208-427	Coversheet
839-6208-089	DC Regulator (2 sheets)
839-6208-227	Driver Supply Regulator
839-6208-099	External Interface (3 sheets)
839-8222-078	Frequency Determined Chart
839-6208-111	Led Board (4 sheets)
839-6208-088	Modulation Encoder (4 sheets)
839-6208-268	Motherboard Binary Combiner
839-6208-226	Motherboard Driver Combiner
839-6208-229	Motherboard Main Combiner
839-6208-302	Multimeter
839-7930-032	Oscillator (2 sheets)
843-5155-851	Oscillator, Auto (2 sheets)
843-5400-101	Output Monitor (3 sheets)
839-7953-001	Output Sample Board
843-5400-641	PWA, AD7525KN Replacement
843-5400-081	Pwr Distribution Sch
839-7930-518	Pwr Supply Discharge
839-6208-246	RF Amplifier
839-6208-301	Switch Board/Meter Panel (2 sheets)
839-6208-285	Tuning Chart (3 sheets)
839-6208-241	Wiring Diagram, Overall Delta (2 sheets)
839-6208-282	Wiring Diagram, Overall WYE (2 sheets)

NOTES

REVISION	LTR	ZONE	DATE	DFTM	ENG	ECO NBR
	J	.	12-9-03	BAK	TLH	49774
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	K	.	DEC 9, 2004	SEC	SEC	50683
	ADDED 843-5155-851					

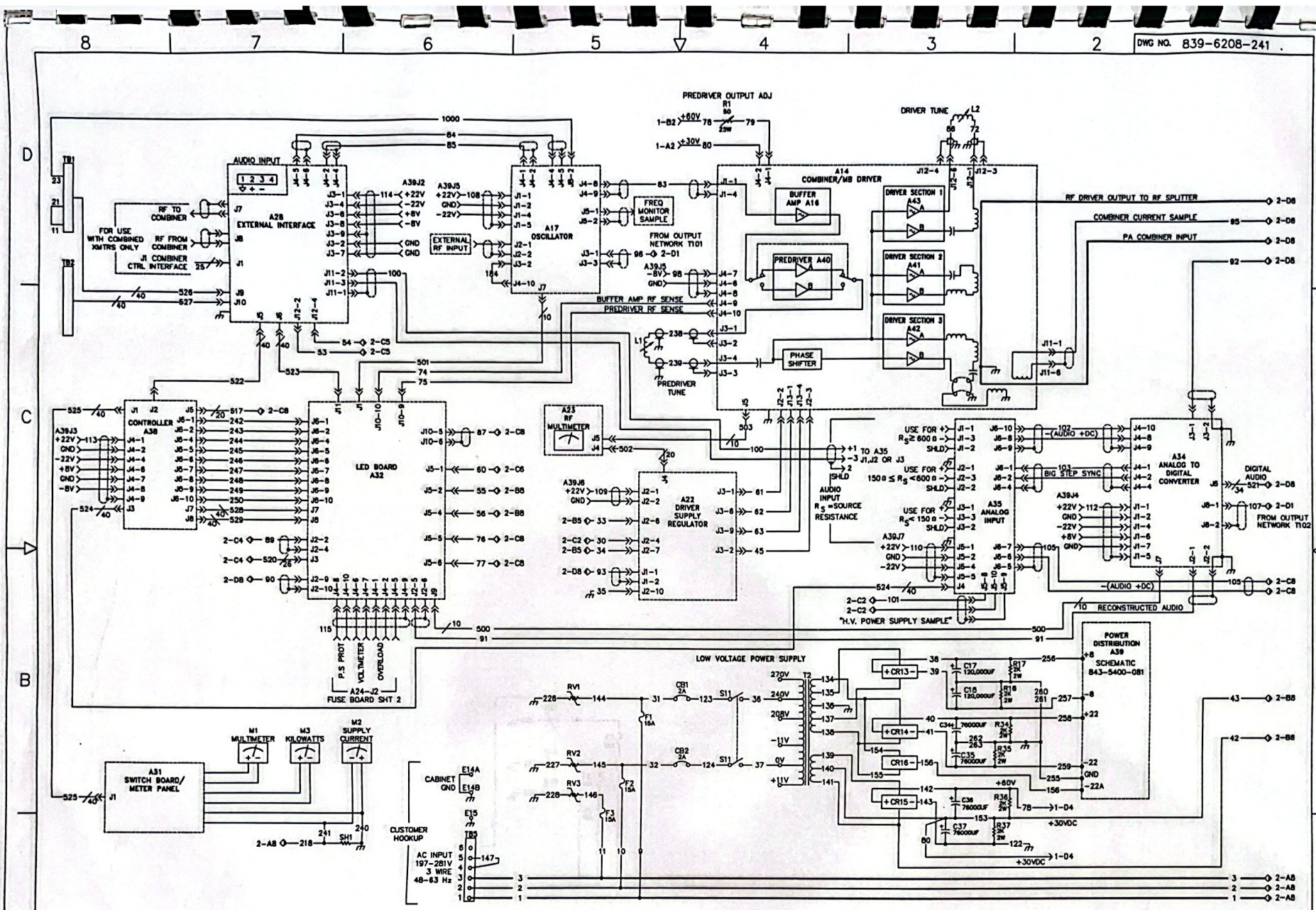
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DRAWN BY	SAM CROUCH
DATE	JAN 29, 1994
ENG CHK	CROUCH
PROJ ENG	STEVE SPRADLIN
MFG ENG	CROUCH
C	SHEET 1 OF 1

TITLE
COVERSHEET, DX-10

DWG NO. 839-6208-427. REV K



NOTES
1. UNLESS OTHERWISE NOTED ALL RESISTORS IN OHMS
2. CAPACITANCE IN MICRO-FARADS

REVISION	LTR	ZONE	DATE	DFTM	ENG	ECO NBR
	Y	.	APRIL 6, 2002	SEC	SEC	48124
	REVISED VALUE OF C17 AND C18					
	Z	.	DEC 09, 2004	SEC	SEC	50683
	ADDED WIRE #1000					

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QUINCY, ILLINOIS 62305

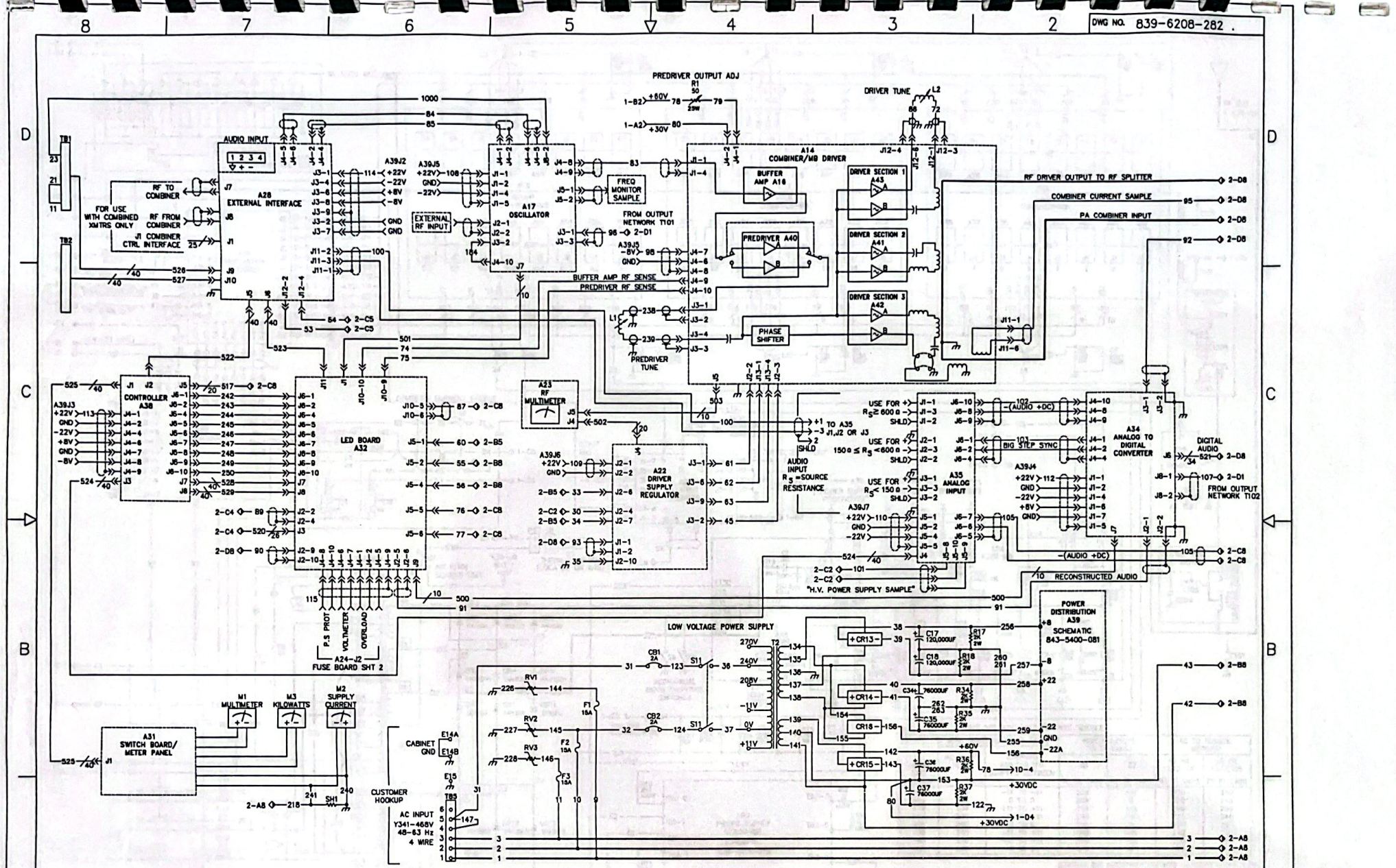
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DRAWN BY	D. GLOVER
DATE	NOV, 1987
ENG CHK	G.J. KELLER
PROJ ENG	N. RICHARDS
MFG ENG	M. RUSSELL
C	SHEET 1 OF 2

TITLE
SCHEM, DX-10 OVERALL

3PH DELTA

DWG NO. 839-6208-241 . REV Z



NOTES
1. UNLESS OTHERWISE NOTED ALL
2. RESISTORS IN OHMS
3. CAPACITANCE IN MICRO-FARADS

REVISION	LTR	ZONE	DATE	DFTM	ENG	ECO NBR
	R	.	APRIL 6, 2002	SEC	SEC	48124
	REVISED VALUE OF C17 AND C18					
	S	.	DEC 9, 2004	SEC	SEC	50683
	ADDED WIRE #1000					

HARRIS

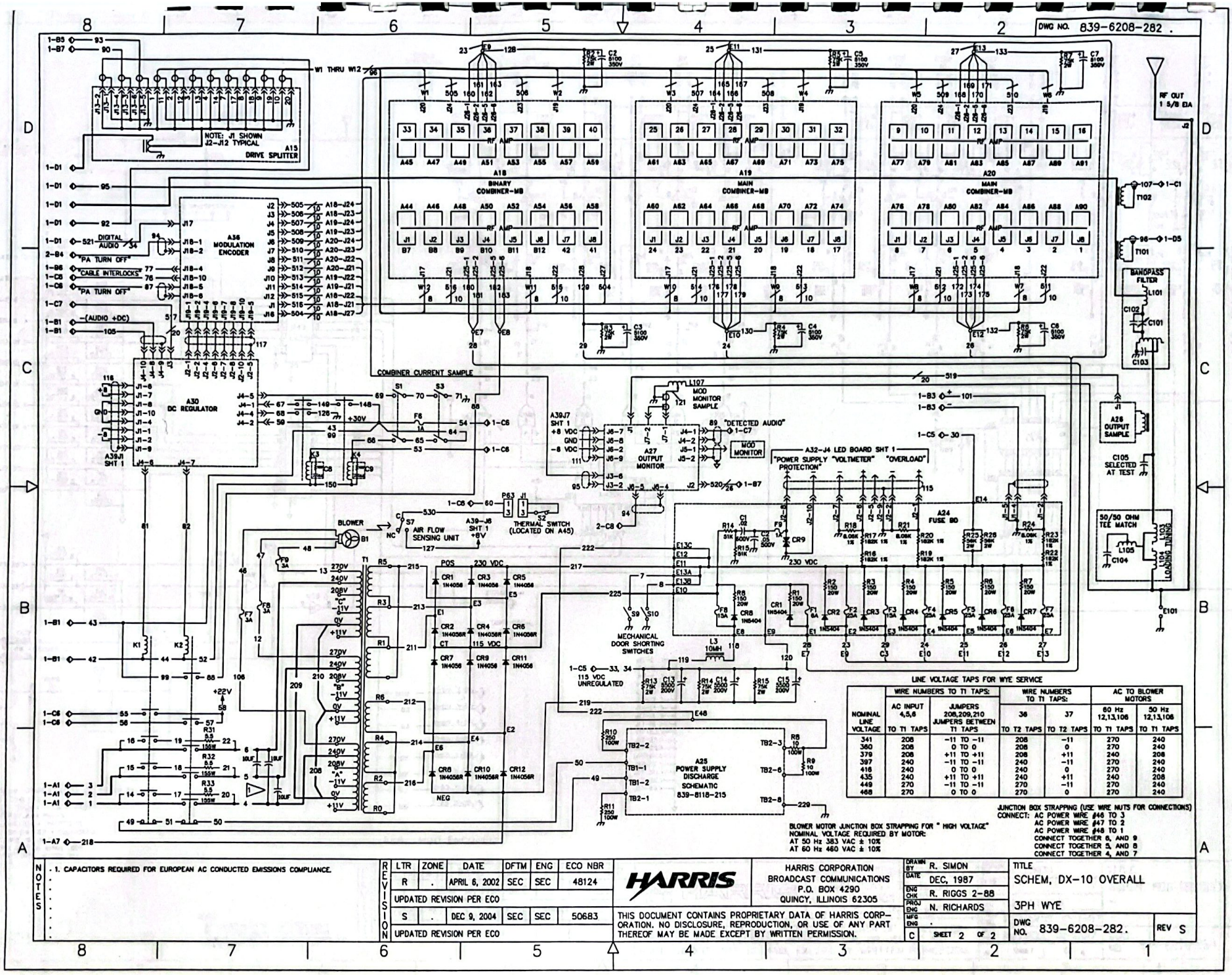
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P.O. BOX 4290
QUINCY, ILLINOIS 62305

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DRAWN BY	R. SIMON
DATE	DEC, 1987
ENG CHK	R. RIGGS 2-88
PROJ ENG	N. RICHARDS
MFG ENG	.
C	SHEET 1 OF 2

TITLE
SCHEM, DX-10 OVERALL
3PH WYE

DWG NO. 839-6208-282. REV S



LINE VOLTAGE TAPS FOR WYE SERVICE

NOMINAL LINE VOLTAGE	WIRE NUMBERS TO T1 TAPS: AC INPUT 4,5,6 TO T1 TAPS	WIRE NUMBERS TO T1 TAPS: JUMPERS 208,209,210 JUMPERS BETWEEN T1 TAPS	WIRE NUMBERS TO T1 TAPS: 36 TO T2 TAPS	WIRE NUMBERS TO T1 TAPS: 37 TO T2 TAPS	AC TO BLOWER MOTORS: 60 Hz 12,13,106 TO T1 TAPS	AC TO BLOWER MOTORS: 50 Hz 12,13,106 TO T1 TAPS
341	208	-11 TO -11	208	-11	270	240
360	208	0 TO 0	208	0	270	240
379	208	+11 TO +11	208	+11	240	208
397	240	-11 TO -11	240	-11	270	240
416	240	0 TO 0	240	0	270	240
435	240	+11 TO +11	240	+11	240	208
449	270	-11 TO -11	270	-11	270	240
468	270	0 TO 0	270	0	270	240

JUNCTION BOX STRAPPING (USE WIRE NUTS FOR CONNECTIONS)
CONNECT: AC POWER WIRE #46 TO 3
AC POWER WIRE #47 TO 2
AC POWER WIRE #48 TO 1
CONNECT TOGETHER 6, AND 9
CONNECT TOGETHER 5, AND 8
CONNECT TOGETHER 4, AND 7

NOTES
1. CAPACITORS REQUIRED FOR EUROPEAN AC CONDUCTED EMISSIONS COMPLIANCE.

REVISION	LTR	ZONE	DATE	DFTM	ENG	ECO NBR
	R	.	APRIL 6, 2002	SEC	SEC	48124
	UPDATED REVISION PER ECO					
	S	.	DEC 9, 2004	SEC	SEC	50683
	UPDATED REVISION PER ECO					

HARRIS

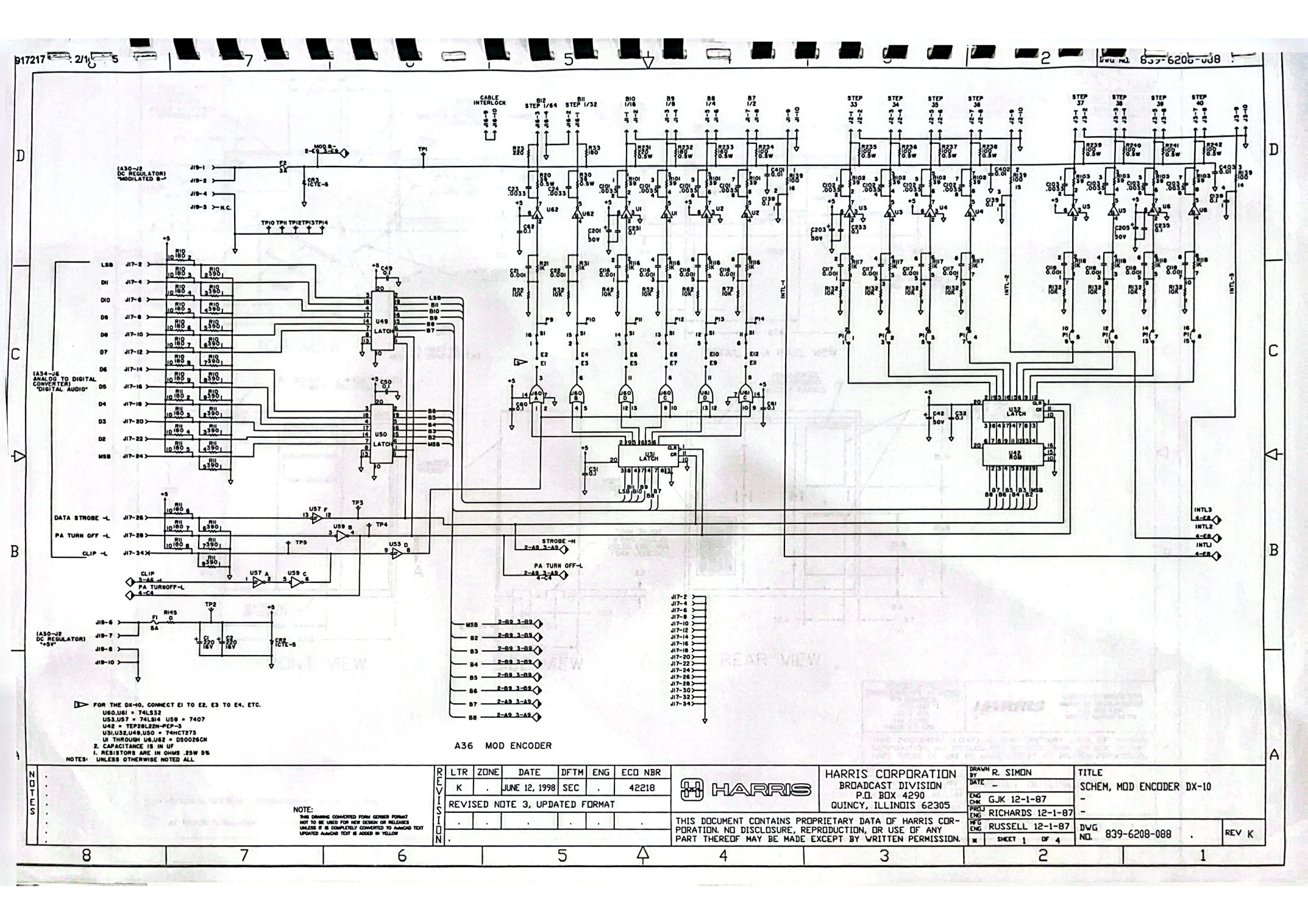
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BROADCAST COMMUNICATIONS
P.O. BOX 4290
QUINCY, ILLINOIS 62305

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DRAWN BY	R. SIMON
DATE	DEC, 1987
ENG CHK	R. RIGGS 2-88
PROJ ENG	N. RICHARDS
MFG ENG	.
C	SHEET 2 OF 2

TITLE
SCHEM, DX-10 OVERALL
3PH WYE

DWG NO. 839-6208-282. REV S



NOTES

NOTE:
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UPDATED AutoCAD TEXT IS ADDED IN YELLOW

REVISION	LTR	ZONE	DATE	DFTM	ENG	ECO NBR
	K	.	JUNE 12, 1998	SEC	.	42218
	REVISED NOTE 3, UPDATED FORMAT					

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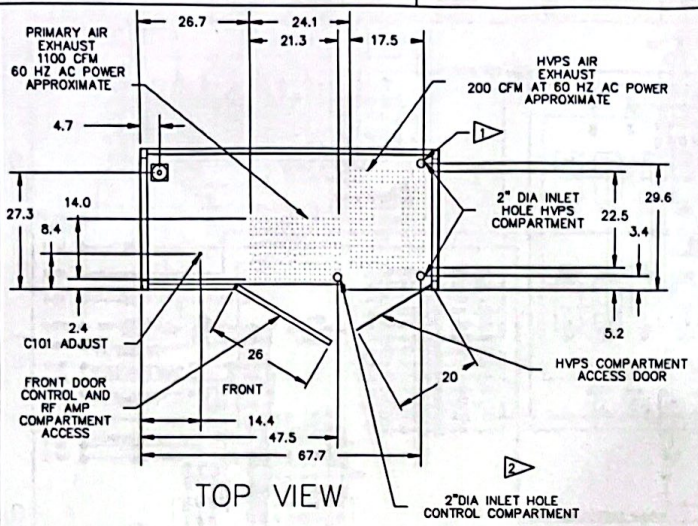
HARRIS CORPORATION
BROADCAST DIVISION
P.O. BOX 4290
QUINCY, ILLINOIS 62305

DRAWN BY	R. SIMON
DATE	-
ENG CHK	GJK 12-1-87
PROJ ENG	RICHARDS 12-1-87
MFG ENG	RUSSELL 12-1-87
	SHEET 1 OF 4

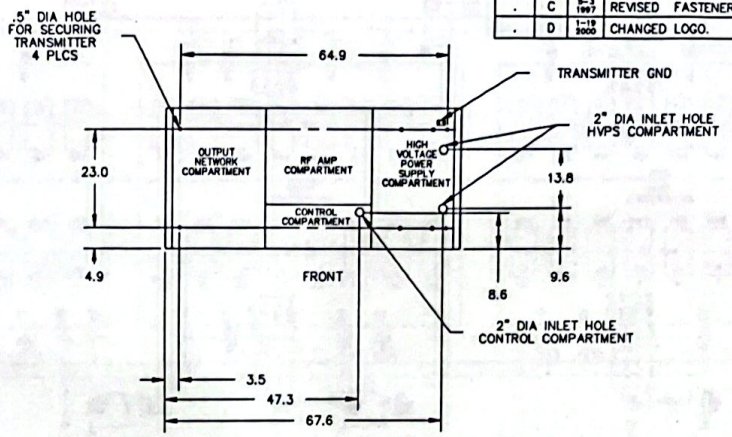
TITLE
SCHEM, MOD ENCODER DX-10
-
-

DWG NO. 839-6208-088 . REV K

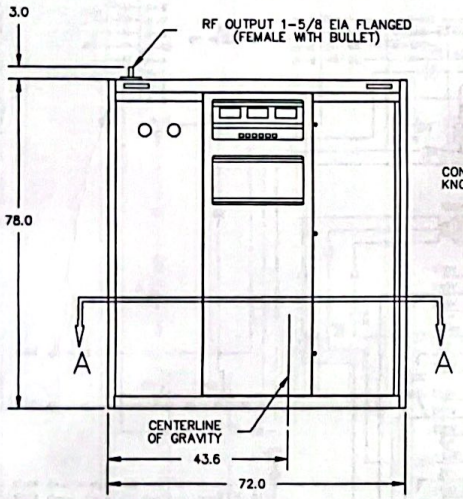
			839 6208 264			
.	B	89	REVISED SHEET 2	DR	.	35260
.	C	5-3 1997	REVISED FASTENERS, SHEET 1 & 2	SEC	SEC	41759
.	D	1-19 2000	CHANGED LOGO.	VRM	SJS	45659



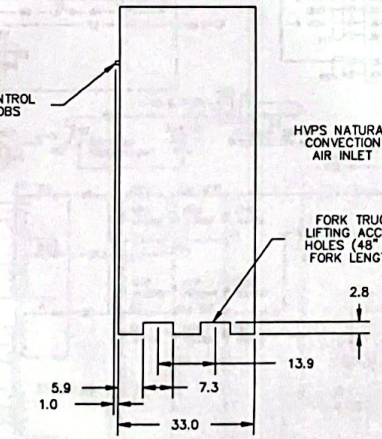
TOP VIEW



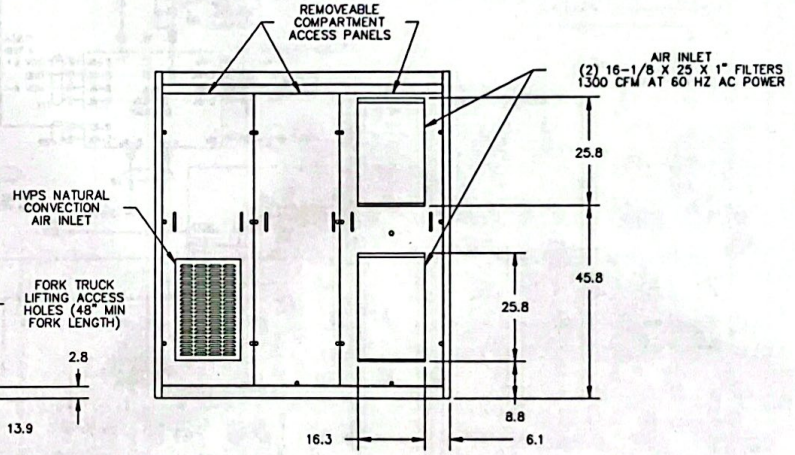
DETAIL A–A BASE VIEW



FRONT VIEW



SIDE VIEW



REAR VIEW

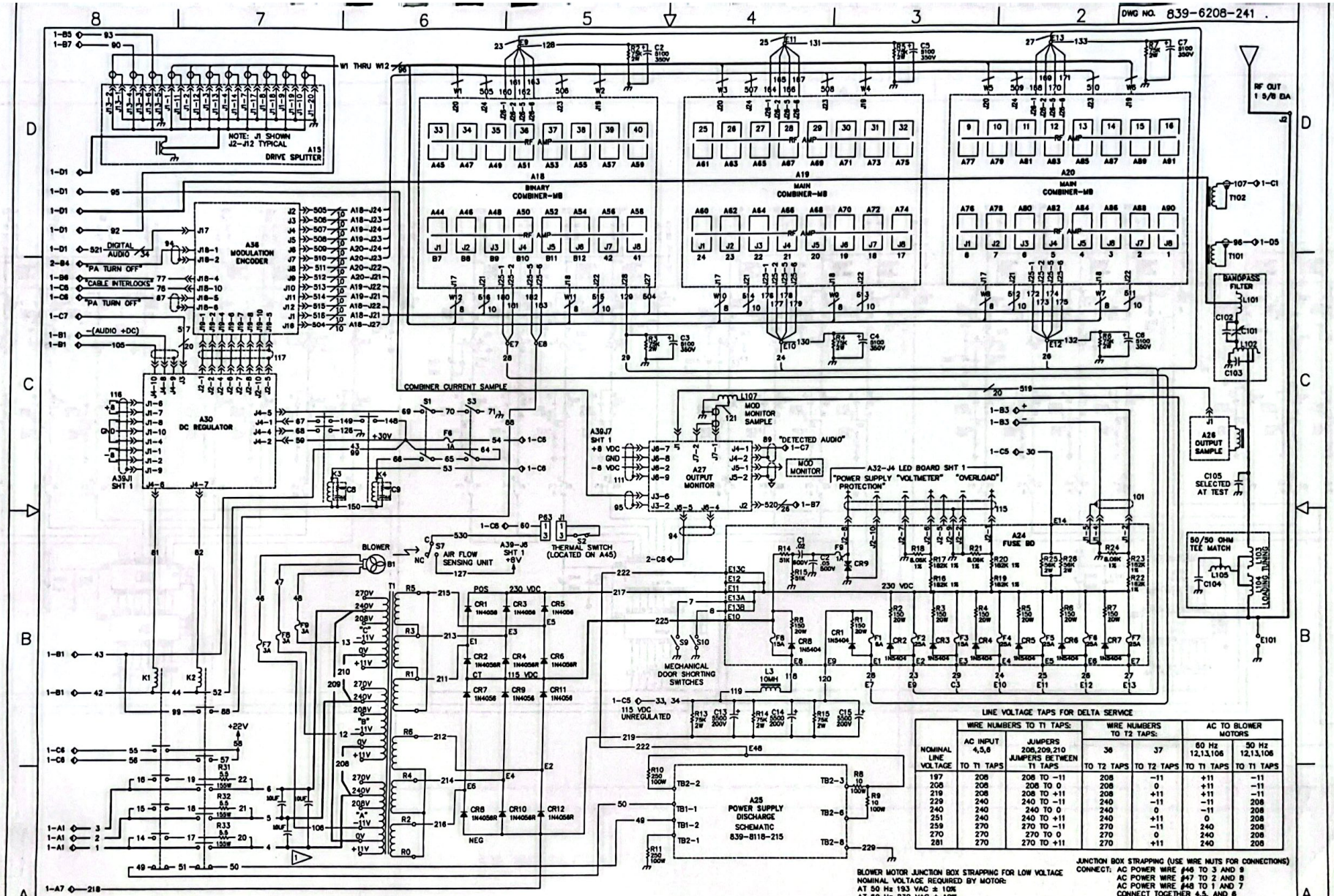
2 EXTERNAL INTERFACE TERMINATION 6" BELOW THIS INLET

1 AC POWER TERMINATION 40" BELOW THIS INLET

UNLESS NOTED: DIMENSIONS ARE IN INCHES TOLERANCES: .X ± .030 .XX ± .015 .XXX ± .005 ANGLES ± 1 DEG.	HARRIS CORPORATION BROADCAST COMMUNICATIONS P.O. BOX 4290 QUINCY, ILLINOIS 62305

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DR. BY CR 6-25-87	TITLE	
ENG. CHK. GJK 12/1/87	CABINET OUTLINE,DX10	
PROJ. ENG. MR 12/1/87	.	
MFG. ENG. MR 12/1/87	.	
MAT'L. . .	SHEET 1 OF 2	DWG. NO. 839 6208 264



LINE VOLTAGE TAPS FOR DELTA SERVICE

NOMINAL LINE VOLTAGE	WIRE NUMBERS TO T1 TAPS: AC INPUT 4,5,6 TO T1 TAPS	WIRE NUMBERS TO T1 TAPS: JUMPERS 208,209,210 JUMPERS BETWEEN T1 TAPS	WIRE NUMBERS TO T2 TAPS: 36 TO T2 TAPS	WIRE NUMBERS TO T2 TAPS: 37 TO T2 TAPS	AC TO BLOWER MOTORS 60 Hz 12,13,106 TO T1 TAPS	AC TO BLOWER MOTORS 50 Hz 12,13,106 TO T1 TAPS
197	208	208 TO -11	208	-11	+11	-11
208	208	208 TO 0	208	0	+11	-11
219	208	208 TO +11	208	+11	+11	-11
229	240	240 TO -11	240	-11	-11	208
240	240	240 TO 0	240	0	-11	208
251	240	240 TO +11	240	+11	0	208
259	270	270 TO -11	270	-11	240	208
270	270	270 TO 0	270	0	240	208
281	270	270 TO +11	270	+11	240	208

BLOWER MOTOR JUNCTION BOX STRAPPING FOR LOW VOLTAGE
NOMINAL VOLTAGE REQUIRED BY MOTOR:
AT 50 Hz 193 VAC ± 10%
AT 60 Hz 230 VAC ± 10%

JUNCTION BOX STRAPPING (USE WIRE NUTS FOR CONNECTIONS)
CONNECT: AC POWER WIRE #46 TO 3 AND 9
AC POWER WIRE #47 TO 2 AND 8
AC POWER WIRE #48 TO 1 AND 7
CONNECT TOGETHER 4,5, AND 6

NOTES
.1. CAPACITORS REQUIRED FOR EUROPEAN AC CONDUCTED EMISSIONS COMPLIANCE.

REVISION	LTR	ZONE	DATE	DFTM	ENG	ECO NBR
	X	.	AUG 11, 2000	SEC	SEC	46305
	MOVED SHIELD OF WIRE 95 FROM PIN 5 TO PIN 2 @ A27J3					
	Z	.	DEC 6, 2004	SEC	SEC	50683
	UPDATED REVISION PER ECO					

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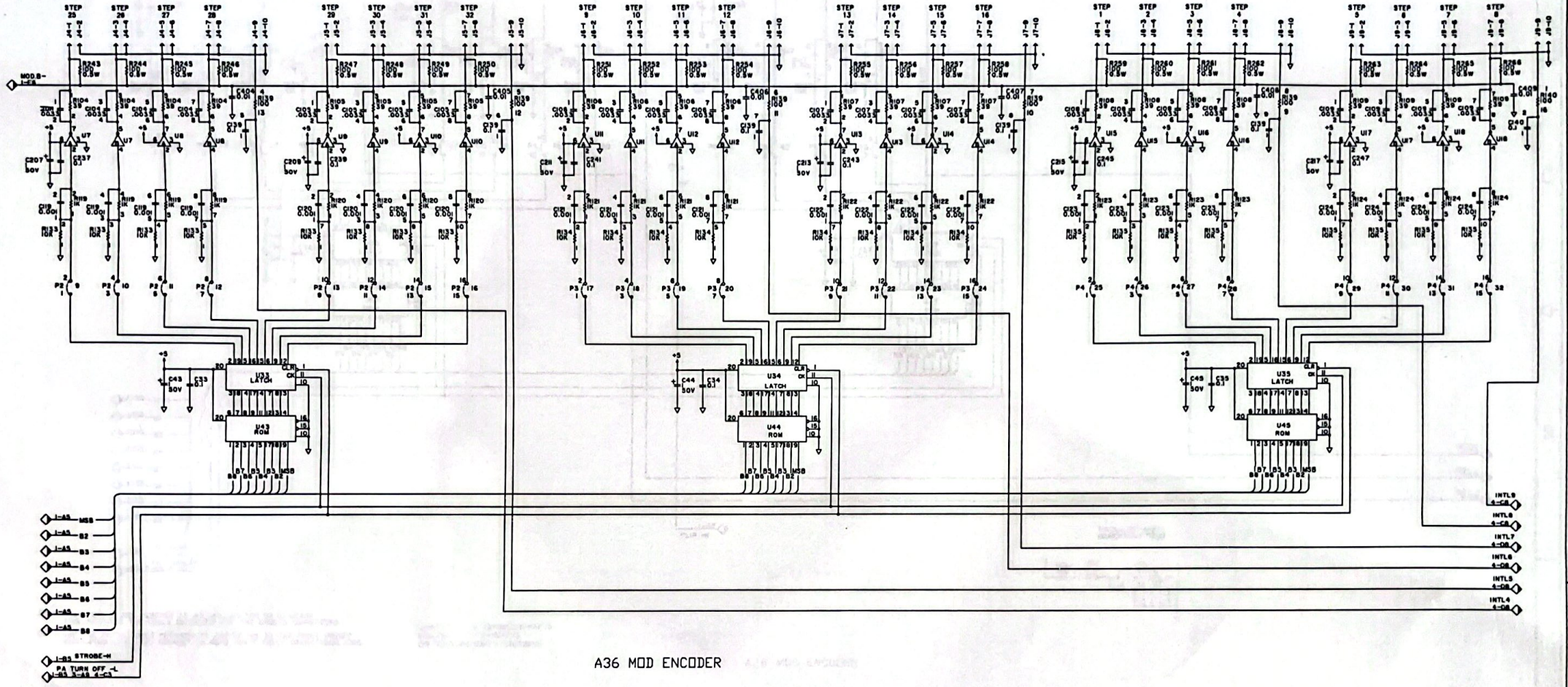
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DRAWN BY	DFG
DATE	11-13-92
ENG CHK	G.J. KELLER
PROJ ENG	N. RICHARDS
MFG ENG	M. RUSSELL
C	SHEET 2 OF 2

TITLE
SCHEM, DX-10 OVERALL
3PH DELTA

DWG NO. 839-6208-241 . REV Z

DWG NO. 839-6208-088 .



A36 MOD ENCODER

NOTES

U43,U44,U45 = TBP8L22N-PEP-3
U33,U34,U45 = 74HCT273
U7 THROUGH U16 = DS0026CN

NOTE:
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UPGRADED AutoCAD TEXT IS ADDED IN YELLOW

REVISION	LTR	ZONE	DATE	DFTM	ENG	ECO NBR
	K	.	JUNE 12, 1998	SEC	.	42218
	UPDATED FORMAT					

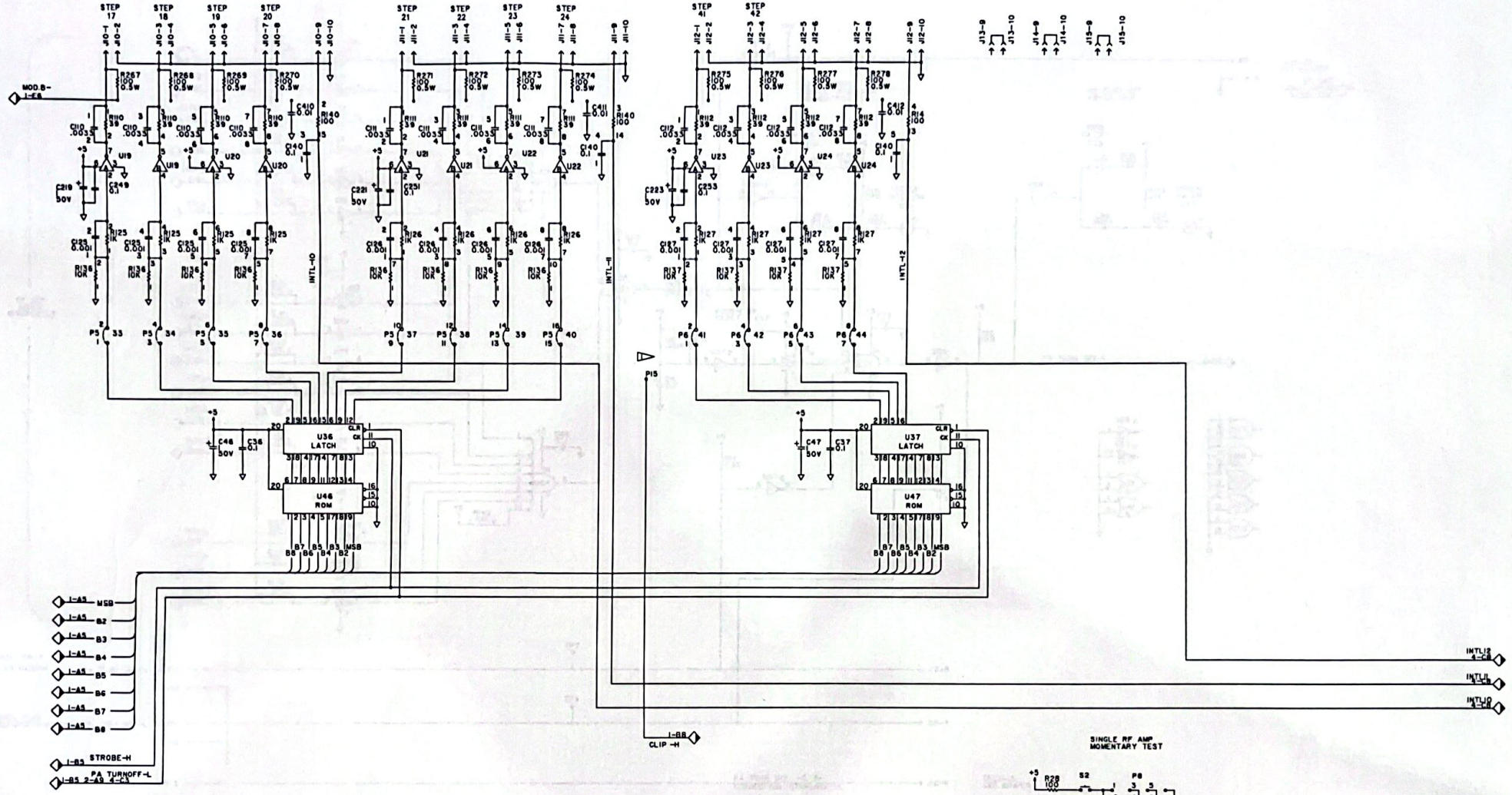
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BROADCAST DIVISION
P.O. BOX 4290
QUINCY, ILLINOIS 62305

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DRAWN BY	R. SIMON
DATE	-
ENG CHK	GJK 12-1-87
PROJ ENG	RICHARDS 12-1-87
MFG ENG	RUSSELL 12-1-87
SHEET	2 OF 4

TITLE
SCHEM, MOD ENCODER DX-10
-
-

DWG NO. 839-6208-088 . REV K



PIN 9 AND 10 ARE JUMPRED AT J13, J14, J15 FOR DX 10 USAGE. THIS DEFEATES THE CABLE INTERLOCK FOR THE UNUSED CONNECTORS

USE THE PATCH CABLE PROVIDED TO JUMPER P15 TO THE FIRST UNUSED MODULATOR LINE. I.E. CONNECT TO P6-5 FOR A FULLY OPERATIONAL DX10.

U46,U47 = TBP28L22N-PEP-3
U36,U37 = 74HCT273
UI9 THROUGH U30 = DS0026CN

A36 MOD ENCODER

NOTES

NOTE:
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REVISION	LTR	ZONE	DATE	DFTM	ENG	ECO NBR
	K	.	JUNE 12, 1998	SEC	.	42218
	UPDATED FORMAT					

HARRIS

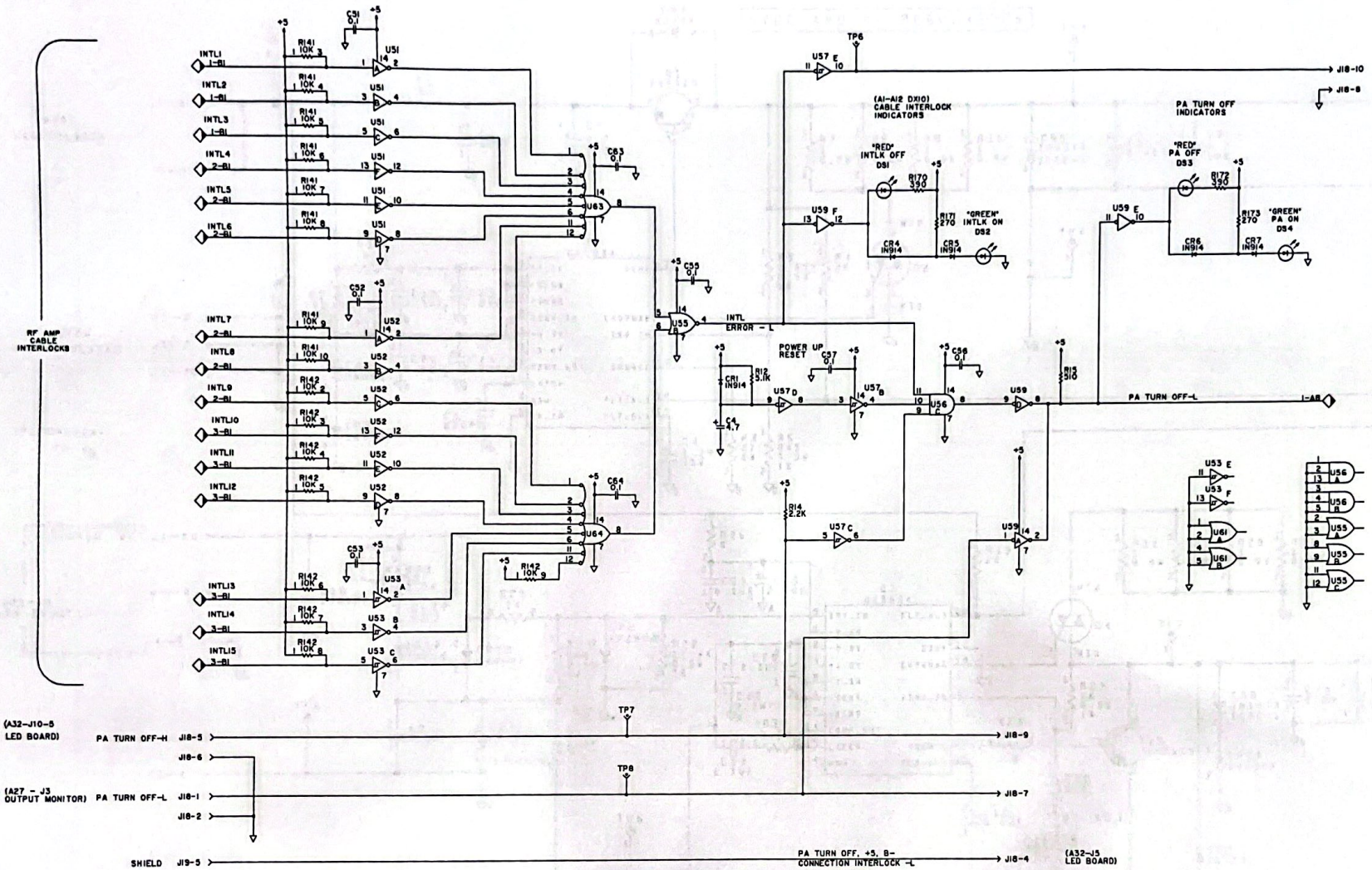
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BROADCAST DIVISION
P.O. BOX 4290
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DRAWN BY	R. SIMON
DATE	-
ENG CHK	GJK 12-1-87
PROJ ENG	RICHARDS 12-1-87
MFG ENG	RUSSELL 12-1-87
	SHEET 3 OF 4

TITLE
SCHEM, MOD ENCODER DX-10
-
-

DWG NO. 839-6208-088 .
REV K



A36 MOD ENCODER

U63, U64 = 74LS30
U59 = 7407 U61 = 74LS32
U53,U55 = 74LS02 U56 = 74LS11
U51,U52,U53,U57 = 74LS14N

NOTES

NOTE:
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REVISION

LTR	ZONE	DATE	DFTM	ENG	ECO NBR
K	.	JUNE 12, 1998	SEC	.	42218
UPDATED FORMAT					

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

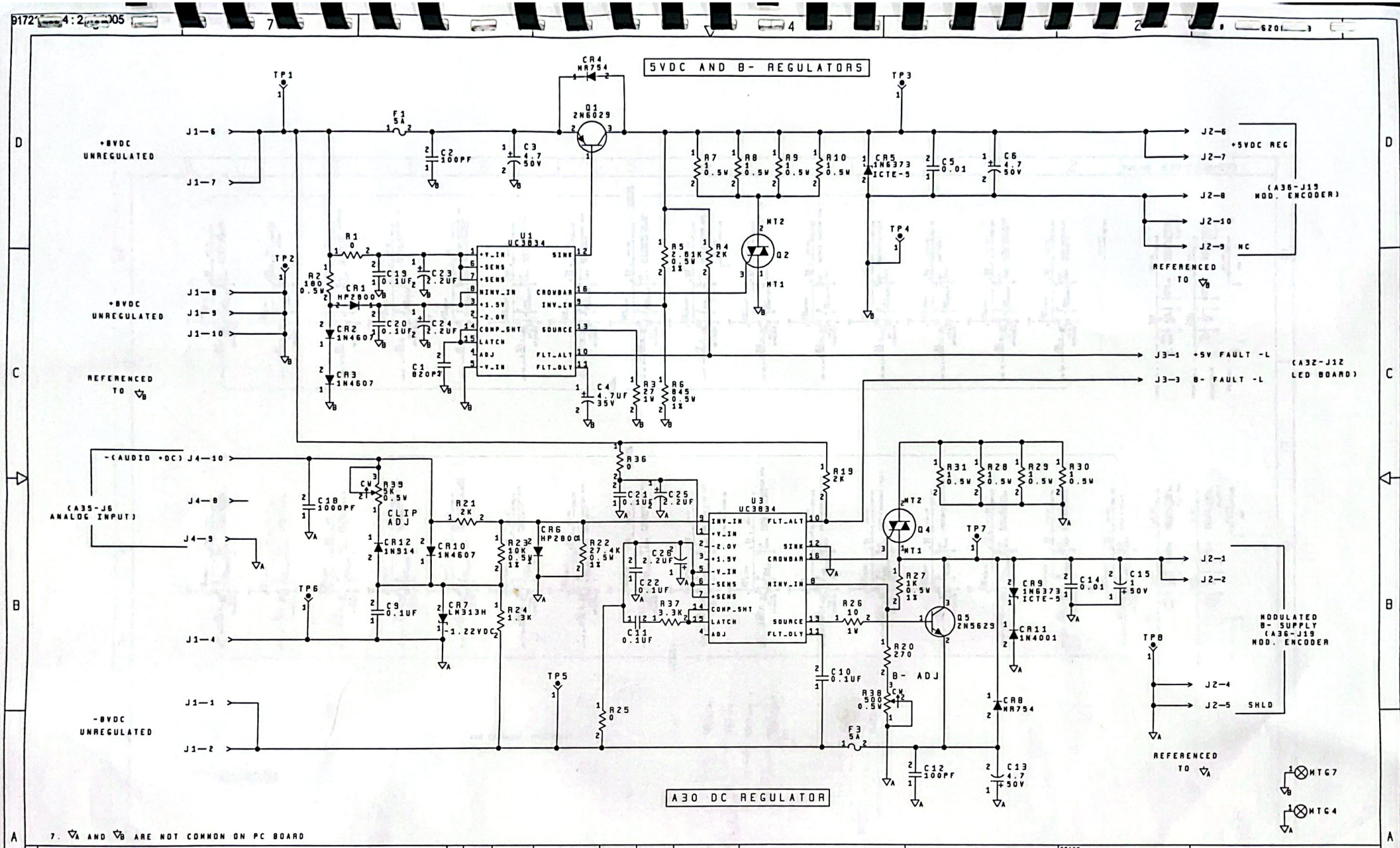
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DRAWN BY	R. SIMON
DATE	-
ENG CHK	GJK 12-1-87
PROJ ENG	RICHARDS 12-1-87
MFG ENG	RUSSELL 12-1-87
SHEET	4 OF 4

TITLE
SCHEM, MOD ENCODER DX-10
-
-

DWG NO. 839-6208-088 .

REV K



7. ⏚A AND ⏚B ARE NOT COMMON ON PC BOARD

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

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

5. (Z/A1) SHEET NUMBER ZONE — ■ CONTINUATION SYMBOL

REVISION	LTR	ZONE	DATE	DFTM	ENG	ECO NUM
	R		7-13-00	RLB	RLB	46172
	GROUND 2 MOUTING HOLES AND PIN 9 OF J1					
	P		3-21-00	JPK		45866
	DEL NOTE 8, R6 WAS 1K, R5 WAS 2.37K					

HARRIS

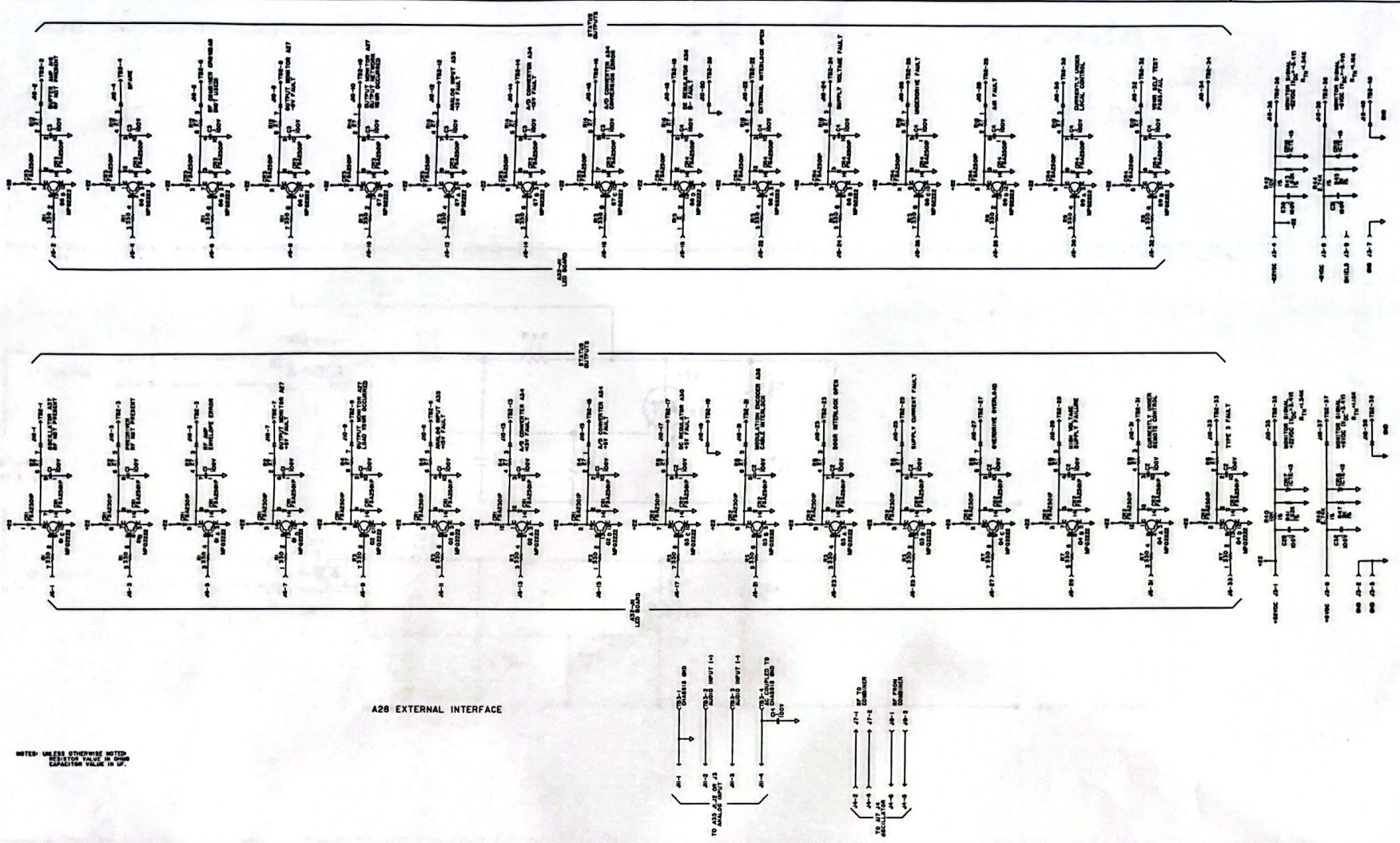
HARRIS CORPORATION
BROADCAST SYSTEMS
P.O. BOX 4290
QUINCY, ILLINOIS 62305

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DRAWN BY	B.BEEVER
DATE	8-85
ENG CHK	SIMON 11-87
PROJ ENG	N.A. 12-87
MFG ENG	N.A. 12-87
D	SHEET 1 OF 2

TITLE: SCHEM. DC REGULATOR

DWG # 839-6208-089 REV A



NOTES: UNLESS OTHERWISE NOTED
RESISTOR VALUE IN OHMS
CAPACITOR VALUE IN UF.

NOTES
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REVISION	LTR	ZONE	DATE	DFTM	ENG	ECO NBR
	E1	.	JUNE 13, 1998	SEC	.	DOC CHG
	UPDATED FORMAT					
	E2	.	02-18-99	PJF	.	DOC-CHG
	MOVED GERBER CONVERSION NOTE TO LYR NOTES					

HARRIS

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

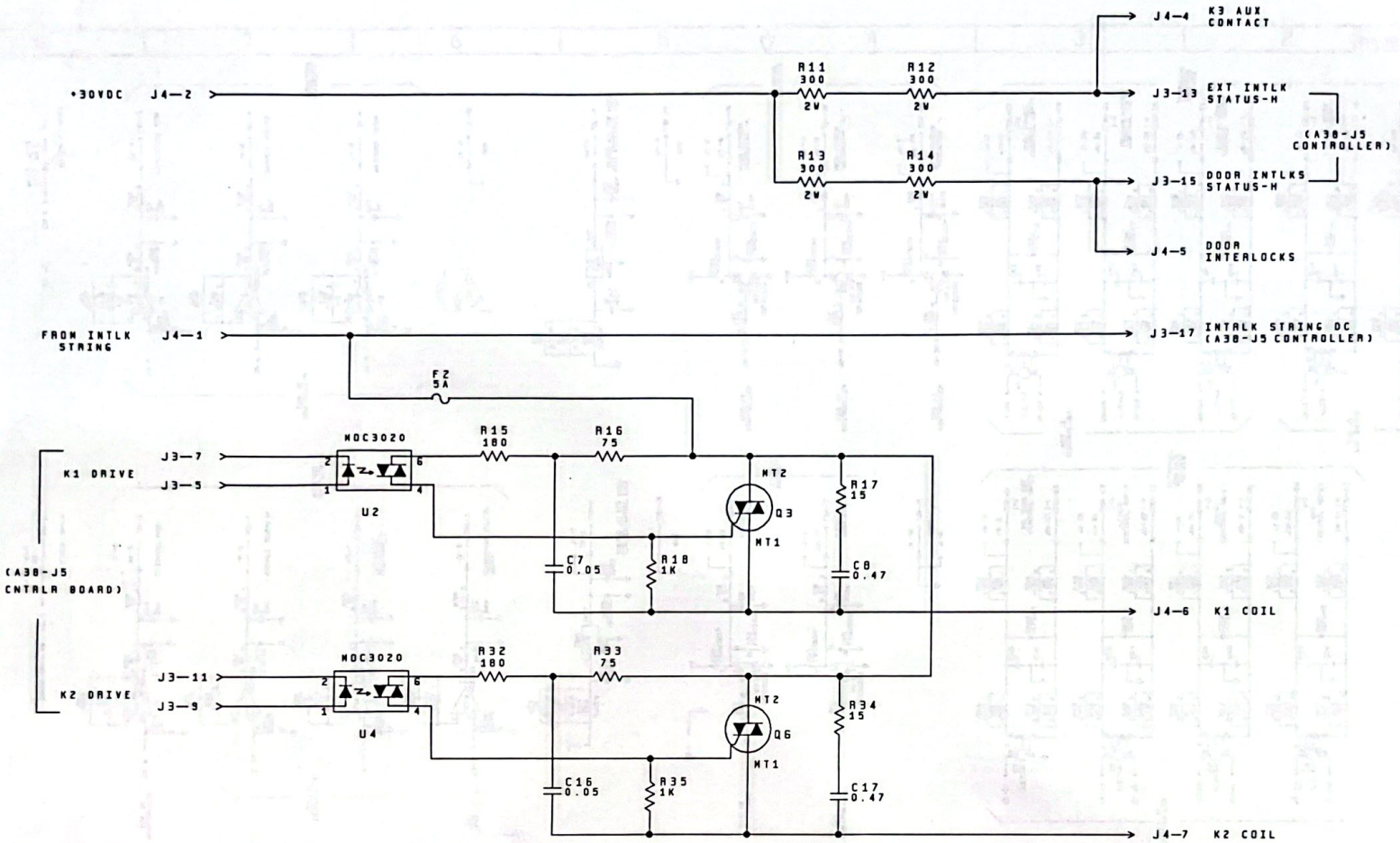
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DRAWN BY	A BUSS
DATE	1-27-86
ENG CHK	GJK 12-1-87
PROJ ENG	RICHARDS 12-1-87
MFG ENG	RUSSELL 12-1-87
SHEET	1 OF 3

TITLE
SCHEM, EXTERNAL INTERFACE
-
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DWG NO. 839-6208-099. REV E2

CONTACTOR DRIVERS AND INTERLOCK STATUS



NOTES

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

UNLESS OTHERWISE NOTED:

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

REVISION	LTR	ZONE	DATE	DFTM	ENG	ECO NUM
	R		7-13-00	RLB	RLB	46172
	REVISE SHEET 1					
	P		3-21-00	JPK	.	45866
	REVISE SHEET 1					

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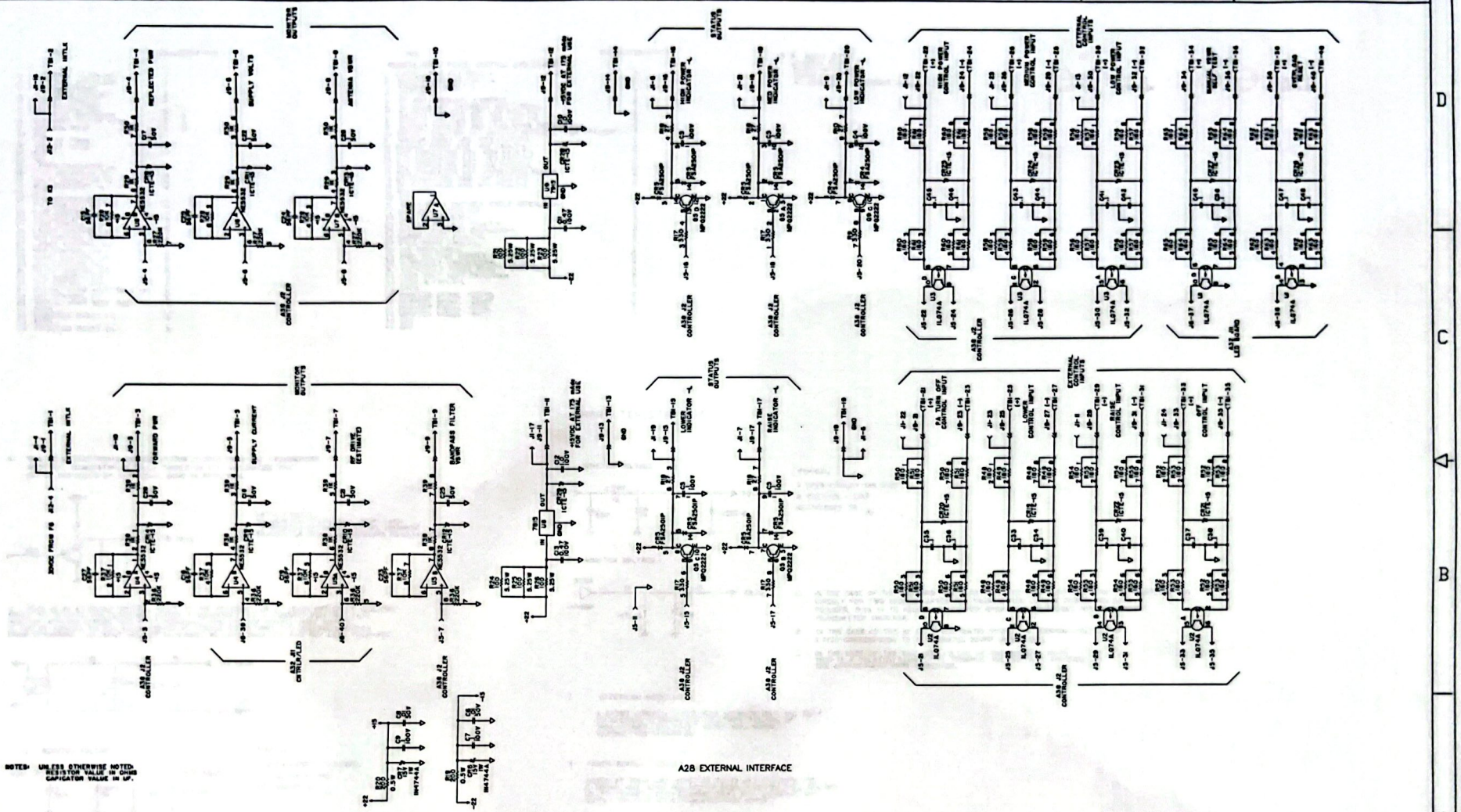
HARRIS CORPORATION
BROADCAST SYSTEMS
P.O. BOX 4290
QUINCY, ILLINOIS 62305

DRAWN BY	B.BEEVER
DATE	8-85
ENG CHK	SIMON 11-87
PROJ ENG	M.A. 12-87
MFG ENG	M.A. 12-87
D	SHEET 2 OF 2

TITLE: SCHEM, DC REGULATOR

DWG # 839-6208-089 REV A

DWG NO. 839-6208-099 .



NOTES: UNLESS OTHERWISE NOTED:
RESISTOR VALUE IN OHMS
CAPACITOR VALUE IN UF.

NOTES
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REVISION	LTR	ZONE	DATE	DFTM	ENG	ECO NBR
	E1	.	JUNE 13, 1998	SEC	.	DOC CHG
	UPDATED FORMAT					
	E2	.	02-18-99	PJF	.	DOC-CHG
	MOVED GERBER CONVERSION NOTE TO LYR NOTES					

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

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DRAWN BY	A BUSS
DATE	1-27-86
ENG CHK	GJK 12-1-87
PROJ ENG	RICHARDS 12-1-87
MFG ENG	RUSSELL 12-1-87
SHEET	2 OF 3

TITLE
SCHEM, EXTERNAL INTERFACE
-
-

DWG NO. 839-6208-099. REV E2

TB1		CHARACTERISTICS	
1	EXTERNAL INTERLOCK	F	
2	EXTERNAL INTERLOCK	F	
3	FORWARD POWER	E	1
4	REFELCTED POWER	E	
5	SUPPLY CURRENT	E	
6	SUPPLY VOLTAGE	E	
7	RF DRIVE (ESTIMATE)	E	2
8	BANDPASS FILTER VSWR	E	3
9	ANTENNA VSWR	E	3
10	GND		
11	+15V AT 175MA	B	
12	-15V AT 175MA	B	
13	GND		
14	GND		
15	LOWER INDICATOR -L	A	
16	HIGH INDICATOR -L	A	
17	RAISE INDICATOR -L	A	
18	MED INDICATOR -L	A	
19	GND		
20	LOW INDICATOR -L	A	
21	PA TURN OFF (+)	B	
22	HIGH CONTROL (+)	B	
23	PA TURN OFF (-)	B	
24	HIGH CONTROL (-)	B	
25	LOWER CONTROL (+)	B	
26	MED CONTROL (+)	B	
27	LOWER CONTROL (-)	B	
28	MED CONTROL (-)	B	
29	RAISE CONTROL (+)	B	
30	LOW CONTROL (+)	B	
31	RAISE CONTROL (-)	B	
32	LOW CONTROL (-)	B	
33	OFF CONTROL (+)	B	
34	MANUAL VSWR SELF TEST (+)	B	
35	OFF CONTROL (-)	B	
36	MONUAL VSWR SELF TEST (-)	B	
37	OPEN		
38	OVERLOAD RESET (+)	B	
39	OPEN		
40	OVERLOAD RESET (-)	B	

TB2	REMOTE MIMIC PANEL CONTROL AND STATUS	CHARACTERISTICS
1	OSCILLATOR A37 FALT-L	A
2	BUFFER AMP A16 FALT-L	A
3	PREDRIVER FAULT-L	A
4	NOT USED	A
5	RF AMP ENVELOPE ERROR-L	A
6	RF COMBINER CROWBAR NOT USED-L	A
7	OUTPUT MONITOR A27 +5V FAULT-L	A
8	OUTPUT MONITOR A27 -5V FAULT-L	A
9	OUTPUT MONITOR A27 LOAD VSWR OCCURRED-L	A
10	OUTPUT MONITOR A27 OUTPUT NETWORK VSWR OCCURRED-L	A
11	ANALOG INPUT A35 +15V FAULT-L	A
12	ANALOG INPUT A35 -15V FAULT-L	A
13	A/D CONVERTER A34 +15V FAULT-L	A
14	A/D CONVERTER A34 -15V FAULT-L	A
15	A/D CONVERTER A34 +5V FAULT-L	A
16	A/D CONVERTER A34 CONVERSION ERROR	A
17	DC REGULATOR A30 +5V FAULT-L	A
18	DC REGULATOR A30 B-Y FAULT-L	A
19	GND	
20	GND	
21	MODULATION ENCODER CABLE INTERLOCK-L	A
22	EXTERNAL INTERLOCK-L	A
23	DOOR INTERLOCK-L	A
24	SUPPLY VOLTAGE FAULT-L	A
25	SUPPLY CURRENT OVERLOAD-L	A
26	UNDER-DRIVE FAULT-L	A
27	OVER-DRIVE FAULT-L	A
28	AIR OVERLOAD-L	A
29	HIGH VOLTAGE SUPPLY FAILURE-L	A
30	CURRENTLY UNDER LOCAL CONTROL-L	A
31	CURRENTLY UNDER REMOTE CONTROL-L	A
32	VSWR SELF TEST PASS/FAIL	A
33	TYPE 3 FAULT-L	A
34	OPEN	
35	MONITOR SIGNAL +22VDC	C
36	MONITOR SIGNAL -22VDC	C
37	MONITOR SIGNAL +8VDC	D
38	MONITOR SIGNAL -8VDC	D
39	GND	
40	GND	

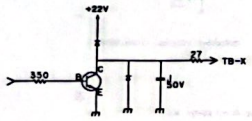
TB 3 AUDIO INPUT
1 CHASSIS GND
2 AUDIO INPUT (+)
3 AUDIO INPUT (-)
4 AC COUPLED TO CHASSIS GND

J7 → RF TO COMBINER

J8 → RF FROM COMBINER

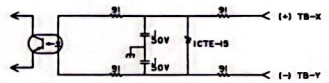
CHARACTERISTIC KEY

A THIS IS AN ELECTRONIC SWITCH, STATUS OUTPUT FROM THE TRANSMITTER. WHEN THE TRANSISTOR IS FULLY TURNED ON (I.E. SATURATED) THE ACTION DESCRIBED BY THE SIGNAL NAME IS HAPPENING.

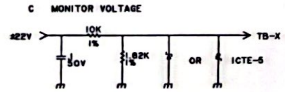


LSTTL FANOUT 12
TRANSISTOR BREAKDOWN VCEO =40V
TRANSISTOR CURRENT IOL,MAX =100MADC
TRANSISTOR POWER DISSIPATION PD,MAX=300MW

B THIS IS AN EXTENDED CONTROL INPUT TO THE TRANSMITTER. IT IS AN OPTICALLY ISOLATED INPUT. TO INITIATE THE DESCRIBED ACTION A MOMENTARY (I.E. > 100MSEC) VOLTAGE (+,-) MUST BE APPLIED ACROSS THE INPUT TERMINALS. THE VOLTAGE SOURCE MUST SUPPLY 15 VDC AT 40MADC. DO NOT EXCEED 29VDC AT 77MADC. TO PREVENT THE DESCRIBED ACTION FROM OCCURRING, THE INPUT VOLTAGE (+,-) MUST BE LESS THAN 1VDC BUT NOT LESS THAN-1VDC.

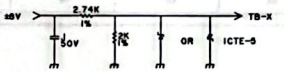


C MONITOR VOLTAGE



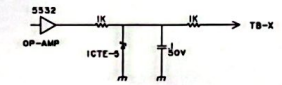
TYPICAL:
V OPEN CIRCUIT =±3.4VDC
R THEVININ = 1.54K
REFERENCED TO ⏚

D MONITOR VOLTAGE



TYPICAL:
V OPEN CIRCUIT =±3.4VDC
R THEVININ = 1.16K
REFERENCED TO ⏚

E MONITOR VOLTAGE



1. IN THE CASE OF THE FORWARD POWER OUTPUT, THE SIGNAL IS HELD HIGH BY AN INTEGRATING CIRCUIT FOR TWO SECONDS AFTER THE TRANSMITTER OUTPUT POWER HAS BEEN REDUCED. THIS IS TO ALLOW FOR PROPER OPERATION WHEN USED WITH A HARRIS TRANSMITTER COMBINER.
2. IN THE CASE OF THE RF DRIVE (ESTIMATE) OUTPUT, A TERMINAL VOLTAGE OF 2.7VDC CORRESPONDS TO A ESTIMATED 25VPP DRIVE LEVEL.
3. IN THE CASE OF THE BANDPASS FILTER OR THE ANTENNA VSWR, THIS IS A RELATIVE SIGNAL. THE TERMINAL VOLTAGE WILL INCREASE AS THE APPROPRIATE VSWR INCREASES.

F EXTERNIAL INTERLOCK

A SHORT CIRCUIT IS REQUIRED BETWEEN TBI-1 AND TBI-2 TO OPERATE A 24VAC-2VA RELAY(K3). FAILURE OF THIS CIRCUIT IS A FAULT WHICH WILL INHIBIT TRANSMITTER OPERATION.

G POWER SUPPLY OUTPUTS

+15VDC AT TBI-11 AND -15VDC AT TBI-12 ARE PROVIDED FOR EXTERNAL USE. EACH VOLTAGE IS REGULATED AND WILL DELIVER UP TO 175MADC. LOADING ABOVE 175MA WILL DECREASE THE OUTPUT VOLTAGE BY A PROPORTIONATE AMOUNT.

NOTES
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REVISION	LTR	ZONE	DATE	DFTM	ENG	ECO NBR
	E1	.	JUNE 13, 1998	SEC	.	DOC CHG
	UPDATED FORMAT					
	E2	.	02-19-99	PJF	.	DOC-CHG
	MOVED GERBER CONVERSION NOTE TO LYR NOTES					

HARRIS

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

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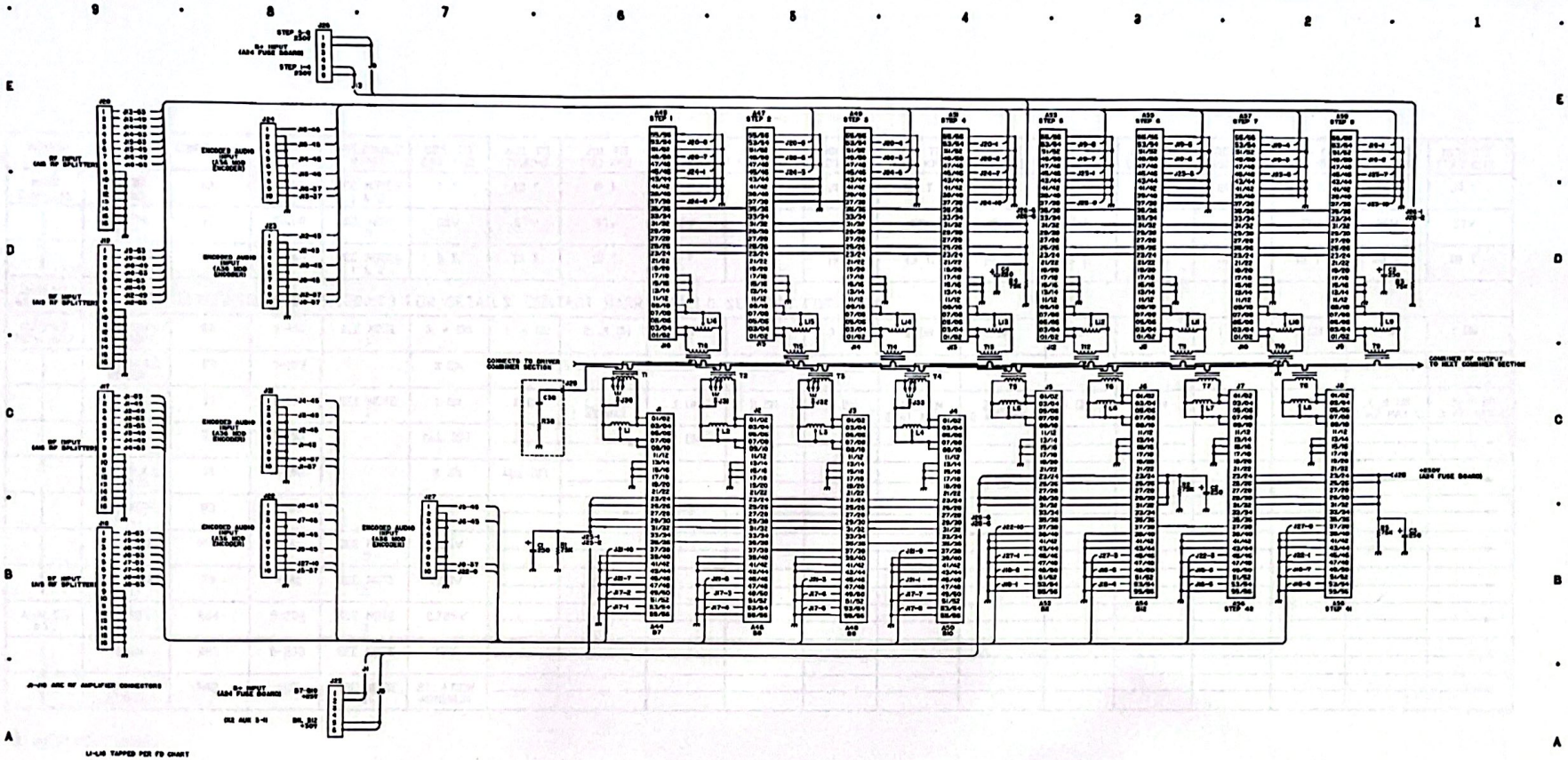
DRAWN BY	A BUSS
DATE	1-27-86
ENG CHK	GJK 12-1-87
PROJ ENG	RICHARDS 12-1-87
MFG ENG	RUSSELL 12-1-87
SHEET	3 OF 3

TITLE
SCHEM, EXTERNAL INTERFACE
-
-

DWG NO. 839-6208-099. REV E2

REFERENCE DOCUMENTS	
PC. BOARD	NET LIST

DWG. NO. 839 6208 268					
LTR	DATE	REVISION	DFTR	ENG	ECN
A	1-29 89	MOVE PHASING DOT ON T6	RLB		34754



CAD-CAM FILED SCH.ES.J96208.268. .01

HARRIS

ALL DIM. IN INCHES 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 R SIMON	TITLE: SCHEM, COMBINER MB, BINARY
CHKD.	
M.E.	
E.E.	
PROJ. ENG.	
MFG.	REF DWG.
NEXT ASSY.	MAT'L.
USED ON	FIN.
	SCALE
	SHEET 1 OF 1
	DWG. NO. 839 6208 268

BOARD	FUNCTION	COMPONENT	REF. PARAG.	APPLICABLE NOTES	525 TO 630 KHZ	631 TO 700KHZ	701 TO 790 KHZ	791 TO 820 KHZ	821 TO 900 KHZ	901 TO 1000 KHZ	1001 TO 1100 KHZ	1101 TO 1200 KHZ	1201 TO 1250 KHZ	1251 TO 1300 KHZ	1301 TO 1400 KHZ	1401 TO 1500 KHZ	1501 TO 1600 KHZ	1601 TO 1720 KHZ
MAIN CHASSIS	PREDR. TUNE	L1	5-167	SEE NOTES 1 & 2	7 T.	12 T.	11 T.	15 T.	18 T.	21 T.	24 T.	26 T.	27 T.	27 T.	28 T.	29 T.	29 T.	30 T.
↓	PREDR. AMPL.	R1	5-168	SEE NOTE 3	58V	57V	55V	52V	51V	49V	47V	45V	43V	42V	40V	37V	36V	33V
↓	DRIVER TUNE	L2	5-169	SEE NOTES 1 & 2	9 T.	13 T.	18 T.	8 T.	13 T.	19 T.	13 T.	19 T.	23 T.	27 T.	31 T.	18 T.	23 T.	28 T.
OUTPUT NETWORK	SEE 8171280101 AND 8171280103 FOR DETAILS. CONTACT HARRIS FIELD SERVICE FOR COPY.																	
OUTPUT MON. A27	ANT. NULL PHASE	S6	5-190	SEE NOTE 1	3, 4 ON	1, 4 ON	2, 3 ON	4 ON	3 ON	3 ON	2 ON	2 ON	2 ON	2 ON	1 ON	1 ON	1 ON	1 ON
↓	ANT. NULL RESON.	S9	5-189		3 ON	ALL OFF	—				→	1 ON	—					→
↓	BPF NULL PHASE	S7	5-193	SEE NOTE 1	1 ON	2 ON	1, 2 ON 1 AT MAX L	3 ON	3 ON	3 ON	2, 3 ON 2 AT MAX L	2, 3 ON 2 AT MAX L	4 ON	4 ON	4 ON	4 ON	3, 4 ON 3 AT MAX L	3, 4 ON 3 AT MAX L
↓	BPF NULL AMP.	S2	5-193		ALL OFF	—	→	2 ON	—					→	1 ON	—		→
↓	BPF NULL RESON.	S1	5-192		3 ON	ALL OFF	—				→	1 ON	—					→
↓	PWR.MTR. BAL.	P3	H-61		1-2	—	→	1-3	—									→
↓	ANT.VSWR TRIP	R15	H-41	SEE NOTE 5	2.25V	—												→
↓	BPF VSWR TRIP	R9	H-41	SEE NOTE 5	2.30V	—												→
ANALOG A35	OFFSET	R84	5-234	SEE NOTE 1	2.725V	—												→
↓	GAIN	R85	5-233	SEE NOTE 5	MAX	—												→
↓	DITHER LEVEL	R43	J-75	SEE NOTE 1	2T. FROM MINIMUM	—												→

8. ACTIVE TURNS

5. PARAMETER IS NOT FREQUENCY DEPENDENT

3. READ PREDRIVER V. ON RF MULTIMETER
2. TURNS COUNTED FROM CCW STOP
1. THE VALUE LISTED IS A STARTING POINT ONLY.
   THE PARAMETER MUST BE ADJUSTED PER THE REF. PARAG.

NOTES:

REVISION	LTR	ZONE	DATE	DFTM	ENG	ECO NBR
	E	.	11/6/03	TLH	TLH	49774
	REPLACED OUTPUT NETWORK INFO					
	F	.	DEC 10, 2004	SEC	SEC	50683
	REVISED SHEET 3					

HARRIS

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

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DRAWN BY	GLOVER
DATE	FEB 1988
ENG CHK	GJK 3-88
PROJ ENG	NR 3-88
MFG ENG	-
C	SHEET 1 OF 3

TITLE
TUNING CHART, DX-10
-
-

DWG NO. 839-6208-285. REV F

BOARD	FUNCTION	COMPONENT	REF. PARAG.	APPLICABLE NOTES	525 TO 630 KHZ	631 TO 700KHZ	701 TO 790 KHZ	791 TO 820 KHZ	821 TO 900 KHZ	901 TO 1000 KHZ	1001 TO 1100 KHZ	1101 TO 1200 KHZ	1201 TO 1250 KHZ	1251 TO 1300 KHZ	1301 TO 1400 KHZ	1401 TO 1500 KHZ	1501 TO 1600 KHZ	1601 TO 1720 KHZ
OSC. A17-002	VSWR FEEDBK.	S1	5-213	SEE NOTE 1	1,3,4 ON	1,2,4 ON	2,4 ON	1,4 ON	2,3 ON	1,3 ON	3 ON	3 ON	3 ON	3 ON	1,2 ON	1,2 ON	1,2 ON	2 ON
	XTAL SELECT	P1 & P6	5-164	SEE NOTE 2	1-2 & 1-2 OR 1-3 & 1-3	—	—	—	—	—	—	—	—	—	—	—	—	—
	XTAL DIVIDE	P2	5-164		1-3	—	—	—	—	—	—	—	—	1-2	—	—	—	—
	INT. OSC. OR EXT.	P3	A-18	SEE NOTE 2	1-3	—	—	—	—	—	—	—	—	—	—	—	—	—
	SINGLE OR COMB.	P4	A-24	SEE NOTE 2	1-3	—	—	—	—	—	—	—	—	—	—	—	—	—
OSC. A17 -004	VSWR FEEDBK.	S1	5-213	SEE NOTE 1	1,3,4 ON	1,2,4 ON	2,4 ON	1,4 ON	2,3 ON	1,3 ON	3 ON	3 ON	3 ON	3 ON	1,2 ON	1,2 ON	1,2 ON	2 ON
	XTAL SELECT	P1 & P6	5-164	SEE NOTE 2	1-2 & 1-2 OR 1-3 & 1-3	—	—	—	—	—	—	—	—	—	—	—	—	—
	XTAL DIVIDE	P2	5-164		1-3	—	—	—	—	—	—	—	—	1-2	—	—	—	—
	INT/EXT OR AUTO	JP4, JP5, JP6			—	—	—	—	—	—	—	—	—	—	—	—	—	—
	SINGLE OR COMB.	P4	A-24	SEE NOTE 2	1-3	—	—	—	—	—	—	—	—	—	—	—	—	—
	CW DECTECT	R64	5-213	SEE NOTE	23K	20K	18K	16.5K	15K	14K	12.5K	11K	10.5K	10.5K	9.75K	8.5K	8.5K	7.9K
SW. BRD. A31	FWD. PWR. CAL.	R1	R-22	SEE NOTES 1 & 4	5.0K OHM	9.0K OHM	16.6K OHM	18.2K OHM	19.5K OHM	21.3K OHM	23.0K OHM	23.7K OHM	24.8K OHM	25.1K OHM	25.7K OHM	26.0K OHM	26.2K OHM	26.3K OHM
	REV. PWR. CAL.	R2	R-22	SEE NOTES 1 & 5	15.7K OHM	18.9K OHM	21.3K OHM	23.0K OHM	24.0K OHM	25.6K OHM	26.8K OHM	27.9K OHM	28.5K OHM	28.8K OHM	29.0K OHM	29.5K OHM	29.8K OHM	29.9K OHM
PA	EFFICENCY COILS	A19L1-L16 A20L1-L16 A18L7-L16		SEE NOTE 6	SEE NOTE 9 65T	—	—	—	50 T.	—	41 T.	—	—	29 T.	—	21 T.	—	14 T.
	1/2 STEP B7	A18L1	5-218	SEE NOTES 1, 6 & 7	64 T.	64 T.	58 T.	53 T.	49 T.	42 T.	35 T.	31 T.	29 T.	28 T.	25 T.	23 T.	22 T.	14 T.
	1/4 STEP B8	A18L2	5-218	SEE NOTES 1, 6 & 7	64 T.	53 T.	46 T.	41 T.	37 T.	31 T.	27 T.	23 T.	22 T.	21 T.	20 T.	18 T.	18 T.	12 T.
	1/8 STEP B9	A18L3	5-218	SEE NOTES 1, 6 & 7	64 T.	50 T.	42 T.	38 T.	33 T.	28 T.	23 T.	20 T.	19 T.	18 T.	16 T.	15 T.	14 T.	12 T.
	1/16 STEP B10	A18L4	5-218	SEE NOTES 1, 6 & 7	52 T.	42 T.	35 T.	31 T.	28 T.	23 T.	20 T.	17 T.	15 T.	14 T.	13 T.	11 T.	11 T.	11 T.
	1/32 STEP B11	A18L5	5-218	SEE NOTES 1, 6 & 7	41 T.	33 T.	29 T.	26 T.	23 T.	20 T.	17 T.	14 T.	12 T.	11 T.	10 T.	10 T.	9 T.	9 T.
	1/64 STEP B12	A18L6	5-218	SEE NOTES 1, 6 & 7	35 T.	29 T.	24 T.	22 T.	20 T.	16 T.	13 T.	10 T.	10 T.	9 T.	8 T.	8 T.	8 T.	9 T.
	BINARY AMP. 1/2	A18J30	5-222	SEE NOTES 1 & 8	+5%	—	—	—	—	—	0%	—	—	—	—	—	—	—
	BINARY AMP. 1/4	A18J31	5-222	SEE NOTES 1 & 8	0%	—	—	—	—	—	—	—	—	—	—	—	—	—
	BINARY AMP.1/8	A18J32	5-222	SEE NOTES 1 & 8	0%	—	-5%	—	—	—	—	—	—	—	0%	—	—	—
	BINARY AMP. 1/16	A18J33	5-222	SEE NOTES 1 & 8	0%	—	-5%	—	—	—	—	—	—	—	—	—	—	—

8. ADJUST THE BINARY EFFICIENCY COILS BEFORE ADJUSTING THESE AMPLITUDES.
7. ADJUST THESE BINARY EFFICIENCY COILS BEFORE ADJUSTING BINARY AMPLITUDE.
6. PARAMETER IS THE NUMBER OF ACTIVE COIL TURNS.
5. REMOVE PLUG P1 FROM A31J1. SET SWITCH A31S1 TO REVERSE POWER. MEASURE R FROM A31M1 POS. TERM. TO A31J138.
4. REMOVE PLUG P1 FROM A31J1. SET SWITCH A31S1 TO FORWARD POWER. MEASURE R FROM A31M1 POS. TERM. TO A31J139.
3. DESIGNATION REFERS TO POSITION OF SHIELD IN PLUG P3.
2. PARAMETER IS NOT FREQUENCY DEPENDENT.
1. THE VALUE LISTED IS A STARTING POINT ONLY. THE PARMETER MUST BE ADJUSTED PER THE REF. PARAG.

NOTES:

REVISION	LTR	ZONE	DATE	DFTM	ENG	ECO NBR
	E	.	11/5/03	TLH	TLH	49774
	REVISED SHEET 1					
	F	.	DEC 10, 2004	SEC	SEC	50683
	ADDED OSC LINES A17 -004					

HARRIS

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BROADCAST COMMUNICATIONS
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QUINCY, ILLINOIS 62305

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DRAWN BY	GLOVER
DATE	FEB 1988
ENG CHK	GJK 3-88
PROJ ENG	NR 3-88
MFG ENG	-
C	SHEET 3 OF 3

TITLE: TUNING CHART, DX-10
-
-

DWG NO. 839-6208-285. REV F

BOARD	FUNCTION	COMPONENT	REF. PARAG.	APPLICABLE NOTES	525 TO 630 KHZ	631 TO 700KHZ	701 TO 790 KHZ	791 TO 820 KHZ	821 TO 900 KHZ	901 TO 1000 KHZ	1001 TO 1100 KHZ	1101 TO 1200 KHZ	1201 TO 1250 KHZ	1251 TO 1300 KHZ	1301 TO 1400 KHZ	1401 TO 1500 KHZ	1501 TO 1600 KHZ	1601 TO 1720 KHZ
A/D A34	QUAD. PHASING	P11	K-54	SEE NOTE 2	1-2 & 3-4 (IN)			800 KHZ (OUT) 1-3 & 2-4										
	SAMPLE PHASING	S1	5-197	SEE NOTE 1	B ON													
	SAMPLE FREQ	P10	K-58		1-3				1-4							1-2		
DC REG. A30	CLIPPER	R39	5-236	SEE NOTE 1	850 OHM													
	B- VOLT	R38	5-235	SEE NOTES 1 & 3	-3.711V													
LED A32	OVER-DRIVE	R88	5-96	SEE NOTE 1	5.55V	5.43V	5.36V	5.30V	5.24V	5.14V	5.03V	4.91V	4.83V	4.79V	4.70V	4.60V	4.50V	4.36V
	UNDER DRIVE	R92	5-96	SEE NOTE 1	4.55V	4.43V	4.36V	4.30V	4.24V	4.14V	4.03V	3.91V	3.83V	3.79V	3.70V	3.60V	3.50V	3.36V
	AVG. CURRENT	R102	5-103	SEE NOTES 1 & 2	4.000V													
	PEAK CURRENT	R98	5-104	SEE NOTES 1 & 2	11.850V													
	P.S. PROTECT	R23	5-105	SEE NOTES 1 & 2	SEE NOTE 4													
DR. COMB A14	DRIVER TUNING	J31,J32	5-175	SEE NOTE 1	1-5	1-5	1-4	1-4	1-4	1-4	1-3	1-3	1-3	1-3	1-3	1-2	1-2	1-2
	DRIVER AMPL.	J17,J19 J21	5-177	SEE NOTE 1	1-4	1-4	1-3	1-3	1-3	1-3	1-2	1-2	1-2	1-2	1-4	1-4	1-4	1-3
	DRIVER AMPL.	J18,J20 J22	5-177	SEE NOTE 1	1-2	1-2	1-2	1-2	1-2	1-2	1-2	1-2	1-2	1-2	1-3	1-3	1-3	1-3
	NEUT. CONFIG.	J24	5-225		1-3 & 2-4					1-2 & 3-4								
	NEUT. AMPL.	J23	5-225	SEE NOTE 1	1-3													
	NEUT. CAPAC.	J25	5-225	SEE NOTE 1	IN (1-2)					OUT (1-3)							IN (1-2)	
		J26	5-225	SEE NOTE 1	OUT (1-3)	IN (1-2)				OUT (1-3)							IN (1-2)	
		J27	5-225	SEE NOTE 1	OUT (1-3)													IN (1-2)
		J28	5-225	SEE NOTE 1	OUT (1-3)													
		J29	5-225	SEE NOTE 1	IN (1-2)					OUT (1-3)								
	NEUT. INDUC.	J30	5-225	SEE NOTE 1	1-4	1-5				1-2								
	PREDR. BAND SW.	J14	D-16		1-2	1-3												
	PREDR. V. SELECT	J15	D-19	SEE NOTE 2	1-2													

4. NO PRESETABLE PARAMETER AVAILABLE. SET PER REF. PARAG.

3. ADJUST OFFSET AND GAIN ON A35. ADJUST B- AT 1KW AND NO MOD.

2. PARAMETER IS NOT FREQUENCY DEPENDENT.

1. THE VALUE LISTED IS A STARTING POINT ONLY.
THE PARAMETER MUST BE ADJUSTED PER THE REF. PARAG.

NOTES:

REVISION	LTR	ZONE	DATE	DFTM	ENG	ECO NBR
	E	.	11/6/03	TLH	TLH	49774
	REVISED SHEET 1					
	F	.	DEC 10, 2004	SEC	SEC	50683
	UPDATED REVISION PER ECO					

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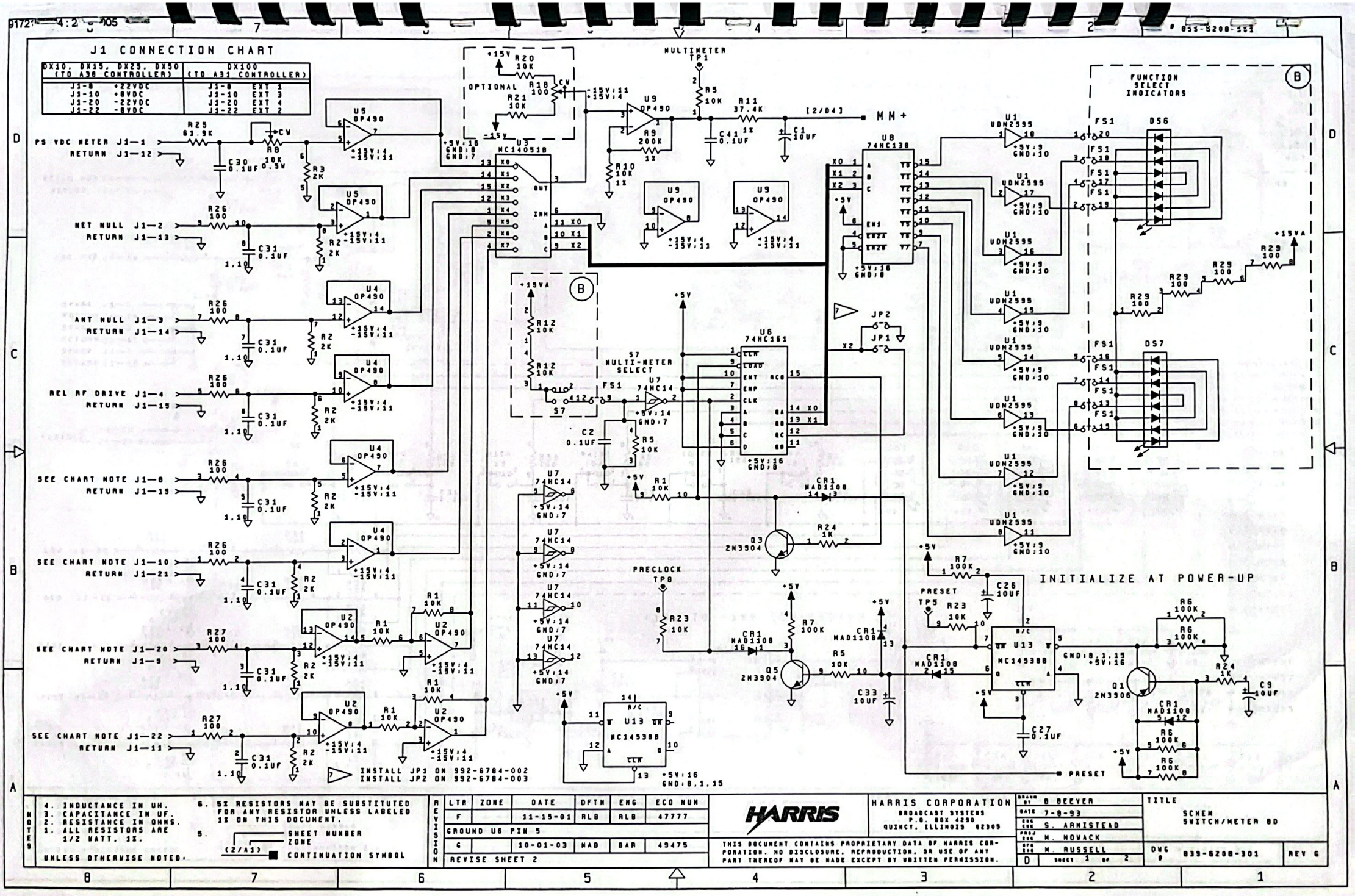
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QUINCY, ILLINOIS 62305

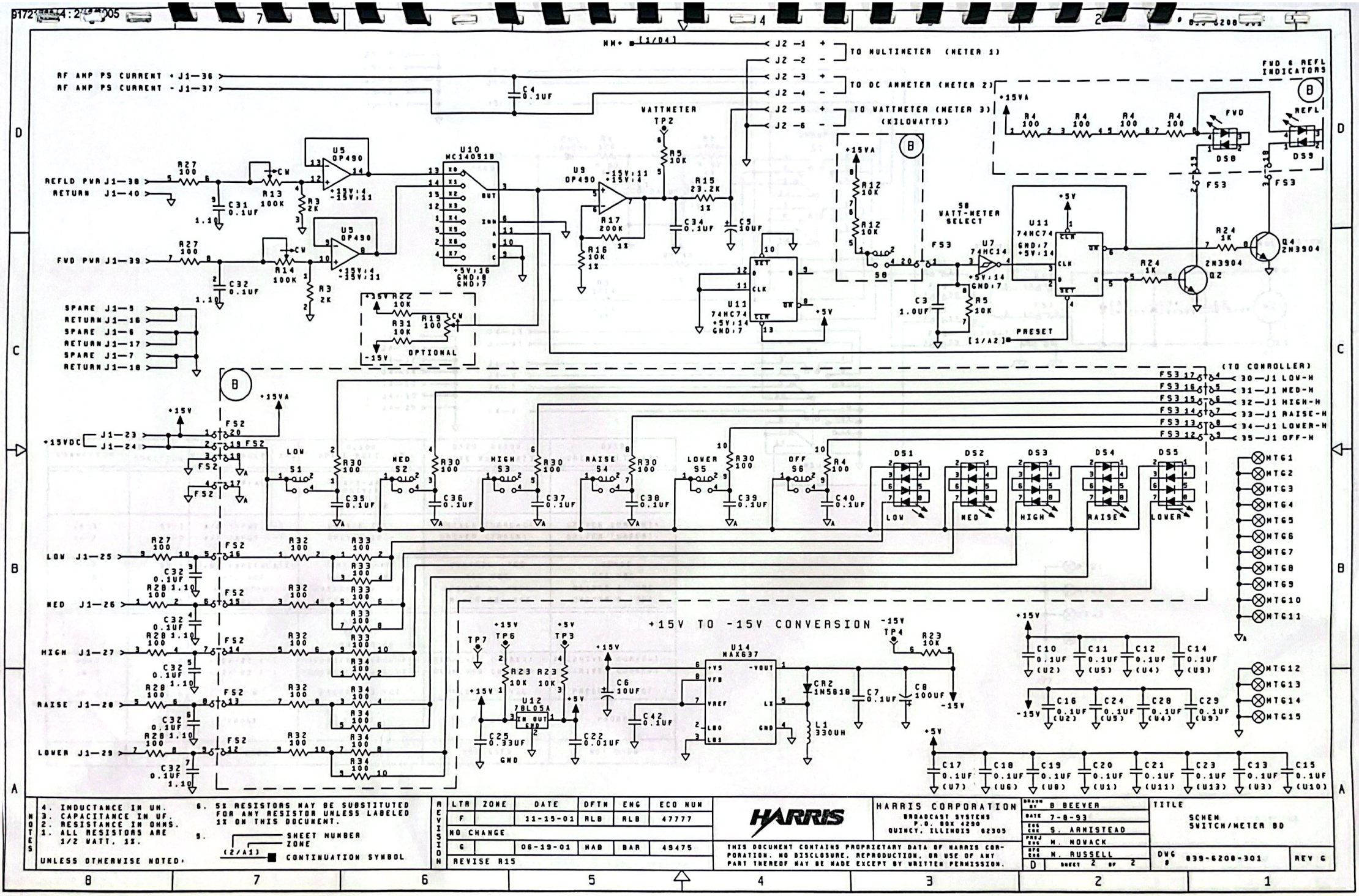
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DRAWN BY	GLOVER
DATE	FEB 1988
ENG CHK	GJK 3-88
PROJ ENG	NR 3-88
MFG ENG	-
C	SHEET 2 OF 3

TITLE
TUNING CHART, DX-10
-
-

DWG NO. 839-6208-285. REV F


J1 CONNECTION CHART
DX10, DX15, DX25, DX50 (TO A30 CONTROLLER)
DX100 (TO A31 CONTROLLER)
J1-8 +22VDC
J1-10 +8VDC
J1-20 -22VDC
J1-22 -8VDC
J1-8 EXT 1
J1-10 EXT 3
J1-20 EXT 4
J1-22 EXT 2
PS VDC METER J1-1
RETURN J1-12
NET NULL J1-2
RETURN J1-13
ANT NULL J1-3
RETURN J1-14
REL RF DRIVE J1-4
RETURN J1-15
SEE CHART NOTE J1-8
RETURN J1-15
SEE CHART NOTE J1-10
RETURN J1-21
SEE CHART NOTE J1-20
RETURN J1-9
SEE CHART NOTE J1-22
RETURN J1-11
OPTIONAL
MULTIMETER TP1
MM+
[2/D4]
FUNCTION SELECT INDICATORS
MULTI-METER SELECT
PRECLOCK TP8
PRESET TP5
INITIALIZE AT POWER-UP
INSTALL JP1 ON 992-6784-002
INSTALL JP2 ON 992-6784-003
NOTES
4. INDUCTANCE IN UH.
3. CAPACITANCE IN UF.
2. RESISTANCE IN OHMS.
1. ALL RESISTORS ARE 1/2 WATT, 1%.
UNLESS OTHERWISE NOTED.
6. 5% RESISTORS MAY BE SUBSTITUTED FOR ANY RESISTOR UNLESS LABELED 1% ON THIS DOCUMENT.
5. SHEET NUMBER ZONE
CONTINUATION SYMBOL
REVISION
LTR ZONE DATE DFTM ENG ECO NUM
F 11-15-01 RLB RLB 47777
GROUND U6 PIN 5
G 10-01-03 MAB BAR 49475
REVISE SHEET 2
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HARRIS CORPORATION
BROADCAST SYSTEMS
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QUINCY, ILLINOIS 62305
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DRAWN BY B BEEVER
DATE 7-8-93
CHK S. ARMISTEAD
PROJ M. NOVACK
APP M. RUSSELL
SHEET 1 OF 2
TITLE
SCHEM
SWITCH/METER BD
DWG # 839-6208-301
REV G



NOTES:
1. ALL RESISTORS ARE 1/2 WATT, 1%.
2. CAPACITANCE IN UF.
3. RESISTANCE IN OHMS.
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.

UNLESS OTHERWISE NOTED.

REVISION	LTR	ZONE	DATE	DFTM	ENG	ECO NUM
	F		11-15-01	RLB	RLB	47777
	NO CHANGE					
	G		06-19-01	MAB	BAR	49475
	REVISE R15					

HARRIS

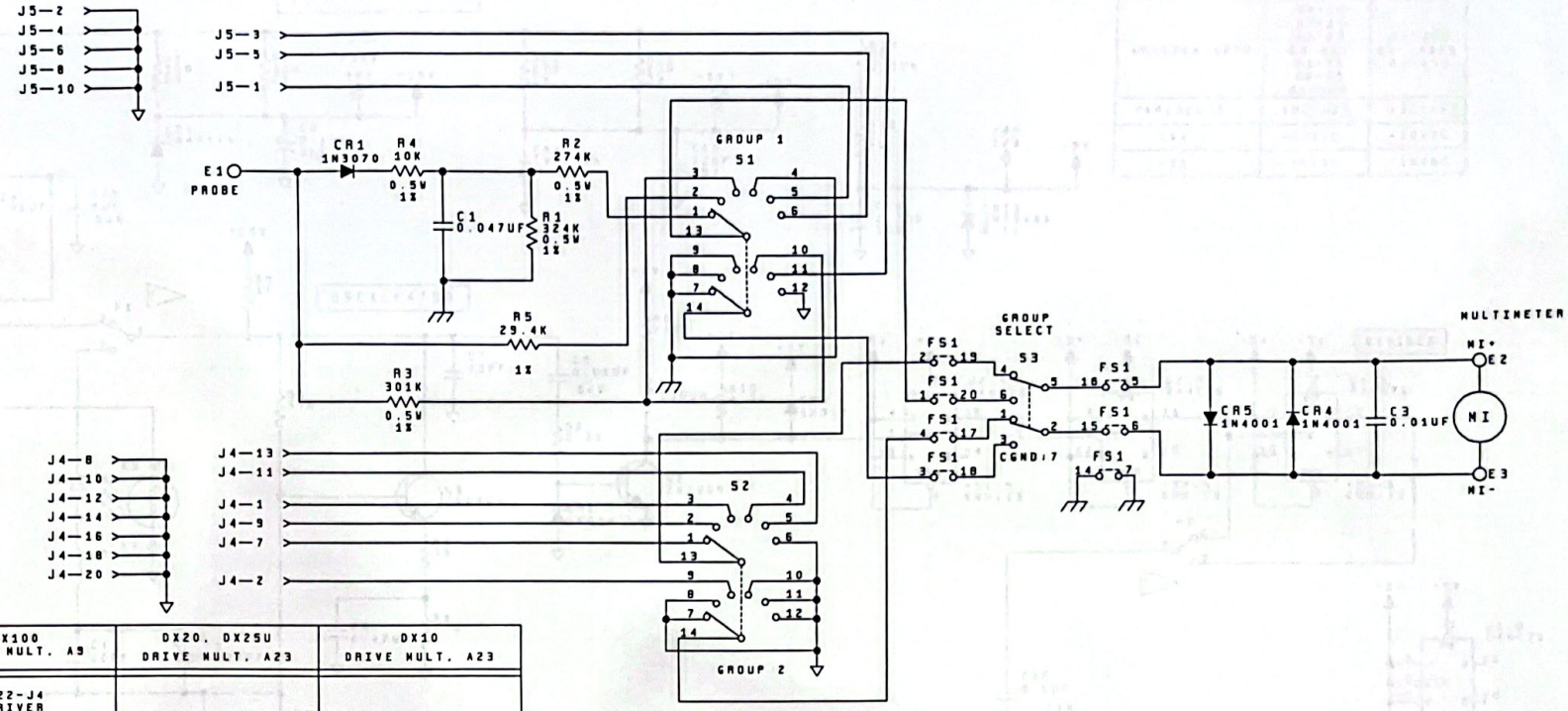
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DRAWN BY	B BEEVER
DATE	7-8-93
ENG	S. ARNISTEAD
PROJ ENG	M. NOVACK
OPS ENG	M. RUSSELL
SIZE	D
SHEET	2 OF 2

TITLE: SCHEM SWITCH/METER BD

DWG # 839-6208-301 REV G



CONNECTOR	SWITCH POSITION	DX100 CONTROL MULT. A41	DX100 DRIVE MULT. A9	DX20, DX25U DRIVE MULT. A23	DX10 DRIVE MULT. A23
		INTERFACE	A22-J4 DRIVER SUPPLY REGULATOR		
J4-1	S2-3	A/D INPUT (+)	DRIVER IOC+	DRIVER CURRENT+	DRIVER CURRENT+
J4-2	S2-3	A/D INPUT (-)	DRIVER IOC-	DRIVER CIRRENT-	DRIVER CURRENT-
J4-7	S2-1	B+/B- UNREGULATED	CONTROL +VDC	CONTROL +VDC	+15VDC
J4-9	S2-2	+12 VDC	DRIVER +VDC	REG VDC	REG VDC
J4-11	S2-4	A/D OUTPUT	DRIVER 14A +VDC	DRIVER 8A +VDC	DRIVER A +VDC
J4-13	S2-5	B-DRIVE	DRIVER 14B +VDC	DRIVER 8B +VDC	DRIVER B +VDC
			A14-J5 DRIVER COMBINER-MB		
J5-1	S1-5	+22/-22 (+)	PREDRIVER CURRENT +	PREDRIVER CURRENT +	PREDRIVER CURRENT +
J5-3	S1-5	+22/-22 (-)	PREDRIVER CURRENT -	PREDRIVER CURRENT -	PREDRIVER CURRENT -
J5-5	S1-6	+8/-8	PREDRIVER VDC	PREDRIVER VDC	PREDRIVER VDC
	S1-1 S1-2 S1-3 S1-4	PROBE	PROBE	PROBE	PROBE
	S2-6	NOT USED	NOT USED	NOT USED	NOT USED

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

UNLESS OTHERWISE NOTED.

REVISION	LTR	ZONE	DATE	DFTM	ENG	ECO NUM
	A		5-12-95	DFD	SCA	
	REVISE S3					
	B		12-7-00	DN	DN	46723
	ADD DX20 WITH DX25U TO TABLE HEADING.					

HARRIS

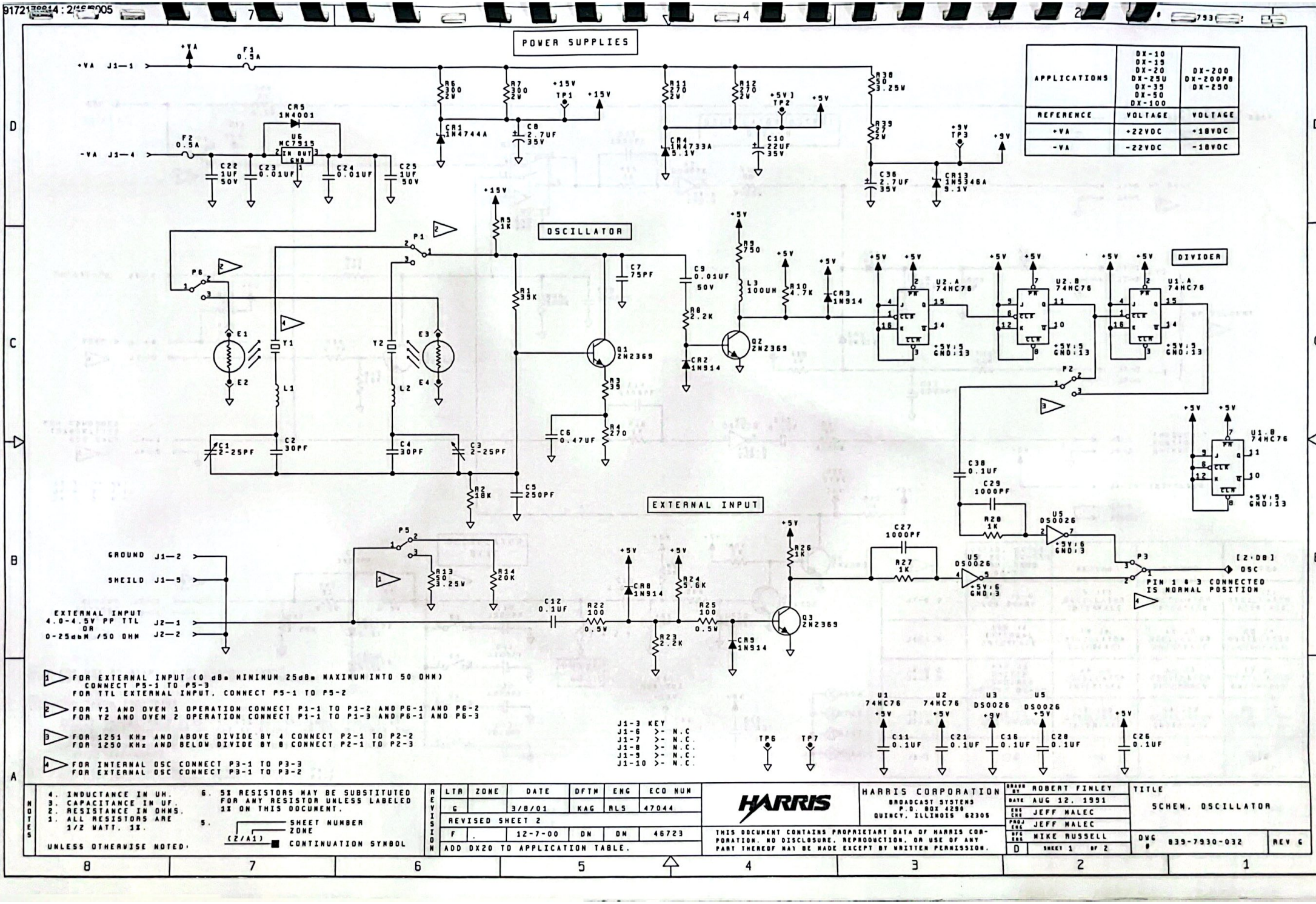
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DRAWN BY	DFD
DATE	2-21-94
ENG CHK	SCA
PROJ ENG	SCA
DFG ENG	
D	SHEET 1 OF 1

TITLE: SCHEM, MULTIMETER

DWG #: 839-6208-302 REV B



APPLICATIONS	DX-10 DX-15 DX-20 DX-25U DX-35 DX-50 DX-100	DX-200 DX-200PB DX-250
REFERENCE	VOLTAGE	VOLTAGE
+VA	+22VDC	+18VDC
-VA	-22VDC	-18VDC

1. FOR EXTERNAL INPUT (0 dBm MINIMUM 25dBm MAXIMUM INTO 50 OHM) CONNECT P5-1 TO P5-3. FOR TTL EXTERNAL INPUT, CONNECT P5-1 TO P5-2
2. FOR Y1 AND OVEN 1 OPERATION CONNECT P1-1 TO P1-2 AND P6-1 AND P6-2. FOR Y2 AND OVEN 2 OPERATION CONNECT P1-1 TO P1-3 AND P6-1 AND P6-3
3. FOR 1251 KHz AND ABOVE DIVIDE BY 4 CONNECT P2-1 TO P2-2. FOR 1250 KHz AND BELOW DIVIDE BY 8 CONNECT P2-1 TO P2-3
4. FOR INTERNAL OSC CONNECT P3-1 TO P3-3. FOR EXTERNAL OSC CONNECT P3-1 TO P3-2

NOTES:
4. INDUCTANCE IN UH.
3. CAPACITANCE IN UF.
2. RESISTANCE IN OHMS.
1. ALL RESISTORS ARE 1/2 WATT. 1%.
UNLESS OTHERWISE NOTED.

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

REVISION	LTR	ZONE	DATE	DFTM	ENG	ECO NUM
	G		3/8/01	KAG	RLS	47044
	REVISED SHEET 2					
	F	.	12-7-00	DN	DN	46723
	ADD DX20 TO APPLICATION TABLE.					

HARRIS

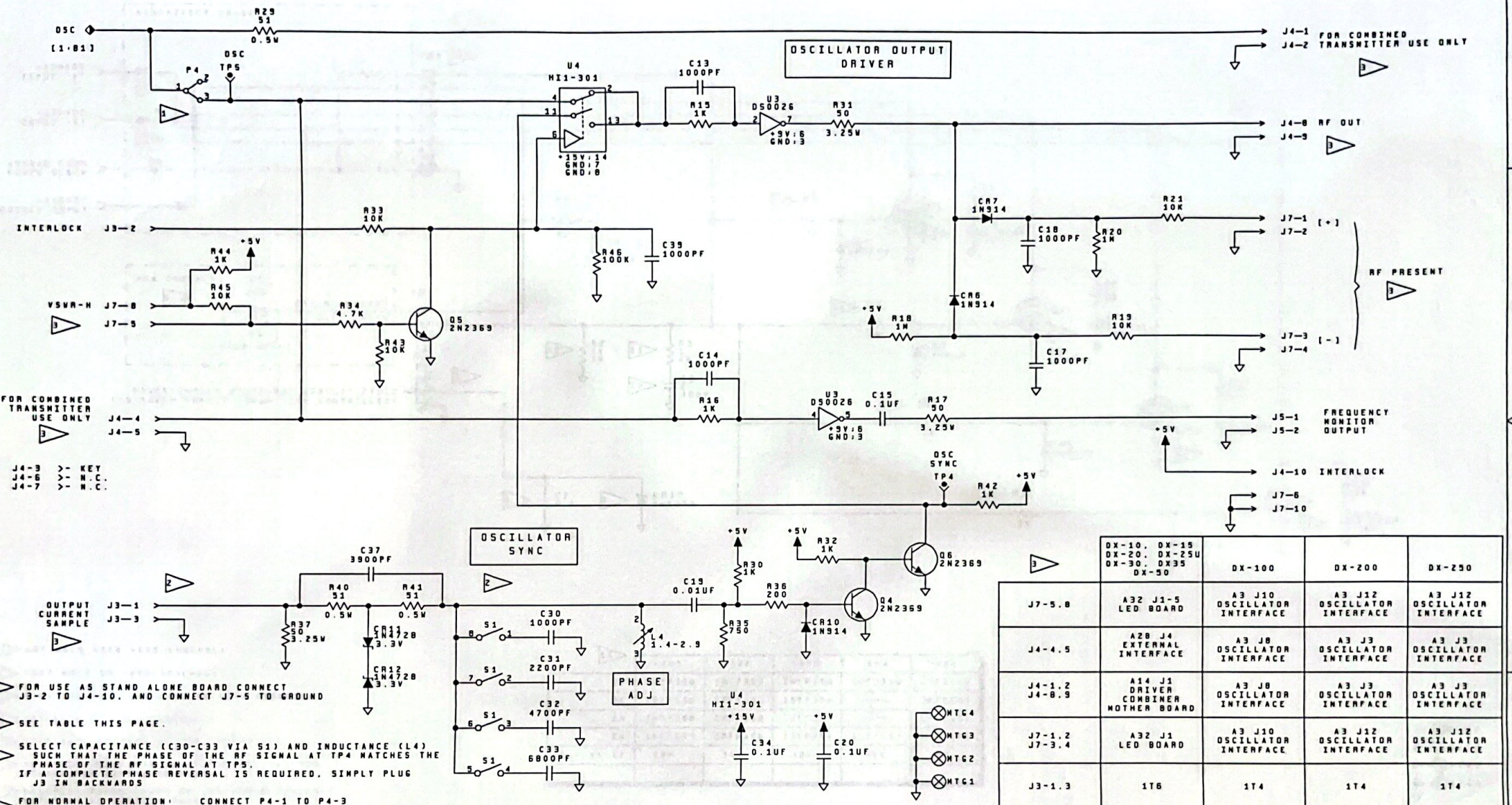
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DRAWN BY	ROBERT FINLEY
DATE	AUG 12, 1991
ENG CHK	JEFF MALEC
PROJ ENG	JEFF MALEC
DFT SUP	MIKE RUSSELL
D	SHEET 1 OF 2

TITLE: SCHEM, OSCILLATOR

DWG # 839-7930-032 REV G



	DX-10, DX-15 DX-20, DX-25U DX-30, DX35 DX-50	DX-100	DX-200	DX-250
J7-5.8	A32 J1-5 LED BOARD	A3 J10 OSCILLATOR INTERFACE	A3 J12 OSCILLATOR INTERFACE	A3 J12 OSCILLATOR INTERFACE
J4-4.5	A28 J4 EXTERNAL INTERFACE	A3 J8 OSCILLATOR INTERFACE	A3 J3 OSCILLATOR INTERFACE	A3 J3 OSCILLATOR INTERFACE
J4-1.2 J4-8.9	A14 J1 DRIVER COMBINER MOTHER BOARD	A3 J8 OSCILLATOR INTERFACE	A3 J3 OSCILLATOR INTERFACE	A3 J3 OSCILLATOR INTERFACE
J7-1.2 J7-3.4	A32 J1 LED BOARD	A3 J10 OSCILLATOR INTERFACE	A3 J12 OSCILLATOR INTERFACE	A3 J12 OSCILLATOR INTERFACE
J3-1.3	1T6	1T4	1T4	1T4

4. FOR USE AS STAND ALONE BOARD CONNECT J3-2 TO J4-10, AND CONNECT J7-5 TO GROUND

3. SEE TABLE THIS PAGE.

2. SELECT CAPACITANCE (C30-C33 VIA S1) AND INDUCTANCE (L4) SUCH THAT THE PHASE OF THE RF SIGNAL AT TP4 MATCHES THE PHASE OF THE RF SIGNAL AT TP5. IF A COMPLETE PHASE REVERSAL IS REQUIRED, SIMPLY PLUG J3 IN BACKWARDS

1. FOR NORMAL OPERATION: CONNECT P4-1 TO P4-3
FOR COMBINED OPERATION: CONNECT P4-1 TO P4-2

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

REVISION	LTR	ZONE	DATE	DFTM	ENG	ECO NUM
	F		12-7-00	DN	DN	46723
	ADD DX20 TO TABLE.					
	G		3/8/01	KAG	RLS	47044
	ADDED NOTE 4					

HARRIS

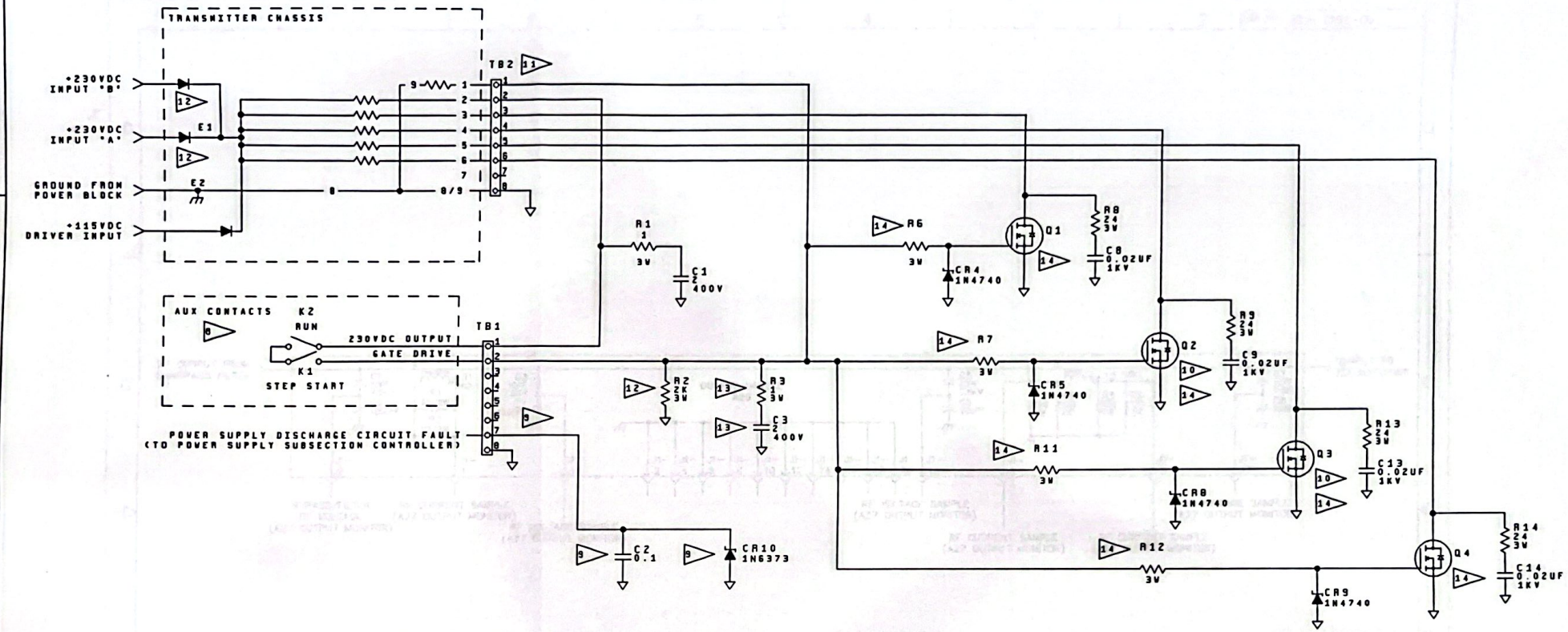
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BROADCAST SYSTEMS
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QUINCY, ILLINOIS 62305

DRAWN BY	ROBERT FINLEY
DATE	AUG 12, 1991
ENG CHG	JEFF MALEC
PROJ ENG	JEFF MALEC
QUAL ENG	MIKE RUSSELL
D	SHEET 2 OF 2

TITLE: SCHEM, OSCILLATOR

DWG # 839-7930-032 REV G



13 NOT USED WITH -005 ASSEMBLY

12 USED ONLY ON -005 ASSEMBLY

11 TB2-4, 5 NOT CONNECTED ON -004 ASSEMBLY

10 NOT USED ON -004 ASSEMBLY

9 USED ONLY ON -001 & -005 ASSEMBLIES

8 AUXILLARY CONTACTS OF STEP START AND RUN (SHOWN FOR REFERENCE ONLY)

7 DISCRETE PARTS (PART OF DISCHARGE ASSEMBLY, NOT PART OF CIRCUIT BOARD)

14

	-001	-002	-003	-004	-005
Q1	IRFP360	IRFP360	IRFP350	IRFP350	IRFP360
Q2	IRFP360	IRFP360	IRFP350	——	IRFP360
Q3	IRFP360	IRFP360	IRFP350	——	IRFP360
Q4	IRFP360	IRFP360	IRFP350	IRFP350	IRFP360
R6,7,11,12	10K	10K	10K	10K	330
.	.	.	.	.	.

NOTES:

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

UNLESS OTHERWISE NOTED.

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

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

REVISION

LTR	ZONE	DATE	DFTM	ENG	ECO NUM
H		01-17-01	MAB	TLH	46733
REVISE OVERALL					
J		6-1-01	JPK	.	47361
REARRANGED & CLARIFIED FLAGGED NOTES					

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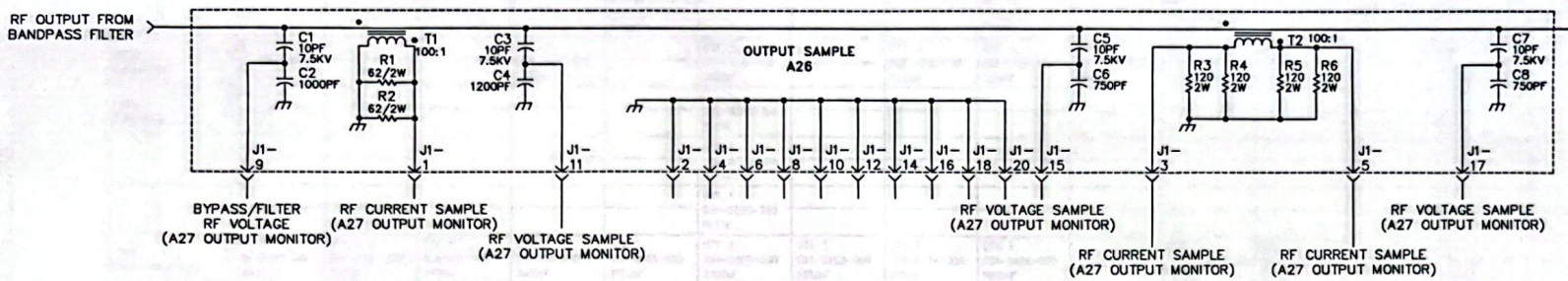
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QUINCY, ILLINOIS 62305

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DRAWN BY	D.DAVIDSON
DATE	10-16-92
ENG CHK	J.MALEC
PROJ ENG	J.MALEC
OPS ENG	N.RUSSELL
D	SHEET 1 OF 1

TITLE: SCH, PWR SUPPLY DISCHARGE

DWG # 839 7930 510 REV J



NOTES:

REVISION	LTR	ZONE	DATE	DFTM	ENG	ECO NBR
	B	.	12/08/94	pjf	.	38312
	Redrawn in autocad					
	.	.	.	.	.	.

HARRIS

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

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DRAWN BY	B. PERRY
DATE	11-2-92
ENG CHK	B. LITTLE
PROJ ENG	B. LITTLE
MFG ENG	—
C	SHEET 1 OF 1

TITLE
SCHEMATIC
OUTPUT SAMPLE
DX-15

DWG NO. 839-7953-001 . REV B

DWG NO. 839-8222-078 .

COMPONENT DESIGNATION	525 TO 565 KHZ	566 TO 609 KHZ	610 TO 656 KHZ	657 TO 707 KHZ	708 TO 762 KHZ	763 TO 821 KHZ	822 TO 885 KHZ	886 TO 953 KHZ	954 TO 1026 KHZ	1027 TO 1105 KHZ	1106 TO 1190 KHZ	1191 TO 1282 KHZ	1283 TO 1381 KHZ	1382 TO 1486 KHZ	1487 TO 1601 KHZ	1602 TO 1720 KHZ
A17Y1, A17Y2 CRYSTAL	QTY.2 444-2909-XXX	SEE CRYSTAL SPEC. 817-1280-025 FOR SPECIFIC PART NO. VS. FREQUENCY														
A14 C3/C5 PREDRIVER TUNING	USE AS BUILT	→	→	→	→	→	→	→	→	→	→	→	→	→	QTY. 2 500-0852-000 1000pF	QTY. 2 500-0911-000 750pF
C101 VACUUM VAR. CAP.	QTY. 1 514-0240-000 2300pF	→	→	→	QTY. 1 514-0264-000 1500pF	→	→	→	→	QTY. 1 514-0266-000 1500pF	→	→	→	→	→	→
C101 HARDWARE	QTY. 1 829-9009-226 SHAFT	→	→	→	QTY. 1 829-9009-227 SHAFT	→	→	→	→	→	→	→	→	→	→	→
C101 HARDWARE	QTY. 1 839-6208-250 CONTACT RING	→	→	→	QTY. 1 943-5479-110 CONTACT RING	→	→	→	→	→	→	→	→	→	→	→
C102 CAPACITOR	QTY. 4 504-0497-000 6200pF	QTY. 4 504-0435-000 5600pF	QTY. 4 504-0420-000 3900pF	QTY. 4 504-0433-000 3600pF	QTY. 3 516-1016-008 1000pF	QTY. 3 516-1016-008 1000pF	QTY. 2 516-1016-008 1000pF	QTY. 3 516-1025-000 500pF	QTY. 2 516-1025-000 500pF	QTY. 2 516-1016-014 350pF	QTY. 1 516-1016-014 350pF	→	OMIT	→	→	→
C102 HARDWARE	QTY. 2 839-6208-251 PLATE	→	→	→	OMIT	→	→	→	→	→	→	→	→	→	→	→
↓	QTY. 2 813-5611-139 3/8-24 STUD	→	→	→	OMIT	→	→	→	→	→	→	→	→	→	→	→
↓	OMIT	→	→	→	QTY. 2 943-5479-112 BRACKET	→	→	→	QTY. 1 943-5479-112 BRACKET	→	QTY. 1 943-5479-114 BRACKET	→	OMIT	→	→	→
↓	OMIT	→	→	→	QTY. 2 943-5479-113 STRAP	→	→	→	QTY. 1 943-5479-113 STRAP	→	QTY. 1 943-5479-115 STRAP	→	OMIT	→	→	→
C103 CAPACITOR	QTY. 4 504-0496-000 4700pF	→	→	QTY. 4 504-0353-000 3000pF	→	QTY. 6 516-1016-006 1500pF	→	QTY. 5 516-1016-006 1500pF	QTY. 4 516-1016-006 1500pF	QTY. 5 516-1016-008 1000pF	QTY. 5 516-1016-008 1000pF	QTY. 4 516-1016-008 1000pF	→	QTY. 3 516-1016-008 1000pF	→	QTY. 2 516-1016-008 1000pF
C103 HARDWARE	QTY. 1 839-6208-256 PLATE	→	→	→	→	QTY. 1 939-8220-298 PLATE	→	→	→	→	→	→	→	→	→	→
↓	OMIT	→	→	→	→	QTY. 1 939-8220-298 PLATE	→	→	→	→	→	→	→	→	→	→
↓	OMIT	→	→	→	→	QTY. 1 939-8220-299 PLATE	→	→	→	→	→	→	→	→	→	→
C104 MICA CAPACITOR	QTY. 1 504-0420-000 3900pF	QTY. 1 504-0433-000 3600pF	QTY. 1 504-0419-000 3300pF	QTY. 1 504-0353-000 3000pF	QTY. 1 504-0418-000 2700pF	QTY. 1 504-0382-000 2400pF	QTY. 1 504-0463-000 2200pF	QTY. 1 504-0374-000 2000pF	QTY. 1 504-0462-000 1800pF	→	QTY. 1 504-0454-000 1600pF	QTY. 1 504-0377-000 1500pF	→	QTY. 1 504-0461-000 1300pF	→	QTY. 1 504-0378-000 1200pF
A14C12,C13,C14 CAPACITOR	QTY. 3 500-1322-000 5000pF	→	→	QTY. 3 500-1324-000 4000pF	→	→	→	QTY. 3 500-1325-000 3000pF	→	→	QTY. 3 500-0452-000 2000pF	→	→	QTY. 3 500-1321-000 1000pF	→	→
R38 POWER RESISTOR	QTY 1 540-1167-000 5 OHM	→	→	→	QTY 1 540-1490-000 10 OHM	→	→	→	→	→	→	→	→	→	OMIT	→
C38 MICA CAPACITOR	QTY 1 500-1323-000 0.02uF	→	→	→	QTY 1 500-0458-000 0.01uF	→	→	→	→	→	QTY 1 500-1322-000 5000 pF	→	→	→	OMIT	→
CAPACITOR HARDWARE	QTY. 18 300-1977-000 3/8-24 BOLT	QTY. 18 →	QTY. 18 →	QTY. 18 →	QTY. 10 →	QTY. 2 →	QTY. 2 →	QTY. 2 →	QTY. 2 →	QTY. 2 →	QTY. 2 →	QTY. 2 →	QTY. 2 →	QTY. 2 →	QTY. 2 →	QTY. 2 →
↓	QTY. 18 308-0011-000 3/8 FLT. W.	QTY. 18 →	QTY. 18 →	QTY. 18 →	QTY. 10 →	QTY. 2 →	QTY. 2 →	QTY. 2 →	QTY. 2 →	QTY. 2 →	QTY. 2 →	QTY. 2 →	QTY. 2 →	QTY. 2 →	QTY. 2 →	QTY. 2 →
↓	QTY. 18 312-0053-000 3/8 SPLIT W.	QTY. 18 →	QTY. 18 →	QTY. 18 →	QTY. 10 →	QTY. 2 →	QTY. 2 →	QTY. 2 →	QTY. 2 →	QTY. 2 →	QTY. 2 →	QTY. 2 →	QTY. 2 →	QTY. 2 →	QTY. 2 →	QTY. 2 →

HOLE	QTY	DESCRIPTION

TOLERANCES UNLESS NOTED
.X ± .030 .XX ± .015
.XXX ± .005 ANGLES ± 1 DEG
ALL √ INDICATES 125 MICRO INCH

ALL DIMENSION IN INCHES UNLESS OTHERWISE NOTED

MUST COMPLY WITH WORKMANSHIP STANDARDS SPEC 817-1152-001

NOTES
C105 - SELECT AT TEST FOR HARMONIC SUPPRESSION
QTY 1
5160207000 25 PF
5160208000 50 PF
5160209000 100 PF
C105 HARDWARE- USE ONLY WHEN C105 IS SELECTED
QTY 1 8170914253
.

REVISION	LTR	ZONE	DATE	DFTM	ENG	ECO NBR
	A	.	.	.	.	49774
	.					
	B	.	2/7/05	WLD	WLD	50805
	FIXED BRACKET & STRAP FOR PROPER FREQ'S					

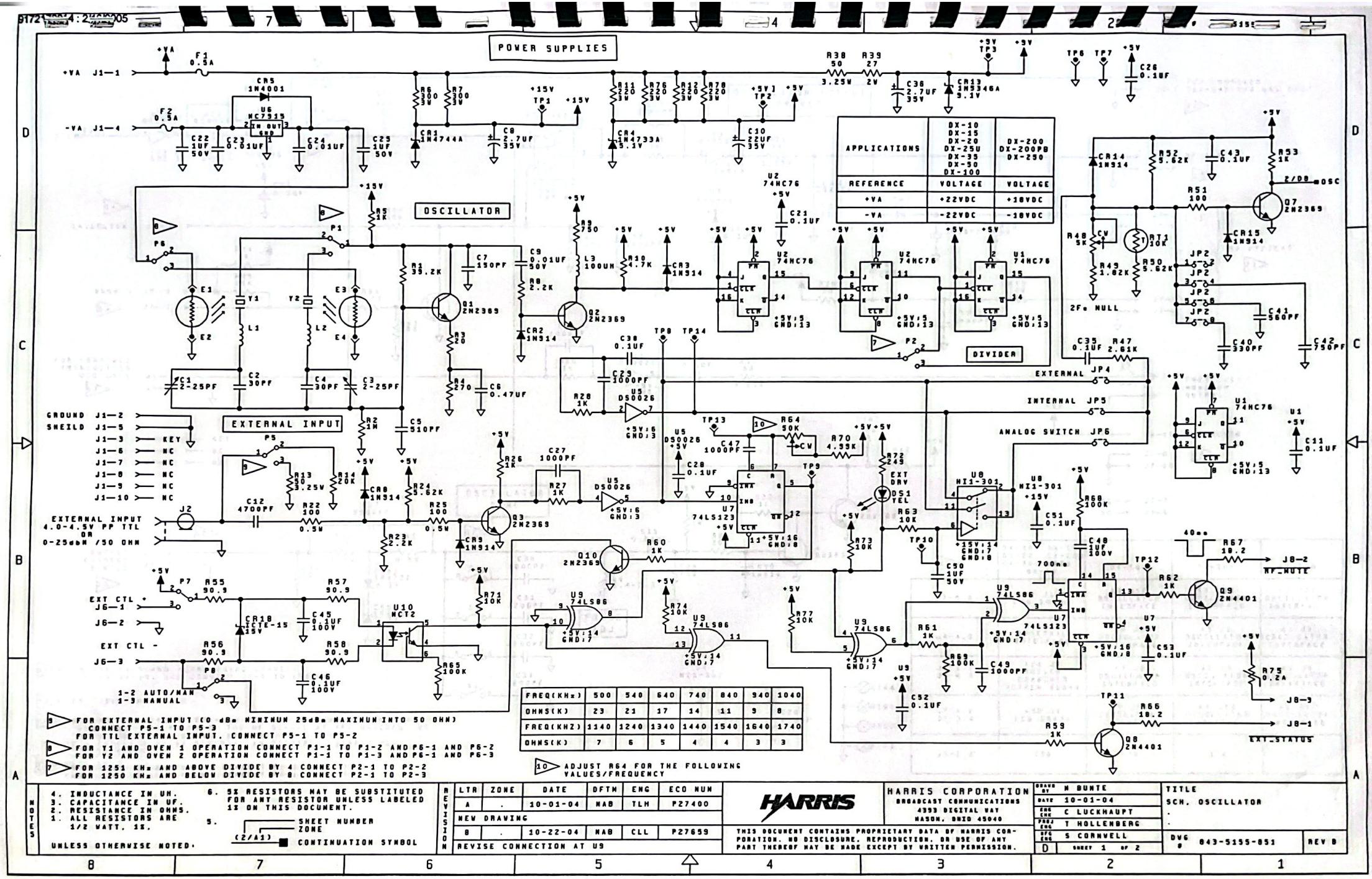
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BROADCAST COMMUNICATIONS
P.O. BOX 4290
QUINCY, ILLINOIS 62305

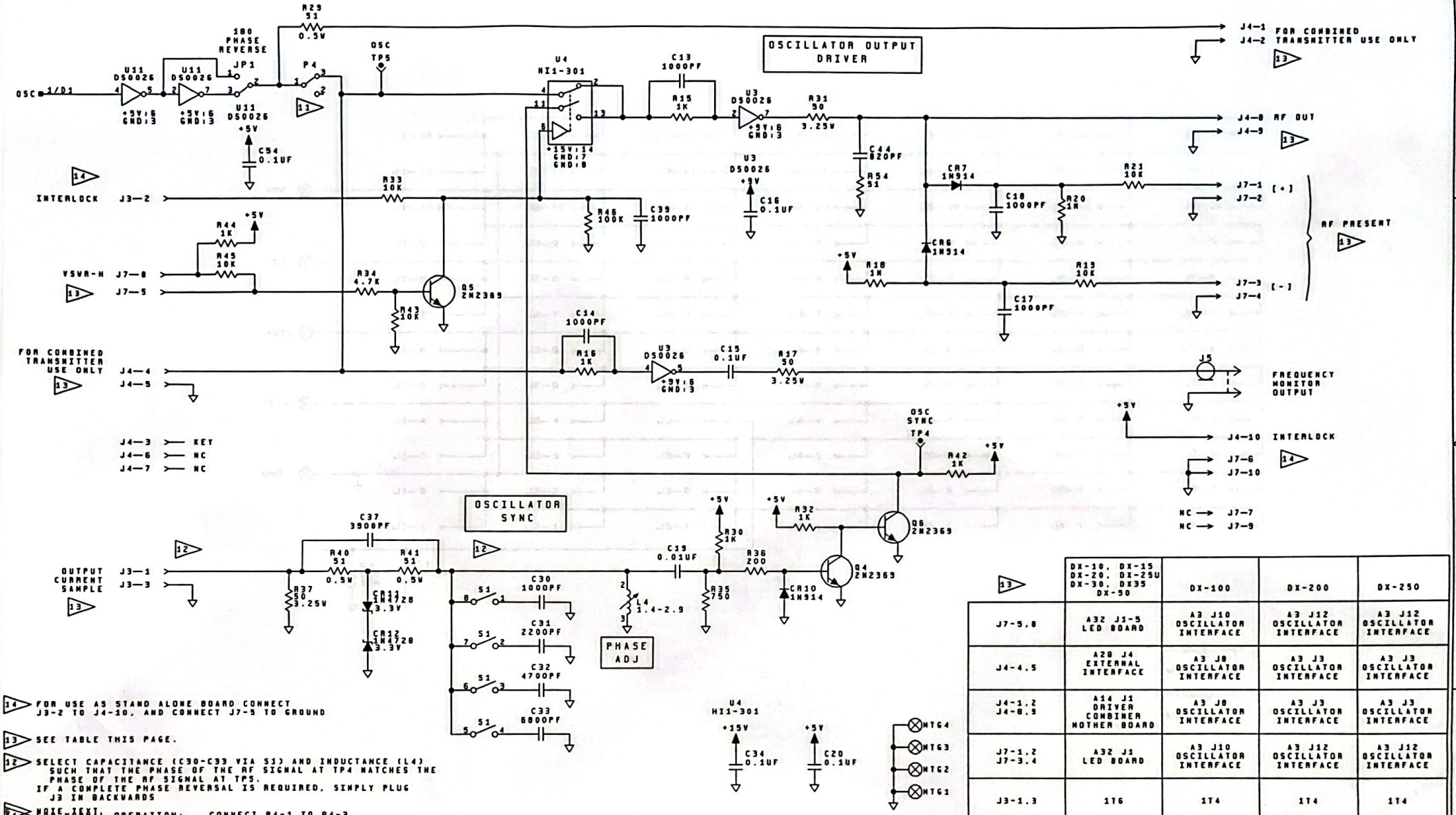
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DRAWN BY	T HOLLENBERG
DATE	11/5/03
ENG CHK	T HOLLENBERG
PROJ ENG	-
MFG ENG	-
C	SHEET 1 OF 1

TITLE
FD CHART, DX-10
-
-

DWG NO. 839-8222-078. REV B


POWER SUPPLIES
OSCILLATOR
EXTERNAL INPUT
DIVIDER
+YA J1—1
-YA J1—4
GROUND J1—2
SHEILD J1—5
J1—3 KEY
J1—6 NC
J1—7 NC
J1—8 NC
J1—9 NC
J1—10 NC
EXTERNAL INPUT 4.0-4.5V PP TTL OR 0-25dBM /50 OHM
EXT CTL + J6—1
J6—2
EXT CTL - J6—3
1-2 AUTO/MAN
1-3 MANUAL
EXTERNAL JP4
INTERNAL JP5
ANALOG SWITCH JP6
2Fo NULL
2/DB OSC
EXT_STATUS
RF_MUTE
APPLICATIONS | DX-10 DX-15 DX-20 DX-25U DX-35 DX-50 DX-100 | DX-200 DX-200PB DX-250
REFERENCE | VOLTAGE | VOLTAGE
+VA | +22VDC | +18VDC
-VA | -22VDC | -18VDC
FREQ(KHz) | 500 | 540 | 640 | 740 | 840 | 940 | 1040
OHMS(K) | 23 | 21 | 17 | 14 | 11 | 9 | 8
FREQ(KHZ) | 1140 | 1240 | 1340 | 1440 | 1540 | 1640 | 1740
OHMS(K) | 7 | 6 | 5 | 4 | 4 | 3 | 3
9 FOR EXTERNAL INPUT (0 dBm MINIMUM 25dBm MAXIMUM INTO 50 OHM) CONNECT P5-1 TO P5-3 FOR TTL EXTERNAL INPUT, CONNECT P5-1 TO P5-2
8 FOR Y1 AND OVEN 1 OPERATION CONNECT P1-1 TO P1-2 AND P6-1 AND P6-2 FOR Y2 AND OVEN 2 OPERATION CONNECT P1-1 TO P1-3 AND P6-1 AND P6-3
7 FOR 1251 KHz AND ABOVE DIVIDE BY 4 CONNECT P2-1 TO P2-2 FOR 1250 KHz AND BELOW DIVIDE BY 8 CONNECT P2-1 TO P2-3
10 ADJUST R64 FOR THE FOLLOWING VALUES/FREQUENCY
NOTES
4. INDUCTANCE IN UH.
3. CAPACITANCE IN UF.
2. RESISTANCE IN OHMS.
1. ALL RESISTORS ARE 1/2 WATT, 1%.
UNLESS OTHERWISE NOTED.
6. 5% RESISTORS MAY BE SUBSTITUTED FOR ANY RESISTOR UNLESS LABELED 1% ON THIS DOCUMENT.
5. SHEET NUMBER ZONE (Z/A1) CONTINUATION SYMBOL
REVISION
LTR | ZONE | DATE | DFTM | ENG | ECO NUM
A | . | 10-01-04 | NAB | TLH | P27400
NEW DRAWING
B | . | 10-22-04 | NAB | CLL | P27659
REVISE CONNECTION AT U9
HARRIS
HARRIS CORPORATION
BROADCAST COMMUNICATIONS
4393 DIGITAL WAY
MASON, OHIO 45040
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DRAWN BY N BUNTE
DATE 10-01-04
ENG CHK C LUCKHAUPT
PROJ ENG T HOLLENBERG
QFC ENG S CONNELL
D SHEET 1 OF 2
TITLE
SCH. OSCILLATOR
DWG # 843-5155-851
REV B



13	DX-10, DX-15 DX-20, DX-25U DX-30, DX35 DX-50	DX-100	DX-200	DX-250
J7-5,8	A32 J1-5 LED BOARD	A3 J10 OSCILLATOR INTERFACE	A3 J12 OSCILLATOR INTERFACE	A3 J12 OSCILLATOR INTERFACE
J4-4,5	A20 J4 EXTERNAL INTERFACE	A3 J8 OSCILLATOR INTERFACE	A3 J3 OSCILLATOR INTERFACE	A3 J3 OSCILLATOR INTERFACE
J4-1,2 J4-8,9	A14 J1 DRIVER COMBINER MOTHER BOARD	A3 J8 OSCILLATOR INTERFACE	A3 J3 OSCILLATOR INTERFACE	A3 J3 OSCILLATOR INTERFACE
J7-1,2 J7-3,4	A32 J1 LED BOARD	A3 J10 OSCILLATOR INTERFACE	A3 J12 OSCILLATOR INTERFACE	A3 J12 OSCILLATOR INTERFACE
J3-1,3	1T6	1T4	1T4	1T4

14 FOR USE AS STAND ALONE BOARD CONNECT J3-2 TO J4-10, AND CONNECT J7-5 TO GROUND

13 SEE TABLE THIS PAGE.

12 SELECT CAPACITANCE (C30-C33 VIA S1) AND INDUCTANCE (L4) SUCH THAT THE PHASE OF THE RF SIGNAL AT TP4 MATCHES THE PHASE OF THE RF SIGNAL AT TP5. IF A COMPLETE PHASE REVERSAL IS REQUIRED, SIMPLY PLUG J3 IN BACKWARDS

11 FOR NORMAL OPERATION: CONNECT P4-1 TO P4-3
FOR COMBINED OPERATION: CONNECT P4-1 TO P4-2

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

REVISION	LTR	ZONE	DATE	DFTM	ENG	ECO NUM
	A	.	10-01-04	MAB	TLH	P27400
	NEW DRAWING					
	B	.	10-22-04	MAB	CLL	P27649
	REVISE SHEET 1					

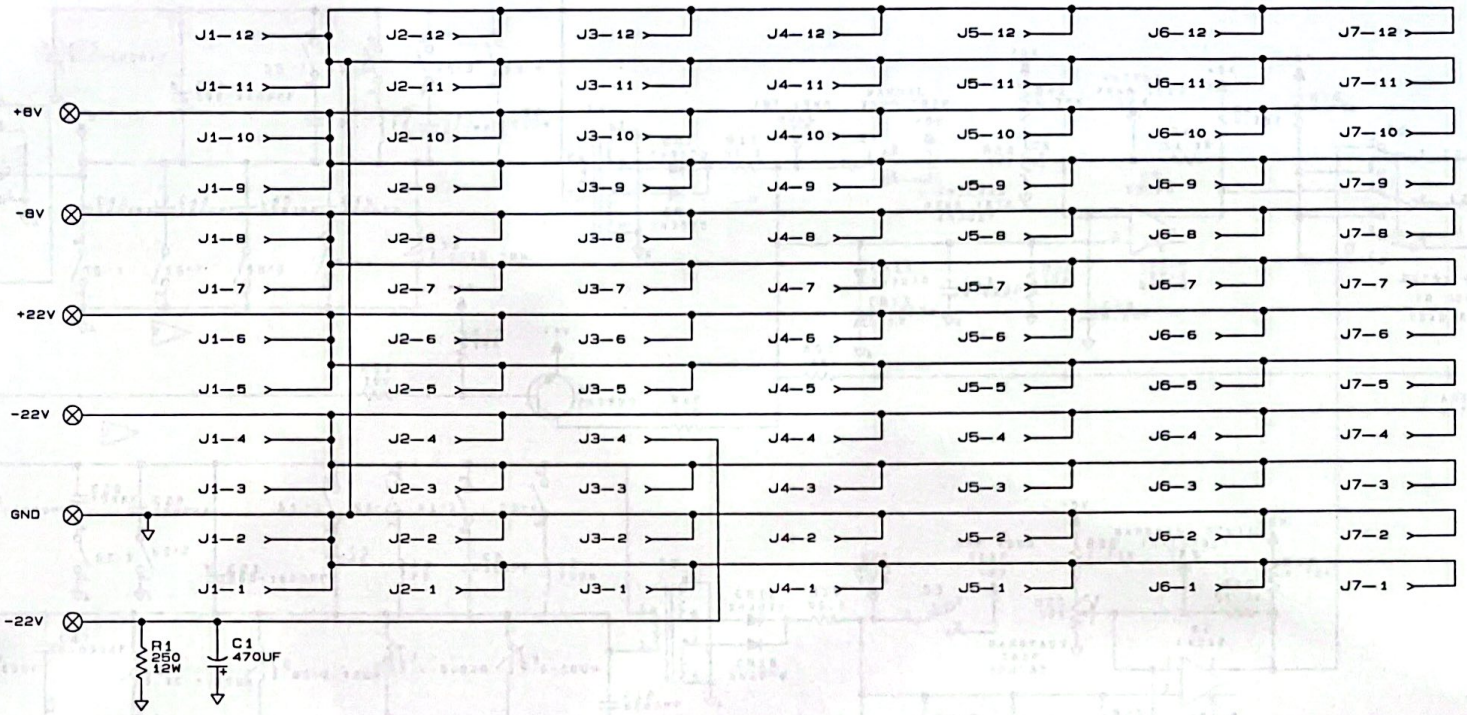
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HARRIS CORPORATION
BROADCAST COMMUNICATIONS
4393 DIGITAL WAY
MASON, OHIO 45040

DRAWN BY	N BUNTE
DATE	10-01-04
ENG CHK	C LUCKHAUPT
PROJ ENG	T HOLLENBERG
SPC ENG	S CORNWELL
D	SHEET 2 OF 2

TITLE
SCH, OSCILLATOR

DWG # 843-5155-851 REV B



NOTES

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

UNLESS OTHERWISE NOTED:

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

REVISION	LTR	ZONE	DATE	DFTM	ENG	ECO NUM
	A					
	NEW DRAWING					

HARRIS

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

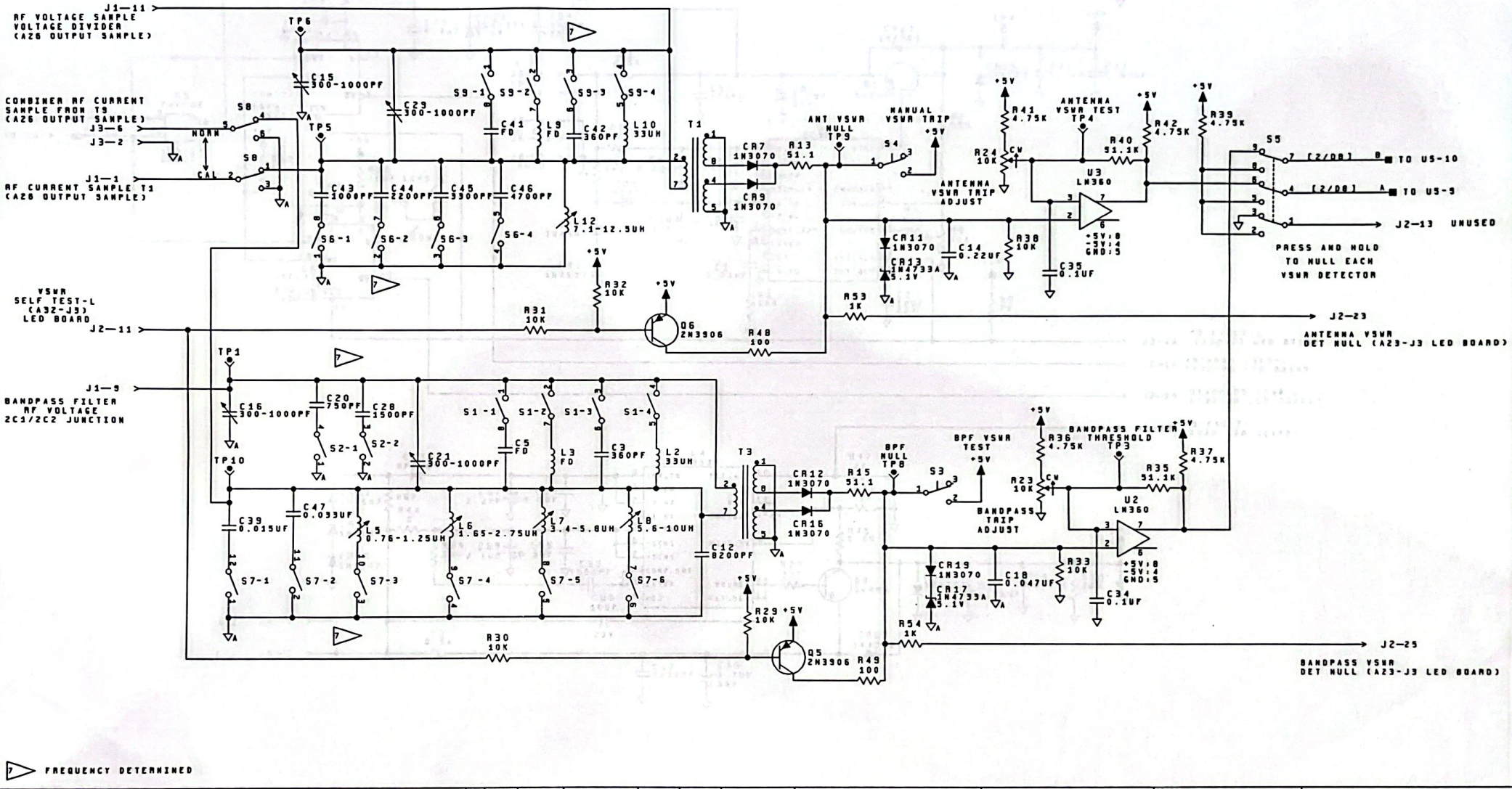
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DRAWN BY	DAVIDSON
DATE	6-28-95
ENG CHK	CROUCH
PROJ ENG	HOLLENBERG
MFG ENG	

D — SHEET 1 OF 1

TITLE: SCH POWER DISTRIBUTION A39

DWG # 843-5400-081 — REV A



NOTES

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

UNLESS OTHERWISE NOTED.

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

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

REVISION	LTR	ZONE	DATE	DFTM	ENG	ECO NUM
	H		7-23-99	DFD	DFD	43008
	REVISED TEXT, REVISED SHEET 2					
	J		12-1-00	DN	DN	46625
	REVISE SHEET 3					

HARRIS

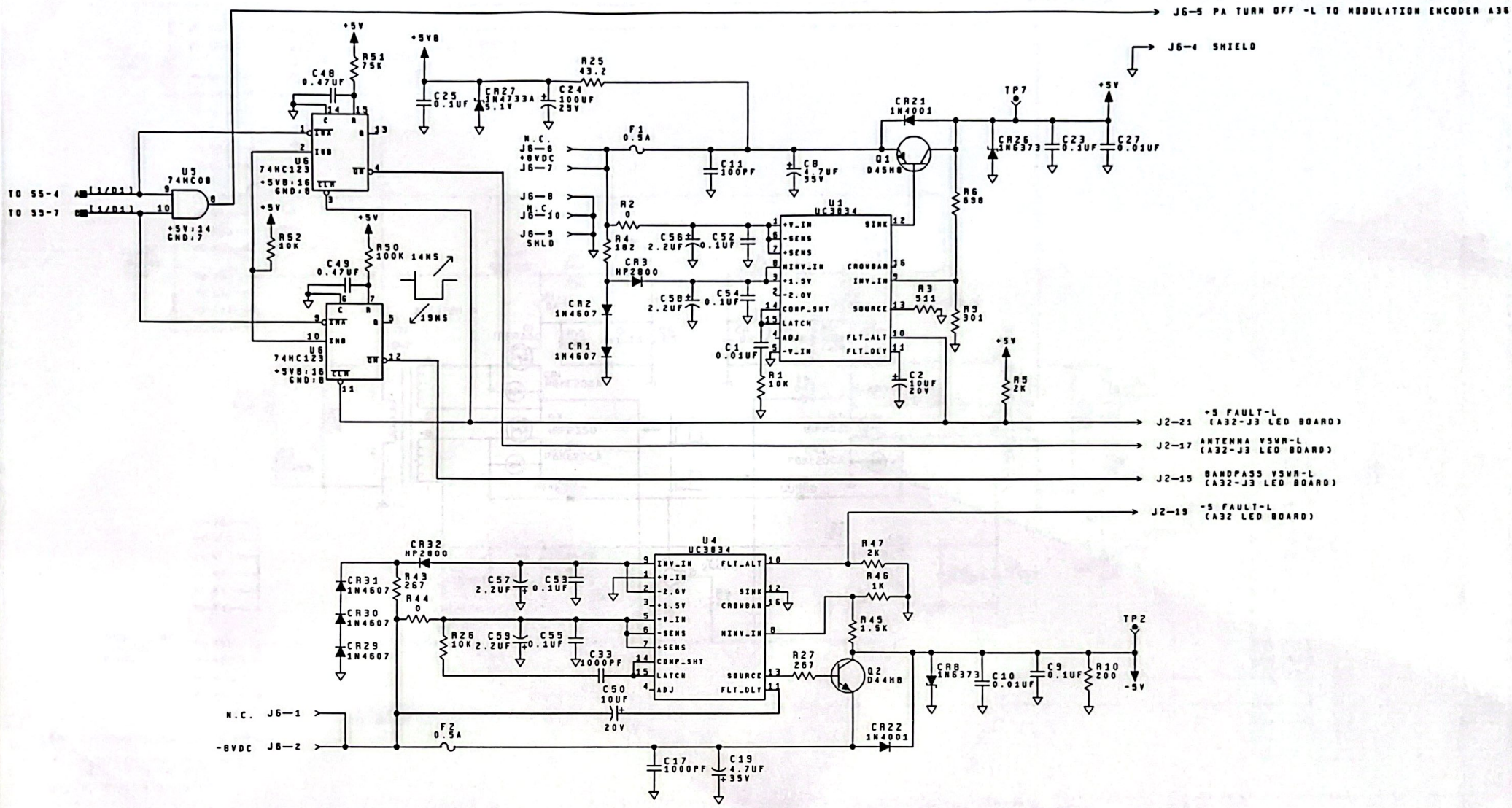
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P.O. BOX 4290
QUINCY, ILLINOIS 62305

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DRAWN BY	DAVIDSON
DATE	9-28-99
ENG CHG	HOLLENBERG
PROJ ENG	HOLLENBERG
QFC ENG	
D	SHEET 1 OF 3

TITLE: SCH OUTPUT MONITOR (AZ7)

DWG # 843-5400-101 REV J



NOTES

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

UNLESS OTHERWISE NOTED.

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

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

REVISION	LTR	ZONE	DATE	DFTN	ENG	ECO NUM
	H		7-23-99	DFD	DFD	43008
	REVISE SHEET #2,R44; REVISE TEXT					
	J		12-1-00	DN	DN	46625
	REVISE SHEET 3.					

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

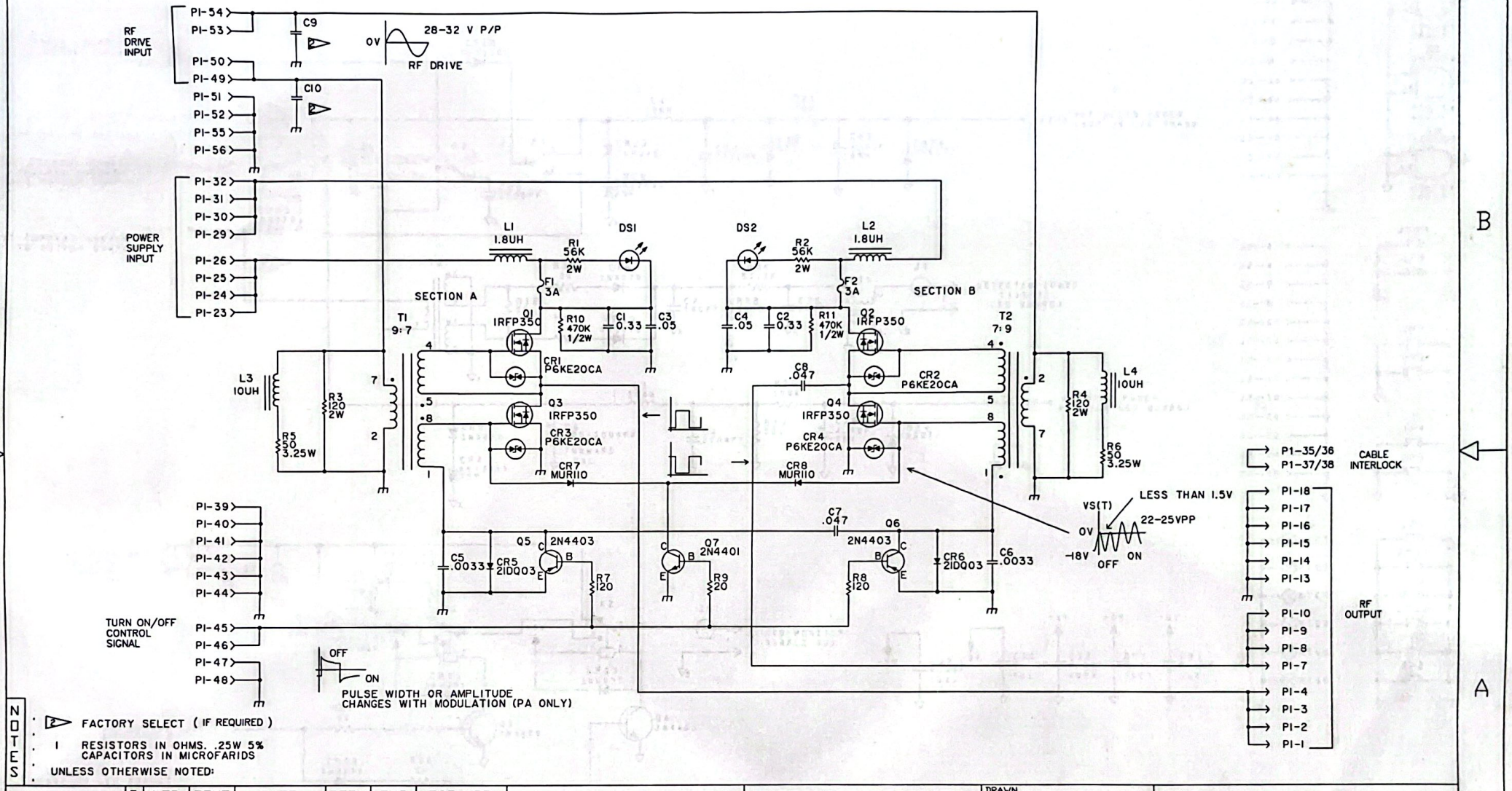
DRAWN BY	DAVIDSON
DATE	9-28-99
ENG CHK	HOLLENBERG
PROJ ENG	HOLLENBERG
OPS ENG	

TITLE: SCM OUTPUT MONITOR (A27)

SIZE D | SHEET 2 OF 3 | DWG # 843-5400-101 | REV J

9172178014 : 2/16/2005

DWG NO. 839-6208-246 .



NOTES:
- 2 FACTORY SELECT (IF REQUIRED)
- 1 RESISTORS IN OHMS. .25W 5% CAPACITORS IN MICROFARIDS
- UNLESS OTHERWISE NOTED:

REVISION	LTR	ZONE	DATE	DFTM	ENG	ECO NBR
	F	.	FEB 2, 1999	SEC	.	42614
	CONVERTED TO AutoCAD FORMAT, CORRECTED WAVE FORM TEXT					

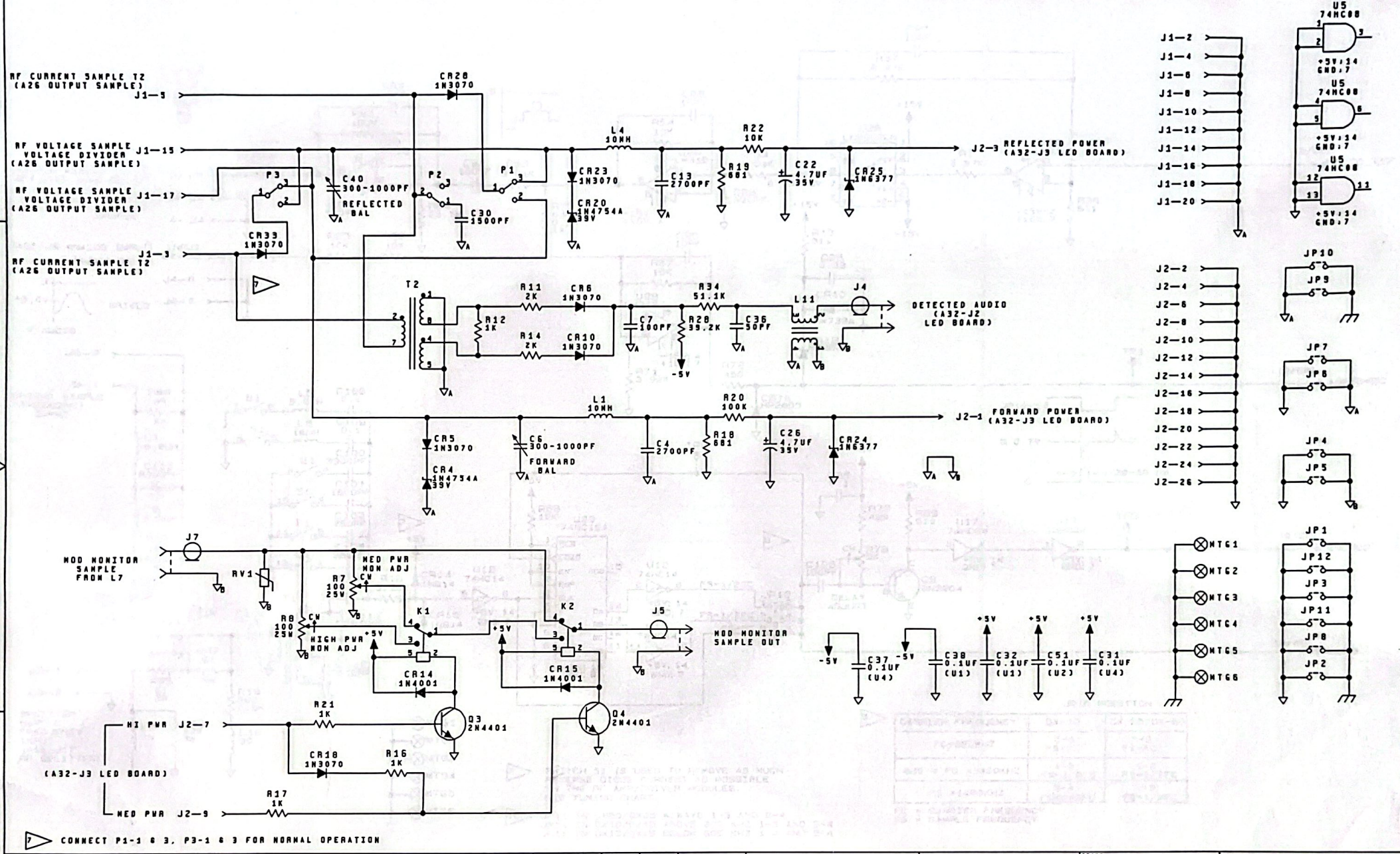
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DRAWN BY	R SIMON
DATE	NOV 1987
ENG CHK	GJK 12-1-87
PROJ ENG	RICHARDS 12/87
MFG ENG	RUSSELL 12/87
*	SHEET 1 OF 1

TITLE
SCHEM, RF AMPLIFIER
—
—

DWG NO. 839-6208-246. REV F



NOTES

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

UNLESS OTHERWISE NOTED:

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

REVISION	LTR	ZONE	DATE	DFTM	ENG	ECO NUM
	H		7-23-99	DFD	DFD	43008
	REVISE SHEETS 1 AND 2					
	J		12-1-00	DN	DN	46625
	CHANGE C1 & C4 FROM 10UH TO 10NH.					

HARRIS

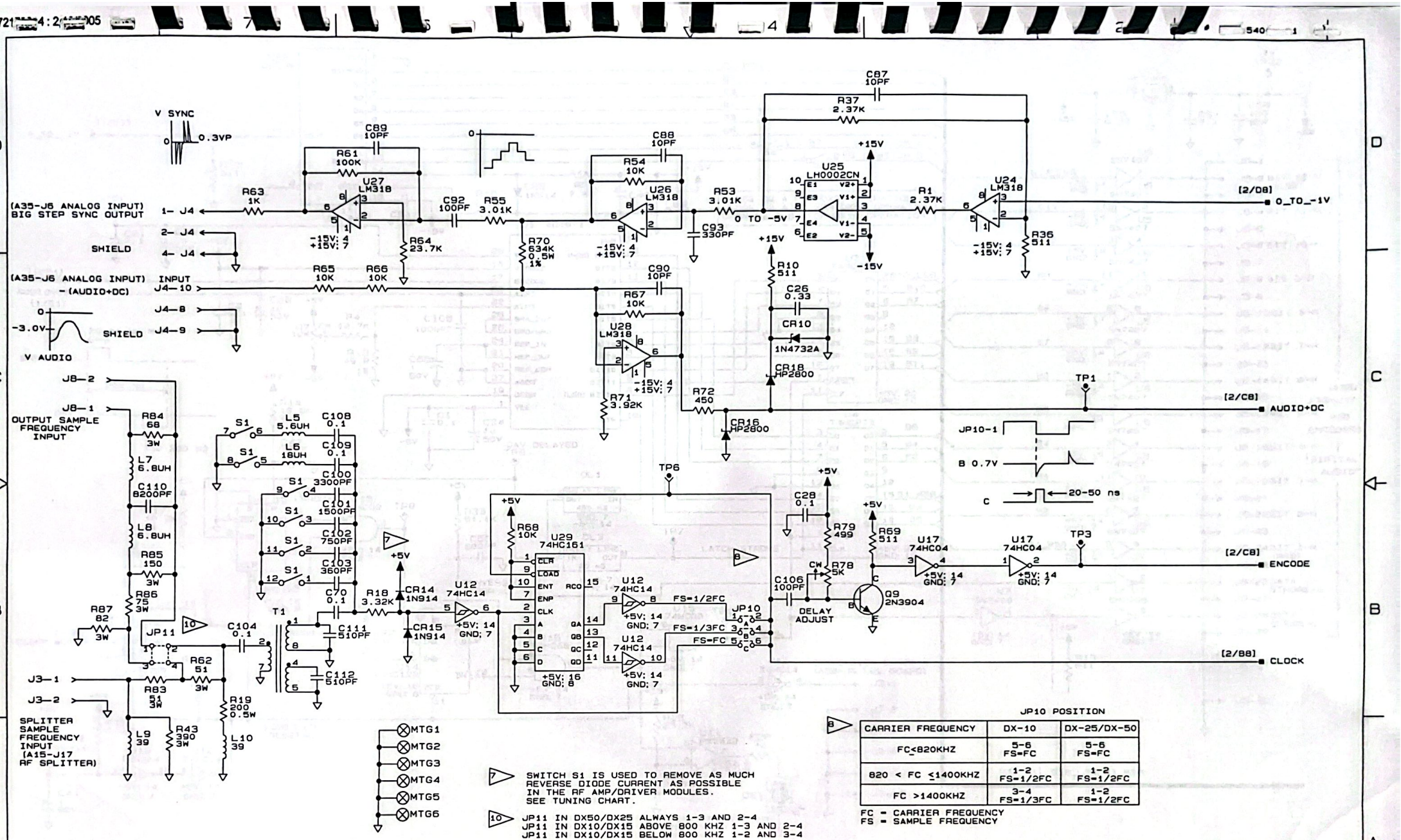
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QUINCY, ILLINOIS 62305

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DRAWN BY	DAVIDSON
DATE	9-28-95
ENG CHG	HOLLENBERG
PROJ ENG	HOLLENBERG
MFG ENG	
D	SHEET 3 OF 3

TITLE: SCH OUTPUT MONITOR (A27)

DWG # 843-5400-101 REV J



JP10 POSITION		
CARRIER FREQUENCY	DX-10	DX-25/DX-50
FC≤820KHZ	5-6 FS=FC	5-6 FS=FC
820 < FC ≤1400KHZ	1-2 FS=1/2FC	1-2 FS=1/2FC
FC >1400KHZ	3-4 FS=1/3FC	1-2 FS=1/2FC

FC = CARRIER FREQUENCY
FS = SAMPLE FREQUENCY

7 SWITCH S1 IS USED TO REMOVE AS MUCH REVERSE DIODE CURRENT AS POSSIBLE IN THE RF AMP/DRIVER MODULES. SEE TUNING CHART.

10 JP11 IN DX50/DX25 ALWAYS 1-3 AND 2-4
JP11 IN DX10/DX15 ABOVE 800 KHZ 1-3 AND 2-4
JP11 IN DX10/DX15 BELOW 800 KHZ 1-2 AND 3-4

NOTES
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3. CAPACITANCE IN UF.
2. RESISTANCE IN OHMS.
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6. 5% RESISTORS MAY BE SUBSTITUTED FOR ANY RESISTOR UNLESS LABELED 1% ON THIS DOCUMENT.
5. SHEET NUMBER / ZONE (2/A1) ■ CONTINUATION SYMBOL

REVISION	LTR	ZONE	DATE	DFTM	ENG	ECO NUM
	A					NEW DWG
	B		2-16-00	DFD	DFD	45724
	REVISE SHEET 2					

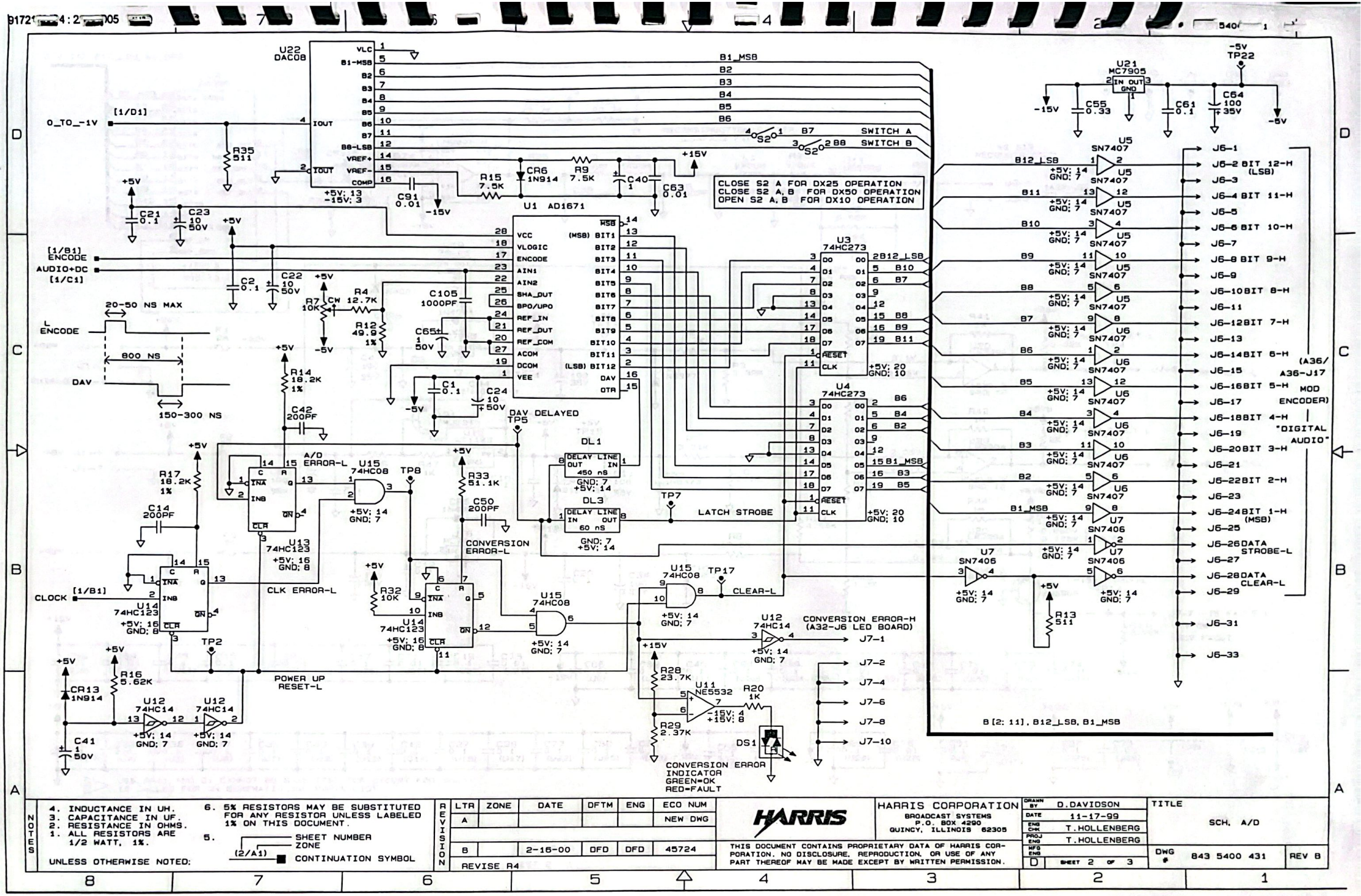
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QUINCY, ILLINOIS 62305

DRAWN BY	D.DAVIDSON
DATE	11-17-99
ENG CHK	T.HOLLENBERG
PROJ ENG	T.HOLLENBERG
MFG ENG	
D	SHEET 1 OF 3

TITLE: SCH. A/D

DWG # 843 5400 431 REV B



NOTES

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

UNLESS OTHERWISE NOTED:

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

REVISION

LTR	ZONE	DATE	DFTM	ENG	ECO NUM
A					NEW DWG
B		2-16-00	DFD	DFD	45724

REVISE R4

HARRIS

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BROADCAST SYSTEMS
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QUINCY, ILLINOIS 62305

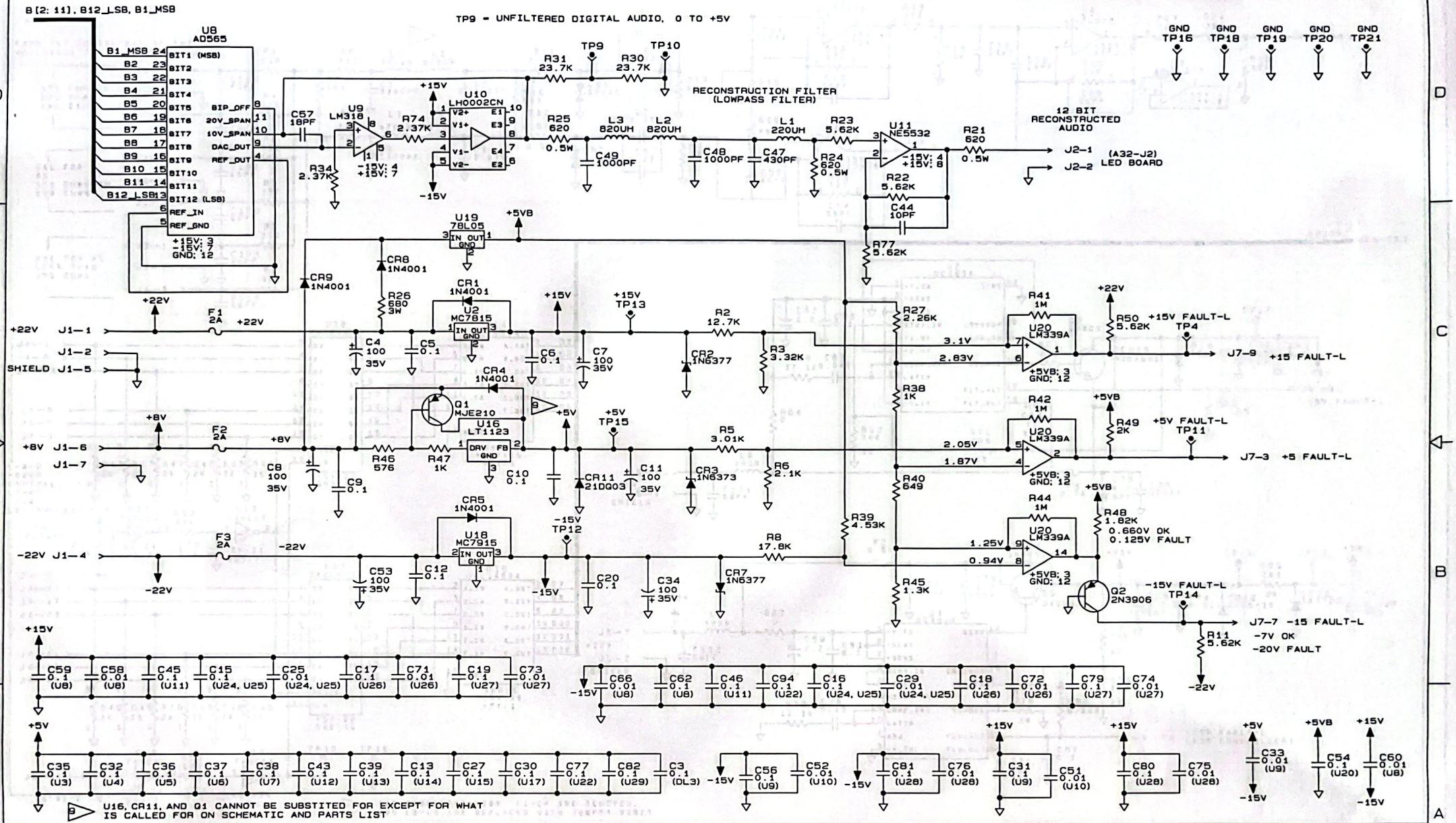
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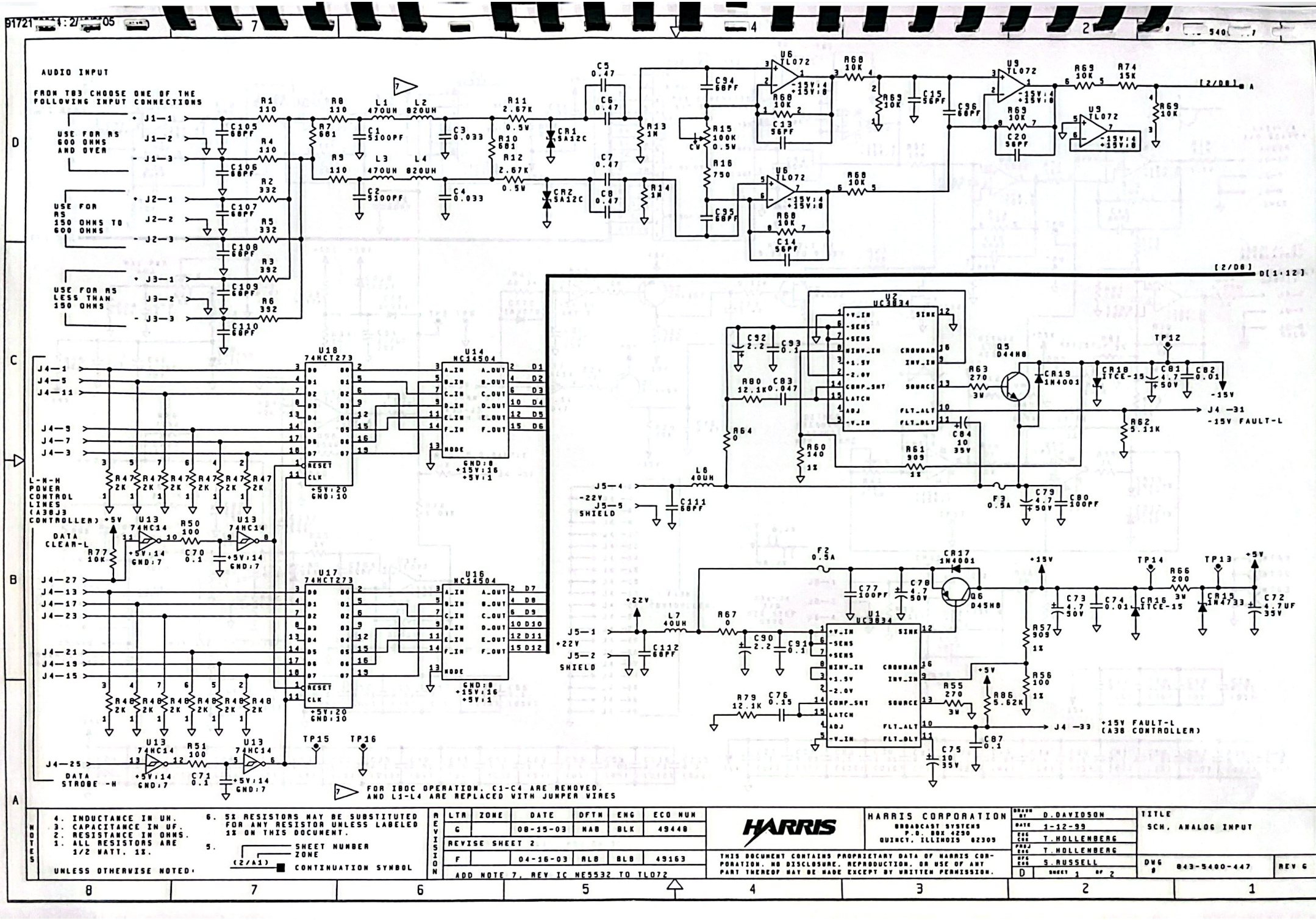
DRAWN BY	D.DAVIDSON
DATE	11-17-99
ENG CHK	T.HOLLENBERG
PROJ ENG	T.HOLLENBERG
MFG ENG	
SHEET	2 OF 3

TITLE: SCH, A/D

DWG #: 843 5400 431

REV B


B[2:11], B12_LSB, B1_MSB
TP9 = UNFILTERED DIGITAL AUDIO, 0 TO +5V
U8 AD565
B1_MSB 24
B2 23
B3 22
B4 21
B5 20
B6 19
B7 18
B8 17
B9 16
B10 15
B11 14
B12_LSB 13
BIT1 (MSB)
BIT2
BIT3
BIT4
BIT5
BIT6
BIT7
BIT8
BIT9
BIT10
BIT11
BIT12 (LSB)
REF_IN
REF_GND
BIP_OFF
20V_SPAN
10V_SPAN
DAC_OUT
REF_OUT
+15V: 9
-15V: 7
GND: 12
TP9
TP10
R31 23.7K
R30 23.7K
RECONSTRUCTION FILTER
(LOWPASS FILTER)
GND TP16
GND TP18
GND TP19
GND TP20
GND TP21
U10 LH0002CN
U9 LM318
C57 18PF
R74 2.37K
R34 2.37K
R25 620
0.5W
L3 820UH
L2 820UH
L1 220UH
R23 5.62K
C49 1000PF
C48 1000PF
C47 430PF
R24 620
0.5W
U11 NE5532
R21 620
0.5W
12 BIT
RECONSTRUCTED
AUDIO
J2-1
J2-2
(A32-J2)
LED BOARD
R22 5.62K
C44 10PF
R77 5.62K
U19 78L05
CR8 1N4001
CR9 1N4001
R26 680 3W
CR1 1N4001
U2 MC7815
+22V
F1 2A
+22V J1-1
J1-2
SHIELD J1-5
C4 100 35V
C5 0.1
C6 0.1
C7 100 35V
R2 12.7K
CR2 1N6377
R3 3.32K
+15V TP13
R27 2.26K
R41 1M
U20 LM339A
3.1V
2.83V
+5VB: 3
GND: 12
R50 5.62K
+15V FAULT-L
TP4
J7-9 +15 FAULT-L
+8V
F2 2A
+8V J1-6
J1-7
CR4 1N4001
Q1 MJE210
U16 LT1123
DRV FB GND
R46 576
R47 1K
C8 100 35V
C9 0.1
C10 0.1
CR11 21DQ03
C11 100 35V
CR3 1N6373
R5 3.01K
R6 2.1K
+5V TP15
R38 1K
R42 1M
2.05V
1.87V
R49 2K
+5V FAULT-L
TP11
J7-3 +5 FAULT-L
R40 649
-22V J1-4
F3 2A
-22V
CR5 1N4001
U18 MC7915
C53 100 35V
C12 0.1
-15V TP12
C20 0.1
C34 100 35V
CR7 1N6377
R8 17.8K
R39 4.53K
R44 1M
1.25V
0.94V
R48 1.82K
0.660V OK
0.125V FAULT
R45 1.3K
Q2 2N3906
-15V FAULT-L
TP14
J7-7 -15 FAULT-L
-7V OK
-20V FAULT
R11 5.62K
C59 0.1 (U8)
C58 0.01 (U8)
C45 0.1 (U11)
C15 0.1 (U24, U25)
C25 0.01 (U24, U25)
C17 0.1 (U26)
C71 0.01 (U26)
C19 0.1 (U27)
C73 0.01 (U27)
C66 0.01 (U8)
C62 0.1 (U8)
C46 0.1 (U11)
C94 0.1 (U22)
C16 0.1 (U24, U25)
C29 0.01 (U24, U25)
C18 0.1 (U26)
C72 0.01 (U26)
C79 0.1 (U27)
C74 0.01 (U27)
C35 0.1 (U3)
C32 0.1 (U4)
C36 0.1 (U5)
C37 0.1 (U6)
C38 0.1 (U7)
C43 0.1 (U12)
C39 0.1 (U13)
C13 0.1 (U14)
C27 0.1 (U15)
C30 0.1 (U17)
C77 0.1 (U22)
C82 0.1 (U29)
C3 0.1 (DL3)
C56 0.1 (U9)
C52 0.01 (U10)
C81 0.1 (U28)
C76 0.01 (U28)
C31 0.1 (U9)
C51 0.01 (U10)
C80 0.1 (U28)
C75 0.01 (U28)
C33 0.01 (U9)
C54 0.1 (U20)
C60 0.01 (U8)
9 U16, CR11, AND Q1 CANNOT BE SUBSTITED FOR EXCEPT FOR WHAT IS CALLED FOR ON SCHEMATIC AND PARTS LIST
NOTES
4. INDUCTANCE IN UH.
3. CAPACITANCE IN UF.
2. RESISTANCE IN OHMS.
1. ALL RESISTORS ARE 1/2 WATT, 1%.
UNLESS OTHERWISE NOTED:
6. 5% RESISTORS MAY BE SUBSTITUTED FOR ANY RESISTOR UNLESS LABELED 1% ON THIS DOCUMENT.
5. (2/A1) SHEET NUMBER ZONE CONTINUATION SYMBOL
REVISION
LTR ZONE DATE DFTM ENG ECO NUM
A NEWDWG
B 2-16-00 DFD DFD 45724
REVISE SHEET 2
HARRIS
HARRIS CORPORATION
BROADCAST SYSTEMS
P.O. BOX 4290
QUINCY, ILLINOIS 62305
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DRAWN BY D.DAVIDSON
DATE 11-17-99
ENG CHK T.HOLLENBERG
PROJ ENG T.HOLLENBERG
MFG ENG
D SHEET 3 OF 3
TITLE SCH, A/D
DWG # 843 5400 431
REV B



NOTES

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

UNLESS OTHERWISE NOTED.

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

REVISION

LTR	ZONE	DATE	DFTM	ENG	ECO NUM
G		08-15-03	MAB	BLK	49448
REVISE SHEET 2					
F		04-16-03	RLB	BLB	49163
ADD NOTE 7, REV IC NE5532 TO TL072					

HARRIS

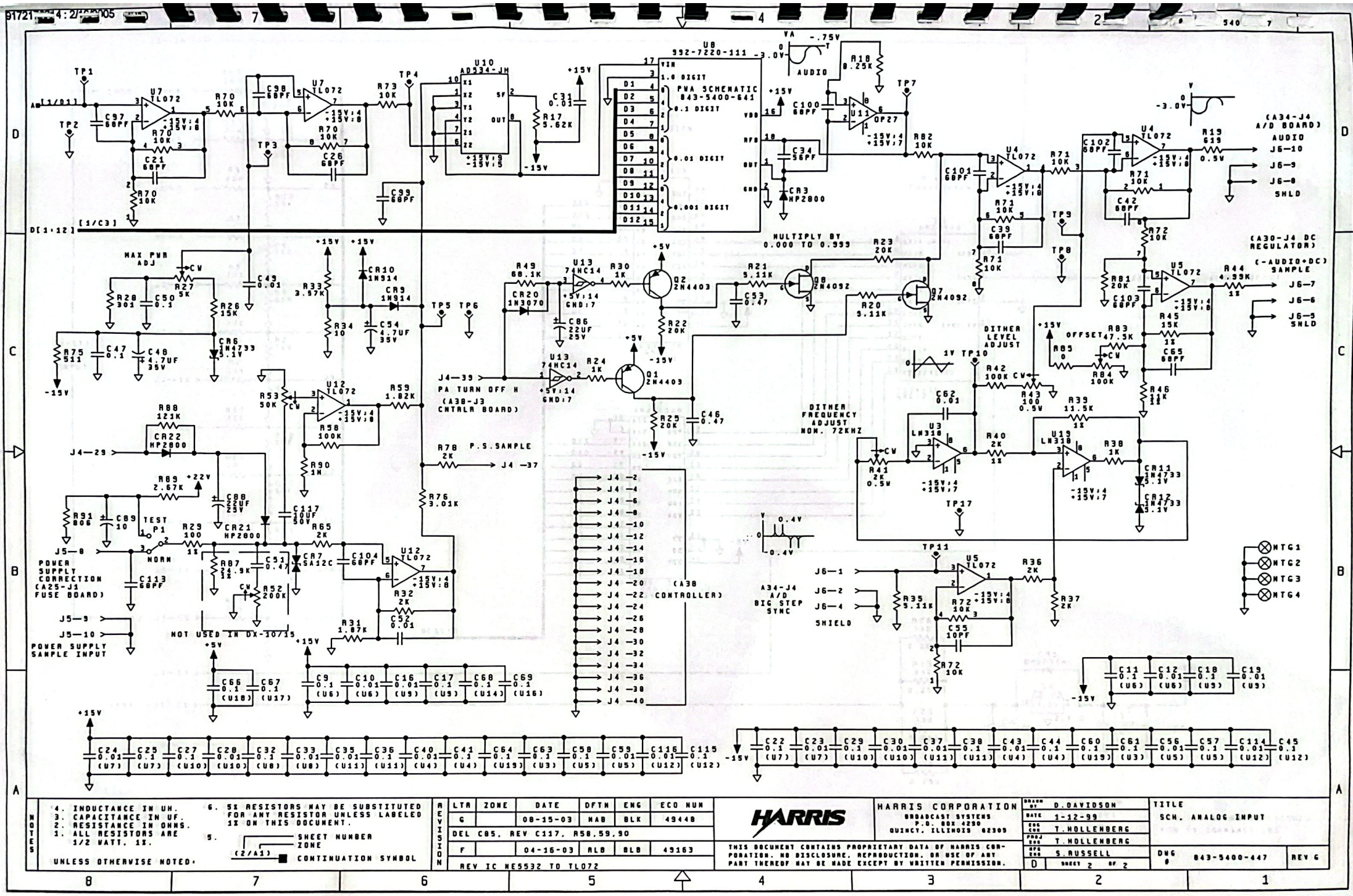
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BROADCAST SYSTEMS
P.O. BOX 4290
QUINCY, ILLINOIS 62305

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DRAWN BY	D.DAVIDSON
DATE	1-12-99
ENG CHK	T.HOLLENBERG
PROJ ENG	T.HOLLENBERG
APP ENG	S.RUSSELL
D	SHEET 1 OF 2

TITLE
SCH, ANALOG INPUT

DWG # 843-5400-447 REV G



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

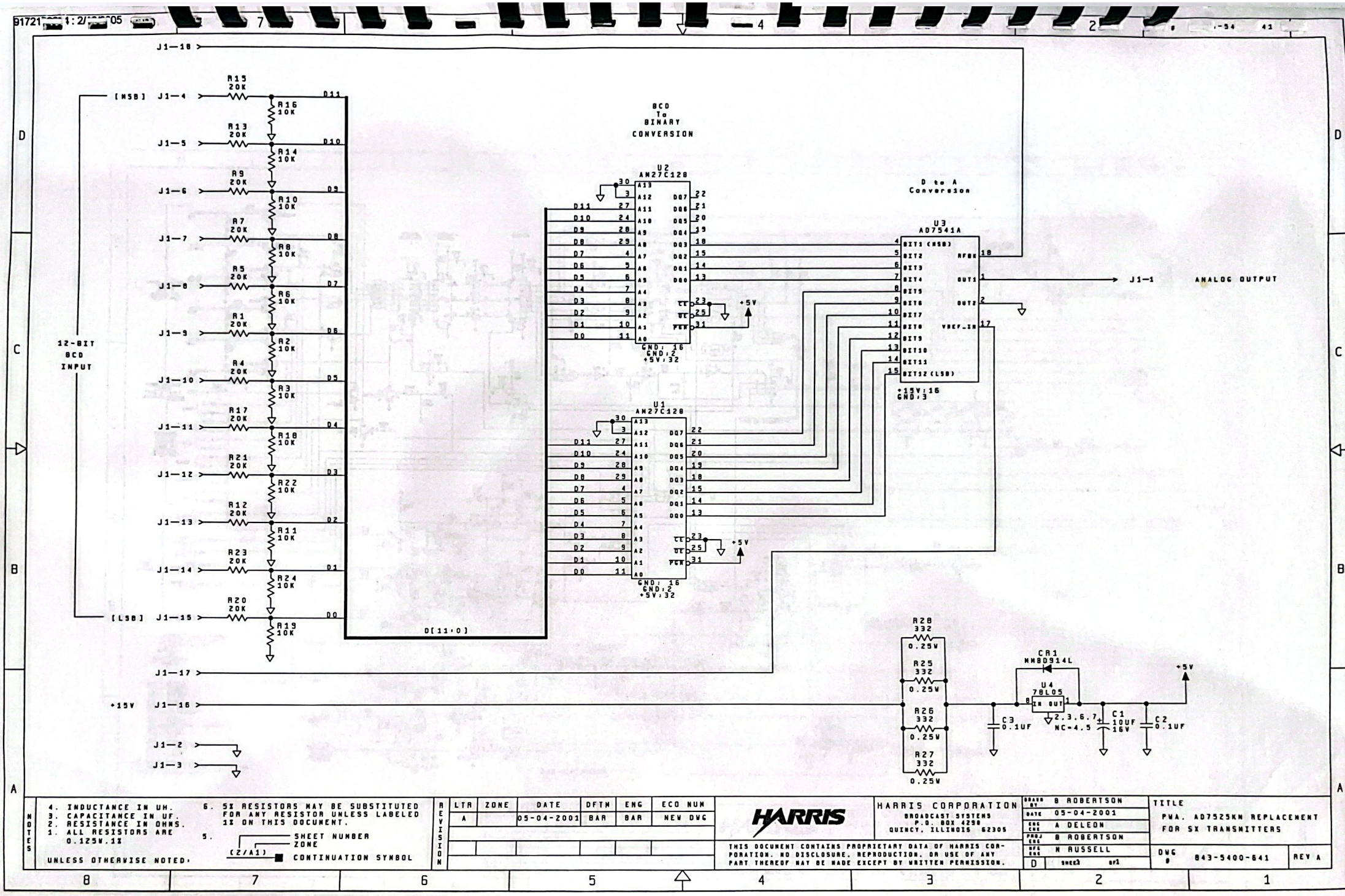
REVISION	LTR	ZONE	DATE	DFTN	ENG	ECO NUM
	G		08-15-03	MAB	BLK	49448
	DEL C85, REV C117, R58,59,90					
	F		04-16-03	RLB	BLB	49163
	REV IC NE5532 TO TL072					

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DRAWN BY	D.DAVIDSON
DATE	1-12-99
ENG CHG	T.HOLLENBERG
PROJ ENG	T.HOLLENBERG
APP ENG	S.RUSSELL
SHEET	2 OF 2

TITLE: SCH, ANALOG INPUT

DWG # 843-5400-447 REV G



NOTES

4. INDUCTANCE IN UH.
3. CAPACITANCE IN UF.
2. RESISTANCE IN OHMS.
1. ALL RESISTORS ARE 0.125W.1%

UNLESS OTHERWISE NOTED:

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

REVISION	LTR	ZONE	DATE	DFTM	ENG	ECO NUM
	A		05-04-2001	BAR	BAR	NEW DWG

HARRIS

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P.O. BOX 4290
QUINCY, ILLINOIS 62305

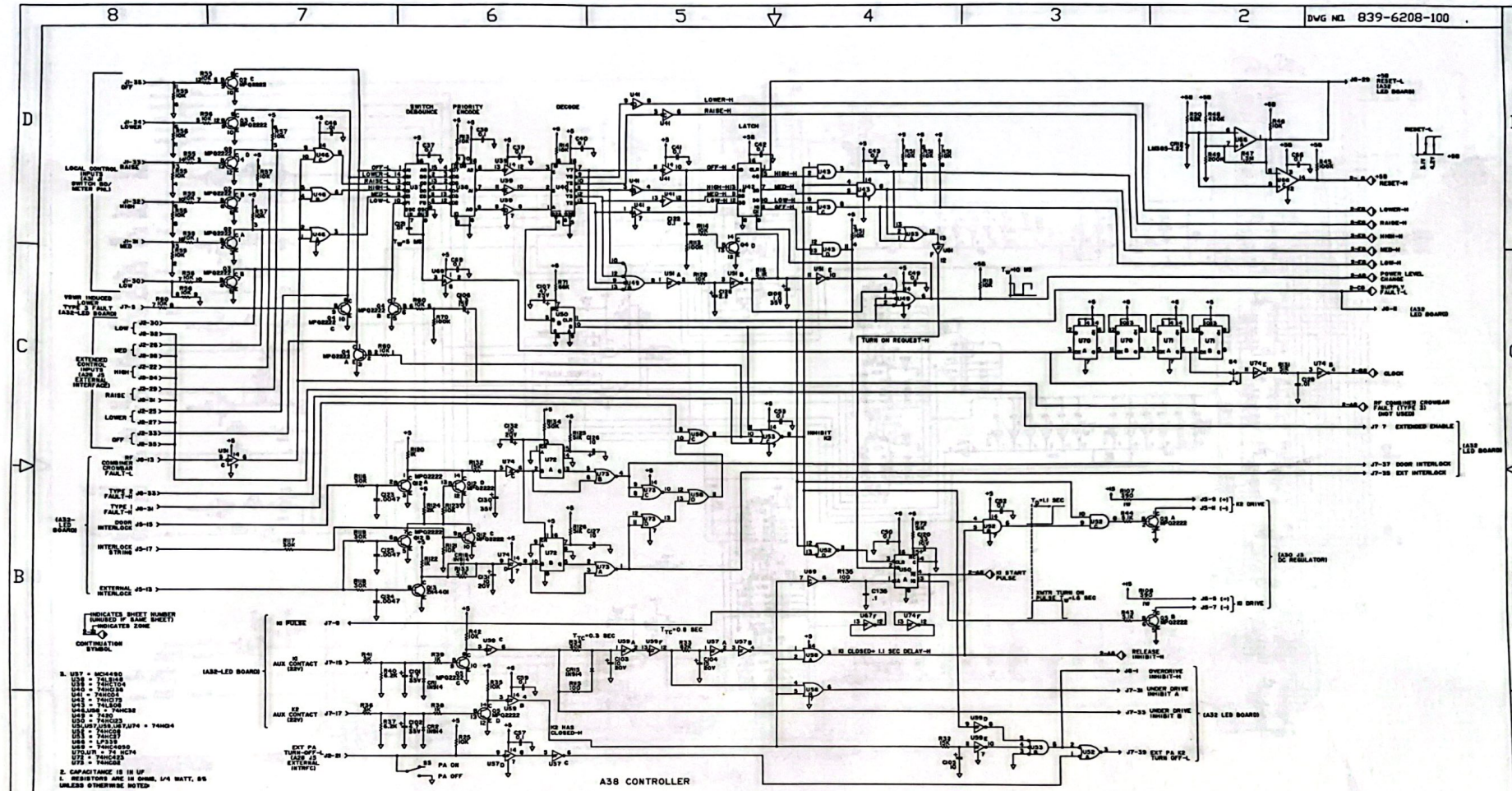
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DRAWN BY	B ROBERTSON
DATE	05-04-2001
ENG CHG	A DELEON
PROJ ENG	B ROBERTSON
MFG ENG	M RUSSELL

D SHEET 3 OF 1

TITLE: PWA, AD7525KN REPLACEMENT FOR SX TRANSMITTERS

DWG # 843-5400-641 REV A



REVISION	LTR	ZONE	DATE	DFTM	ENG	ECO NBR
	R	.	03-29-99	DFD	DFD	42239B
	REVISE SHEET 3					
	S	.	7-26-99	DFD	DFD	43008
	REVISED SHEET 3					

NOTES

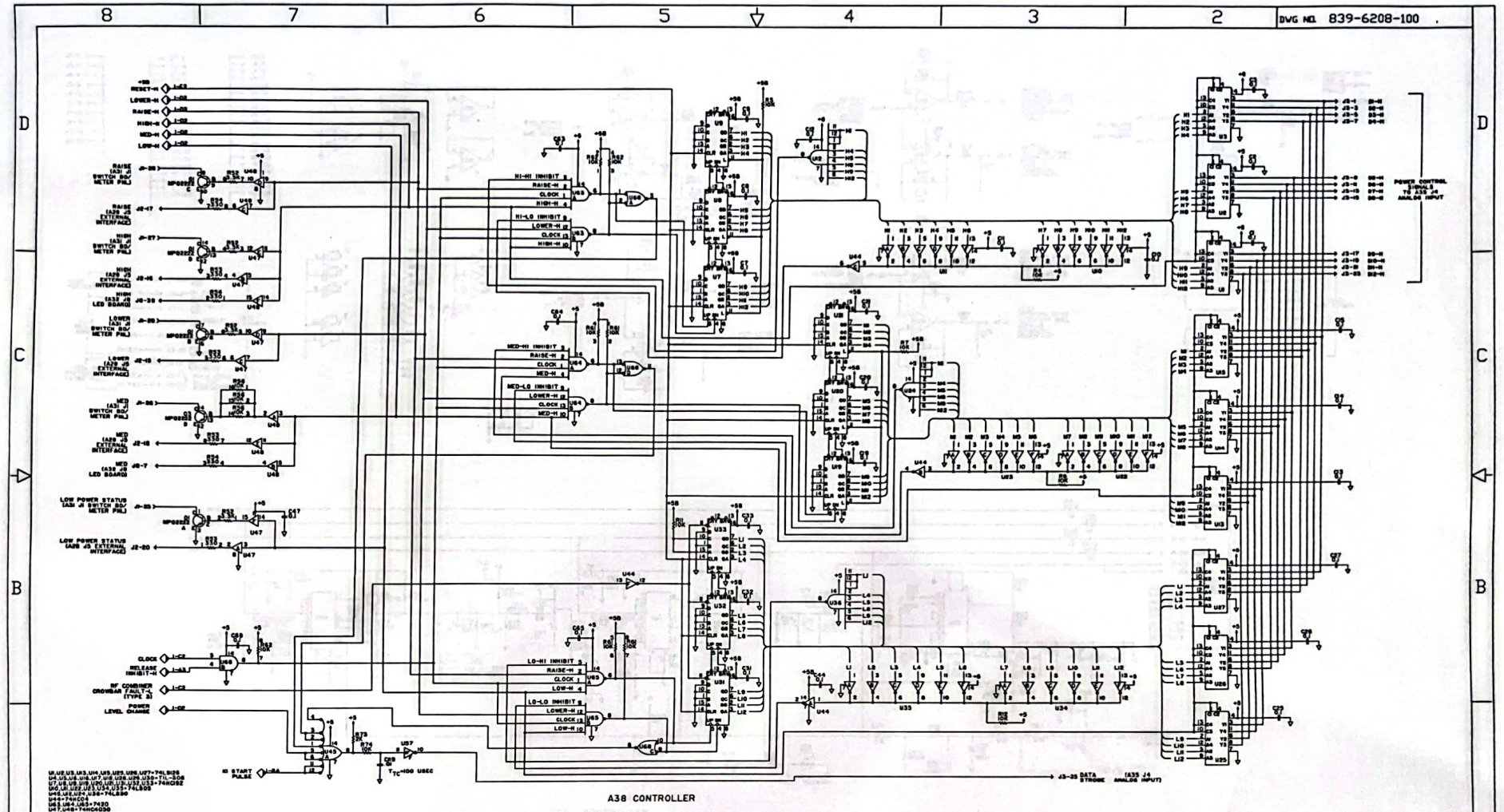
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QUINCY, ILLINOIS 62305

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DRAWN BY	D GLOVER
DATE	2-12-86
ENG CHK	GJK 12-1-87
PROJ ENG	RICHARDS 12-1-87
MFG ENG	RUSSELL 12-1-87
SHEET	1 OF 3

TITLE
SCHEM, CONTROLER
-
-

DWG NO. 839-6208-100 . REV S



NOTES

REVISION	LTR	ZONE	DATE	DFTM	ENG	ECO NBR
	R	.	03-29-99	DFD	DFD	42239B
	REVISE SHEET 3					
	S	.	7-26-99	DFD	DFD	43008
	REVISED SHEET 3					

HARRIS

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

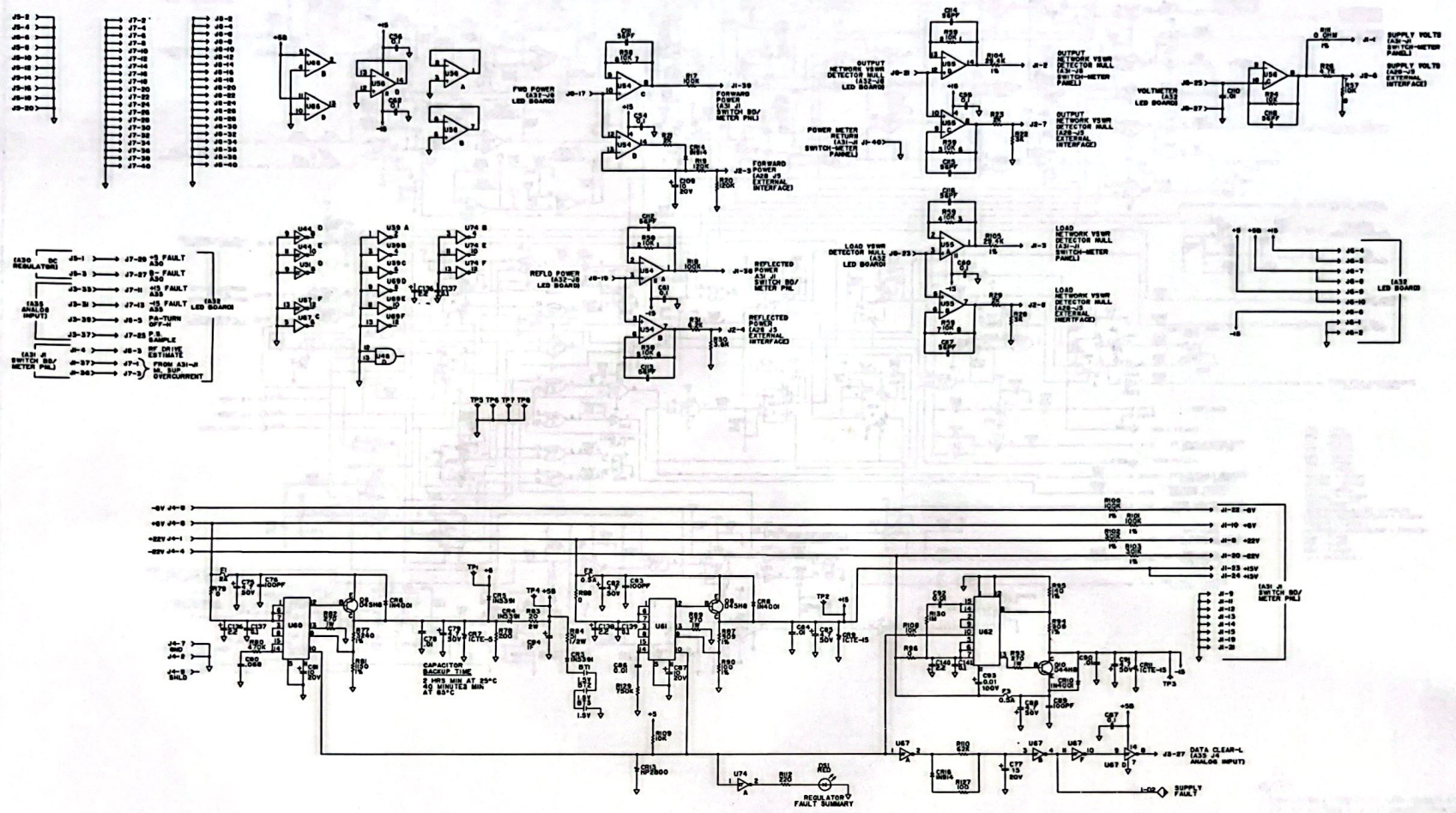
THIS DOCUMENT CONTAINS PROPRIETARY DATA OF HARRIS CORPORATION. NO DISCLOSURE, REPRODUCTION, OR USE OF ANY PART THEREOF MAY BE MADE EXCEPT BY WRITTEN PERMISSION.

DRAWN BY	D GLOVER
DATE	2-12-87
ENG CHK	GJK 12-1-87
PROJ ENG	RICHARDS 12-1-87
MFG ENG	RUSSELL 12-1-87
SHEET	2 OF 3

TITLE
SCHEM, CONTROLLER
-
-

DWG NO. 839-6208-100 . REV S

DWG NO. 839-6208-100



A38 CONTROLLER

NOTES

REVISION	LTR	ZONE	DATE	DFTM	ENG	ECO NBR
	R	.	03-29-99	DFD	DFD	42239B
	ADDED C136-C141					
	S	.	7-26-99	DFD	DFD	43008
	REVISED R79,R88,R96					

HARRIS

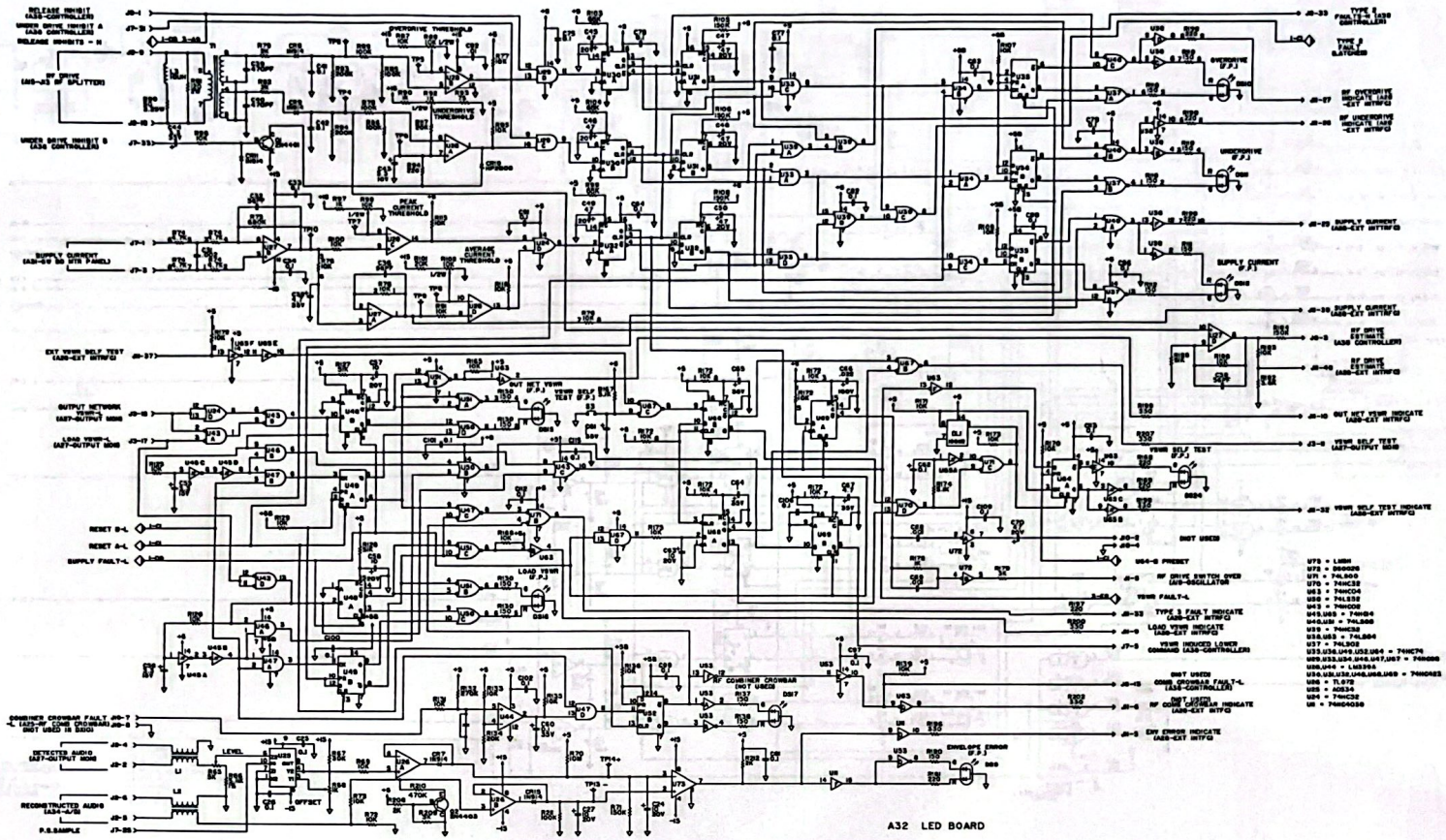
HARRIS CORPORATION
BROADCAST COMMUNICATIONS
P.O. BOX 4290
QUINCY, ILLINOIS 62305

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DRAWN BY	A BUSS
DATE	2-12-86
ENG CHK	GJK 12-1-87
PROJ ENG	RICHARDS 12-1-87
MFG ENG	RUSSELL 12-1-87
SHEET	3 OF 3

TITLE
SCHEM, CONTROLLER
-
-

DWG NO. 839-6208-100 . REV S



A32 LED BOARD

NOTE:
THIS DRAWING CONVERTED FORM GERBER FORMAT
NOT TO BE USED FOR NEW DESIGN OR RELEASES
UNLESS IT IS COMPLETELY CONVERTED TO AutoCAD TEXT
UPDATED AutoCAD TEXT IS ADDED IN YELLOW

NOTES
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.
.
.
.

REVISION	LTR	ZONE	DATE	DFTM	ENG	ECO NBR
	R	.	03-27-03	RLB	RLB	49136
	REVISE SHEET 1					
	P	.	DEC 11, 1999	SEC	SEC	45494
	CONVERTED TO AutoCAD, UPDATED FORMAT					

HARRIS

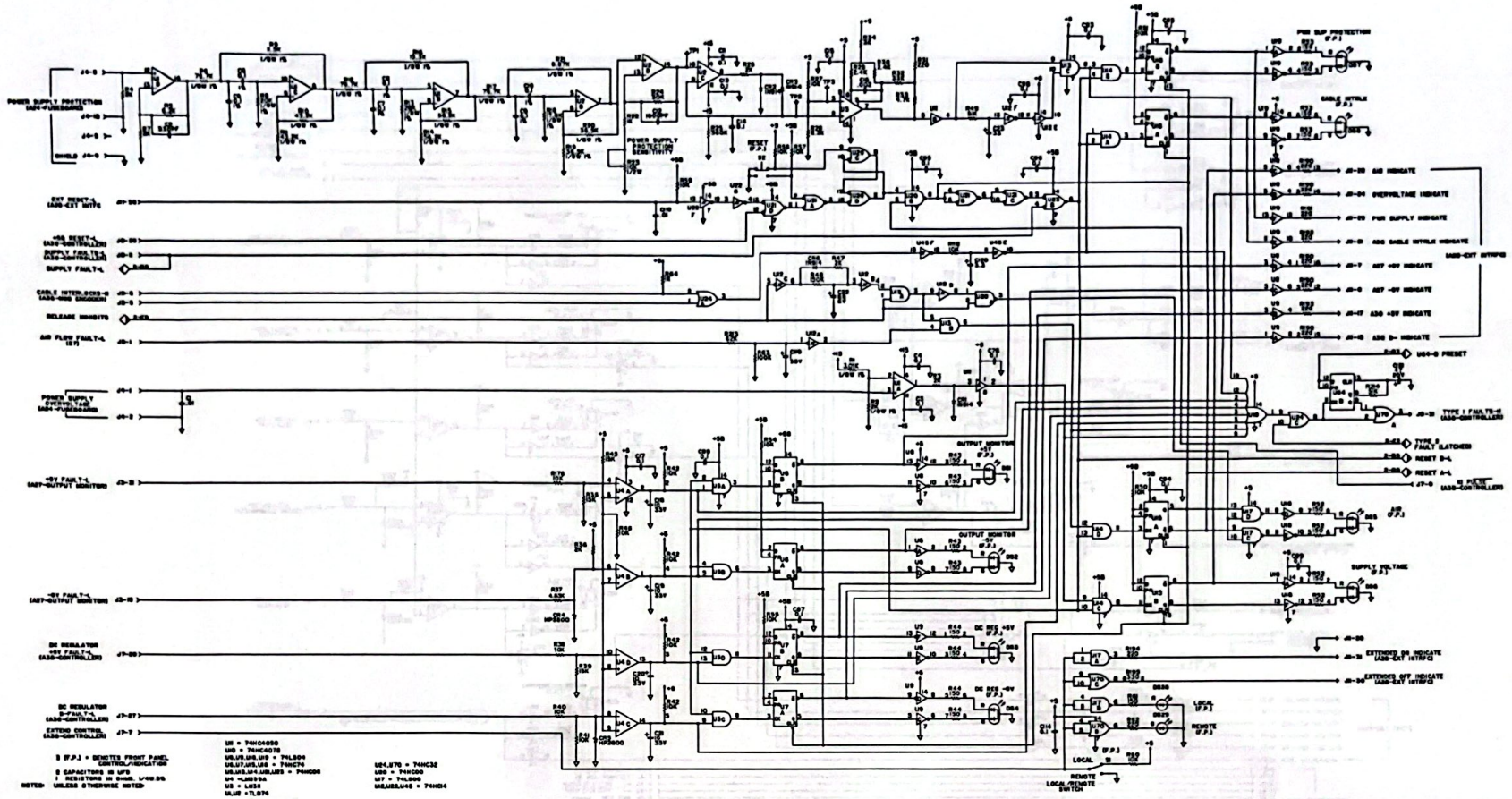
HARRIS CORPORATION
BROADCAST COMMUNICATIONS
P.O. BOX 4290
QUINCY, ILLINOIS 62305

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DRAWN BY	R BEEVER
DATE	4-29-86
ENG CHK	GJK 12-1-87
PROJ ENG	NR 12-1-87
MFG ENG	MR 12-1-87
C	SHEET 2 OF 4

TITLE
SCHEM, LED BOARD
-
-

DWG NO. 839-6208-111 . REV R



NOTE:
THIS DRAWING CONVERTED FORM GERBER FORMAT
NOT TO BE USED FOR NEW DESIGN OR RELEASES
UNLESS IT IS COMPLETELY CONVERTED TO AutoCAD TEXT
UPDATED AutoCAD TEXT IS ADDED IN YELLOW

NOTES:

REVISION	LTR	ZONE	DATE	DFTM	ENG	ECO NBR
	R	.	03-27-03	RLB	RLB	49136
	REVISE R1 TO 3.01K					
	P	.	DEC 11, 1999	SEC	SEC	45494
	CONVERTED TO AutoCAD, REVISED R37					

HARRIS

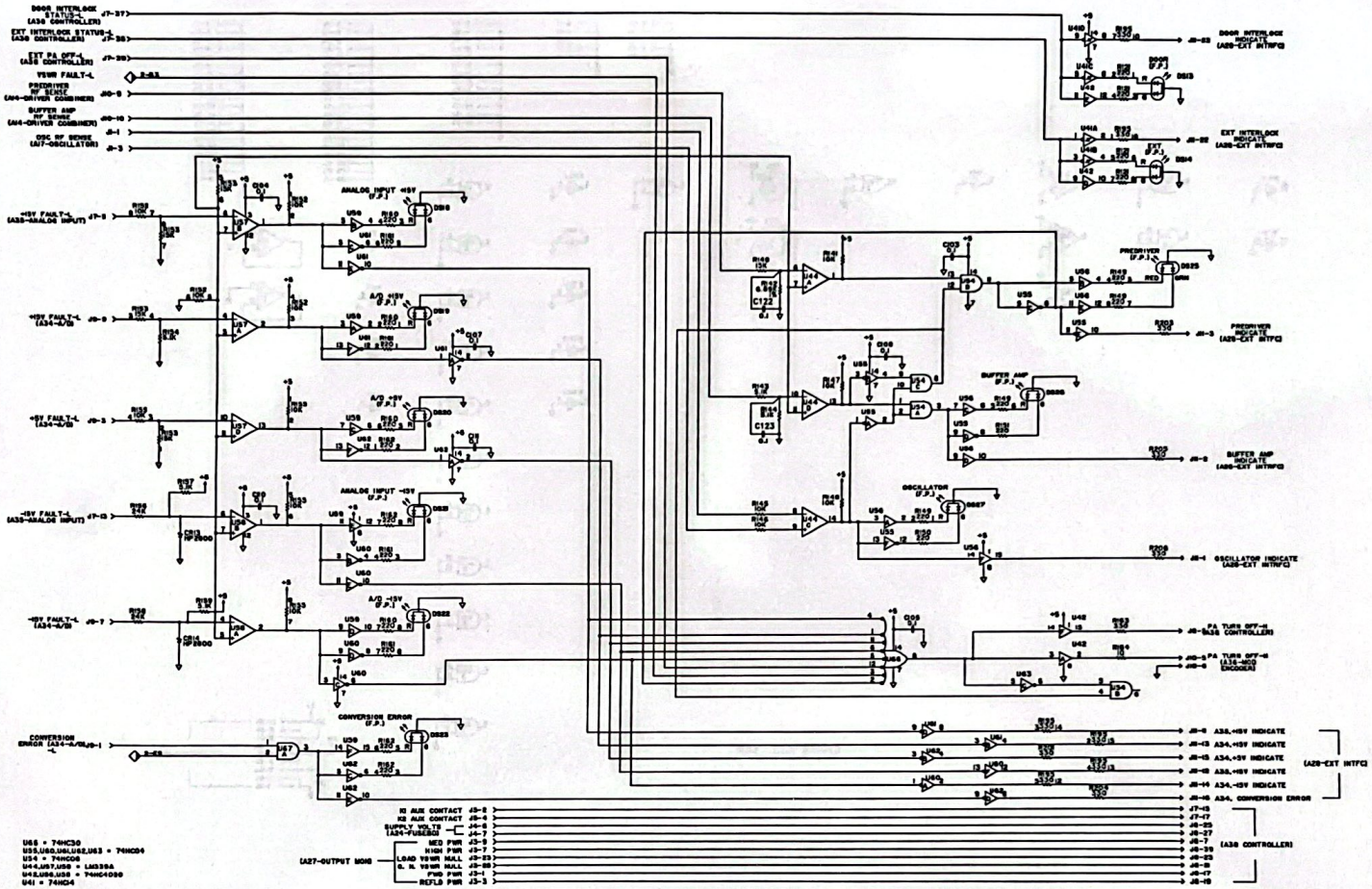
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BROADCAST COMMUNICATIONS
P.O. BOX 4290
QUINCY, ILLINOIS 62305

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DRAWN BY	R BEEVER
DATE	4-29-86
ENG CHK	GJK 12-1-87
PROJ ENG	NR 12-1-87
MFG ENG	MR 12-1-87
C	SHEET 1 OF 4

TITLE
SCHEM, LED BOARD
-
-

DWG NO. 839-6208-111 . REV R



NOTE:
THIS DRAWING CONVERTED FORM GERBER FORMAT
NOT TO BE USED FOR NEW DESIGN OR RELEASES
UNLESS IT IS COMPLETELY CONVERTED TO AutoCAD TEXT
UPDATED AutoCAD TEXT IS ADDED IN YELLOW

NOTES

REVISION	LTR	ZONE	DATE	DFTM	ENG	ECO NBR
	R	.	03-27-03	RLB	RLB	49135
	REVISE SHEET 1					
	P	.	DEC 11, 1999	SEC	SEC	45494
	CONVERTED TO AutoCAD, UPDATED FORMAT					

HARRIS

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

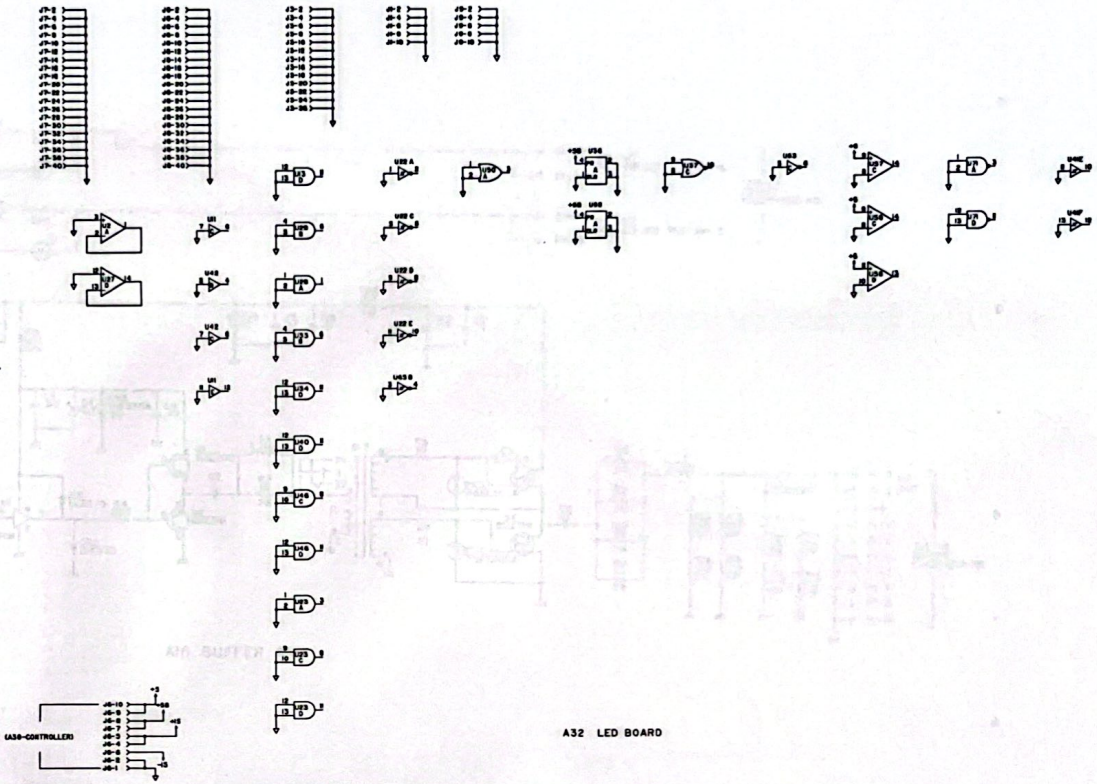
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DRAWN BY	R BEEVER
DATE	4-29-86
ENG CHK	GJK 12-1-87
PROJ ENG	NR 12-1-87
MFG ENG	MR 12-1-87
C	SHEET 3 OF 4

TITLE
SCHEM, LED BOARD
-
-

DWG NO. 839-6208-111 . REV R

DWG NO. 839-6208-111 .



NOTE:
THIS DRAWING CONVERTED FORM GERBER FORMAT
NOT TO BE USED FOR NEW DESIGN OR RELEASES
UNLESS IT IS COMPLETELY CONVERTED TO AutoCAD TEXT
UPDATED AutoCAD TEXT IS ADDED IN YELLOW

NOTES:

REVISION	LTR	ZONE	DATE	DFTM	ENG	ECO NBR
	R	.	03-27-03	RLB	RLB	49136
	REVISE SHEET 1					
	P	.	DEC 11, 1999	SEC	SEC	45494
	CONVERTED TO AutoCAD, UPDATED FORMAT					

HARRIS

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

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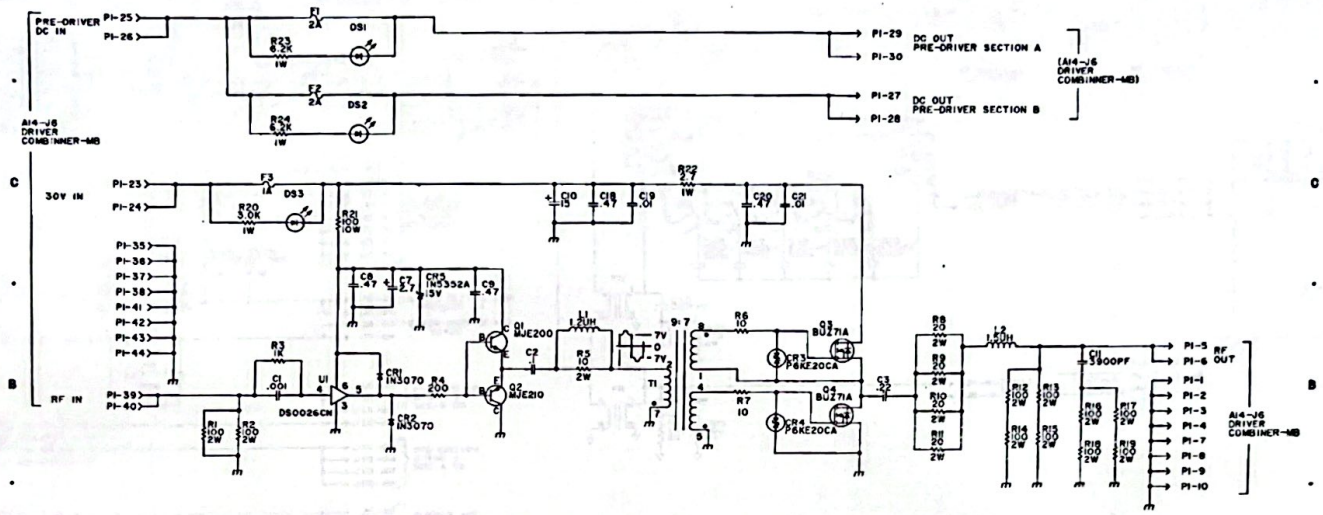
DRAWN BY	R BEEVER
DATE	4-29-86
ENG CHK	GJK 12-1-87
PROJ ENG	NR 12-1-87
MFG ENG	MR 12-1-87
C	SHEET 4 OF 4

TITLE
SCHEM, LED BOARD
-
-

DWG NO. 839-6208-111 . REV R

REFERENCE DOCUMENTS	
PC. BOARD	NET LIST
843 4038 101	

		DWG. NO. 839 6208 225			
LTR	DATE	REVISION	DFTR	ENG	ECN
A	7-28-87	REVISE	DFG		—
B	10-30-87	REVISED FOR RELEASE	RWS		—



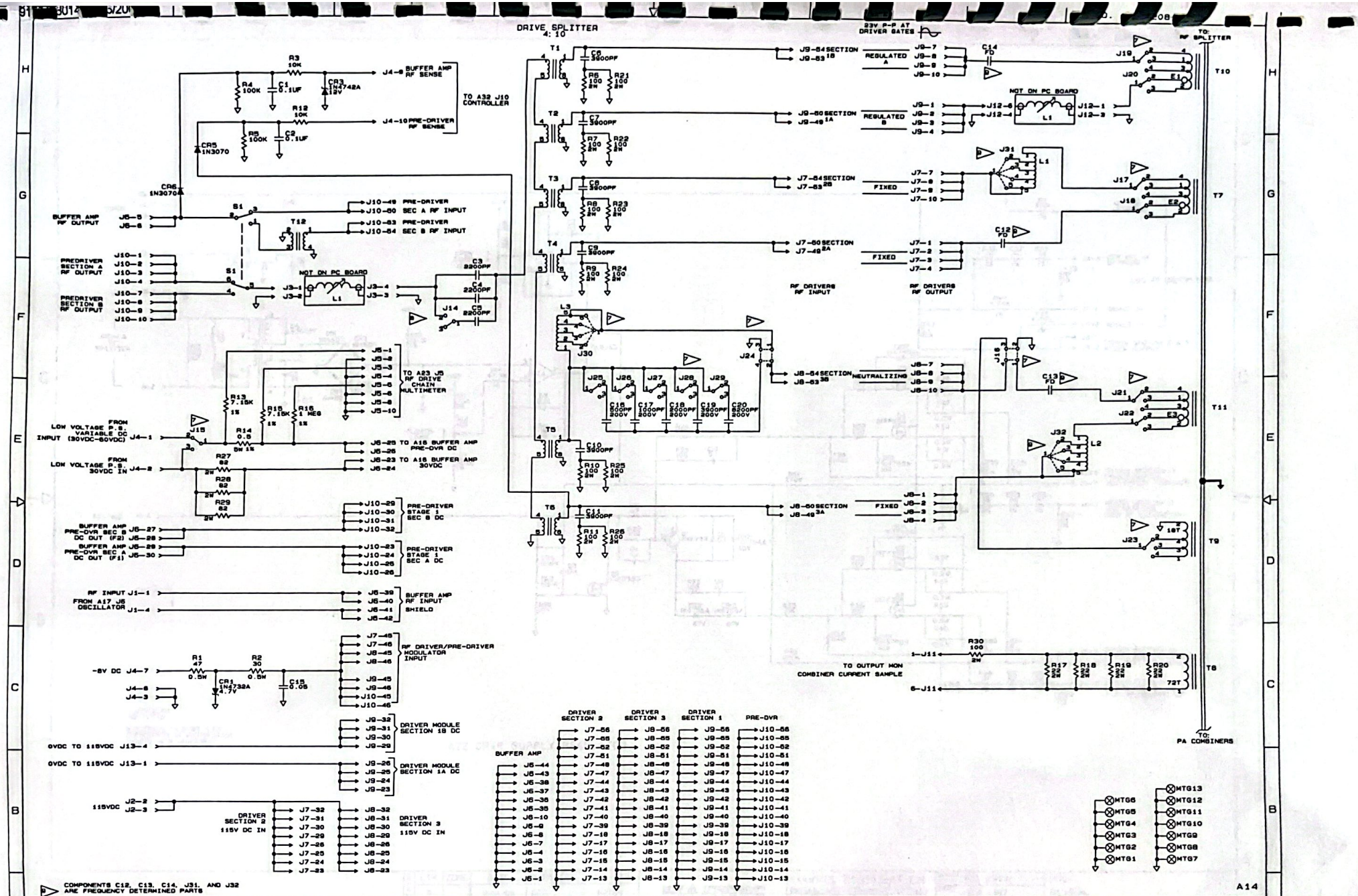
A16 BUFFER AMP

CAPACITORS IN MICROFARADS
RESISTORS IN OHMS .25W
UNLESS OTHERWISE NOTED

SCH.ES.D96208.225. .01

HARRIS

ALL DIM. IN INCHES 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 R SIMON	TITLE: SCHEM. BUFFER AMP
CHKD. SIMON 10-87	
M E CJK 12-1-87	
E E	
PROJ. ENG	
MFG MR 12/1/87	REF DSG / SCALE
NEXT ASSY 992 6969 001	MAT'L / FIN. / DWG. NO 839 6208 225
USED ON	SHEET 1 OF 1



COMPONENTS C12, C13, C14, J31, AND J32 ARE FREQUENCY DETERMINED PARTS

JUMPER J14-1 TO J14-3 FOR 600KHZ AND ABOVE
JUMPER J14-1 TO J14-2 FOR 600KHZ AND BELOW

REFER TO THE TECHNICAL MANUAL FOR SELECTION CRITERIA FOR J15 THROUGH J30

NOTES:
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. (2/A1) SHEET NUMBER ZONE
CONTINUATION SYMBOL
UNLESS OTHERWISE NOTED:

REVISION	LTR	ZONE	DATE	DFTM	ENG	ECO NBR
	F		11-29-99	DFD	DFD	45268
	DELETE CR4					
	E		11/10/87	MAB	MAB	38808
	ADD T7					

HARRIS

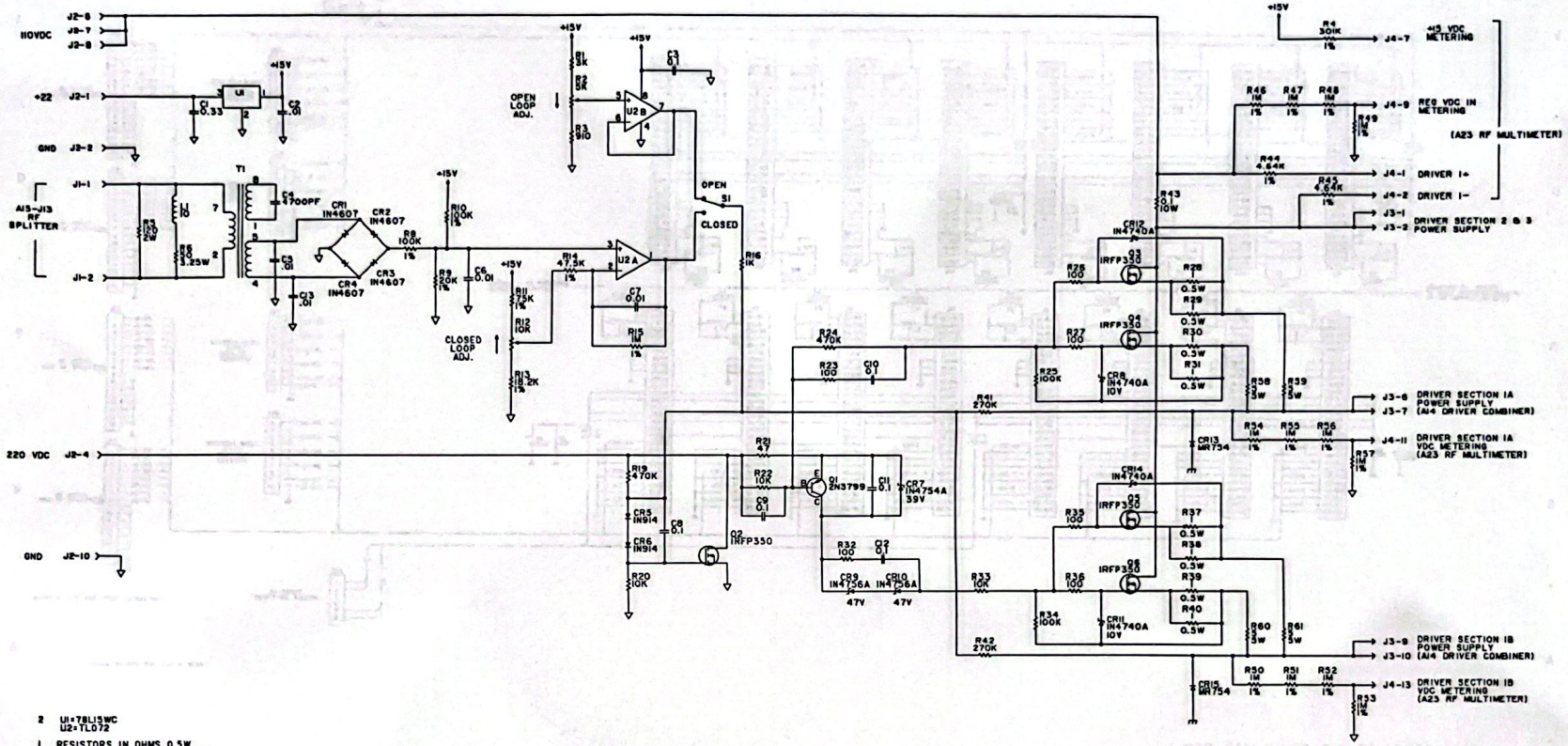
HARRIS CORPORATION
BROADCAST SYSTEMS
P.O. BOX 4290
QUINCY, ILLINOIS 62305

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DRAWN BY	RLB
DATE	2-4-87
ENG CHK	GJK 12-1-87
PROJ ENG	NGR 12-1-87
MFG ENG	MAR 12/1/87
SHEET	1 OF 1

TITLE: SCHEM, DVR COMBINER

DWG NO. 839-6208-226 REV F



2 UI=78L15WC
U2=TL072

1 RESISTORS IN OHMS 0.5W
CAPACITORS IN MICROFARADS
CHOKES IN MICROHENRYS

A22 DRVR SUPPLY REGULATOR

NOTES

REVISION	LTR	ZONE	DATE	DFTM	ENG	ECO NBR
	D	.	8-14-89	DFG	.	62169
	REV C5 WIRING					
	D1	.	MAY 27, 2004	SEC	SEC	DOC CHG
	CONVERTED GERBER FILE TO AutoCAD					

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

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DRAWN BY	ROD SIMON
DATE	NOV 1987
ENG CHK	GJK 12-1-87
PROJ ENG	
MFG ENG	RUSSELL 12-1-87
C	SHEET 1 OF 1

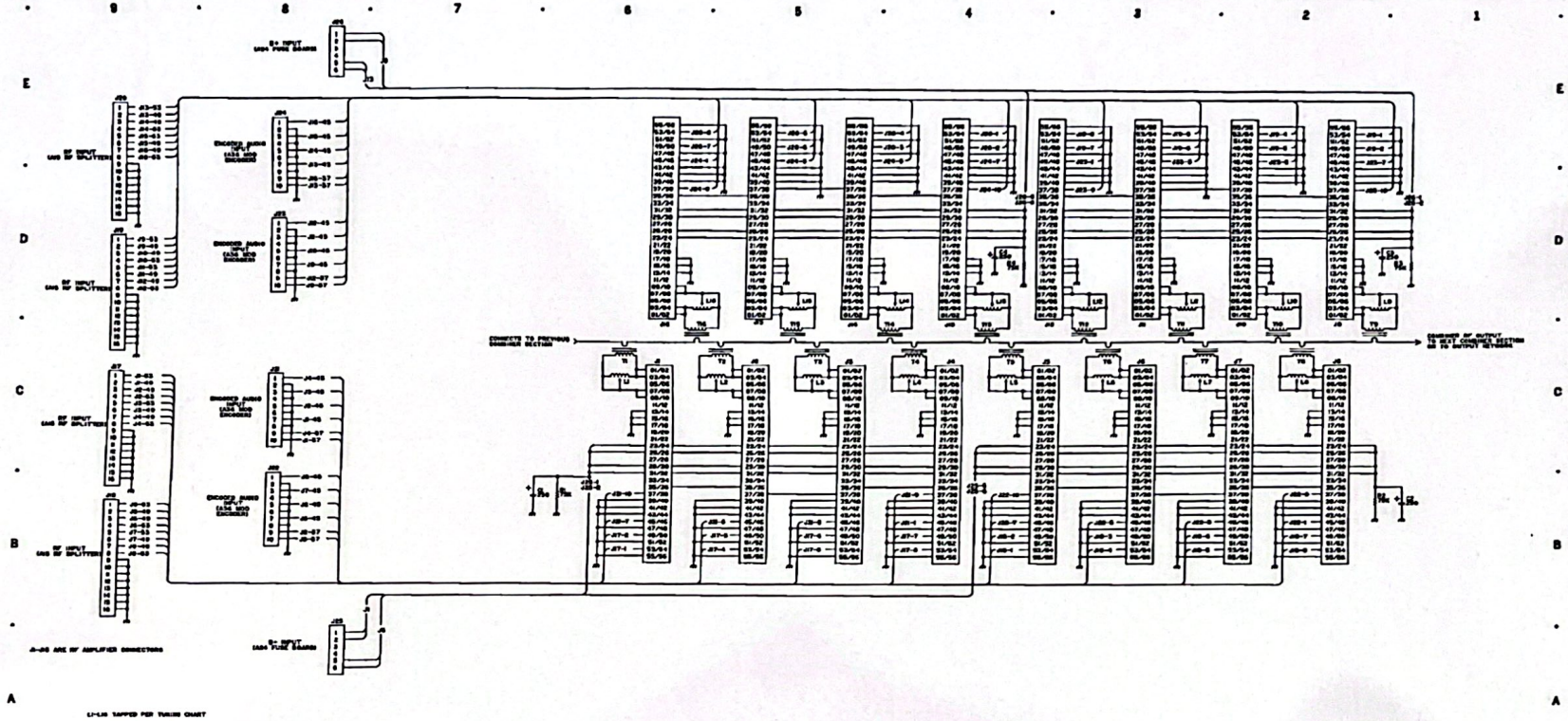
TITLE
SCHEM,
DRVR SUPPLY REGULATOR
-

DWG NO. 839-6208-227. REV D1

DWG NO. 839-6208-227 .

REFERENCE DOCUMENTS	
PC. BOARD	NET LIST

DWG. NO. 839 6208 229				
LTR	DATE	REVISION	DFTR	ENG	MCH
C	1-29-80	REVISE NOTE	RLB		34754



CAD-CAM FILED SCH.ES.J96208.229. .01

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DR. BY R SIMON	TITLE: SCHEM, COMBINER MB MAIN
CHKD.	
M.E.	
E.E.	
PROJ. ENG.	
MFG.	REF. DWG. / SCALE
NEXT ASSY. / MAT'L. / FIN.	DWG. NO. 839 6208 229
USED ON	SHEET 1 OF 1