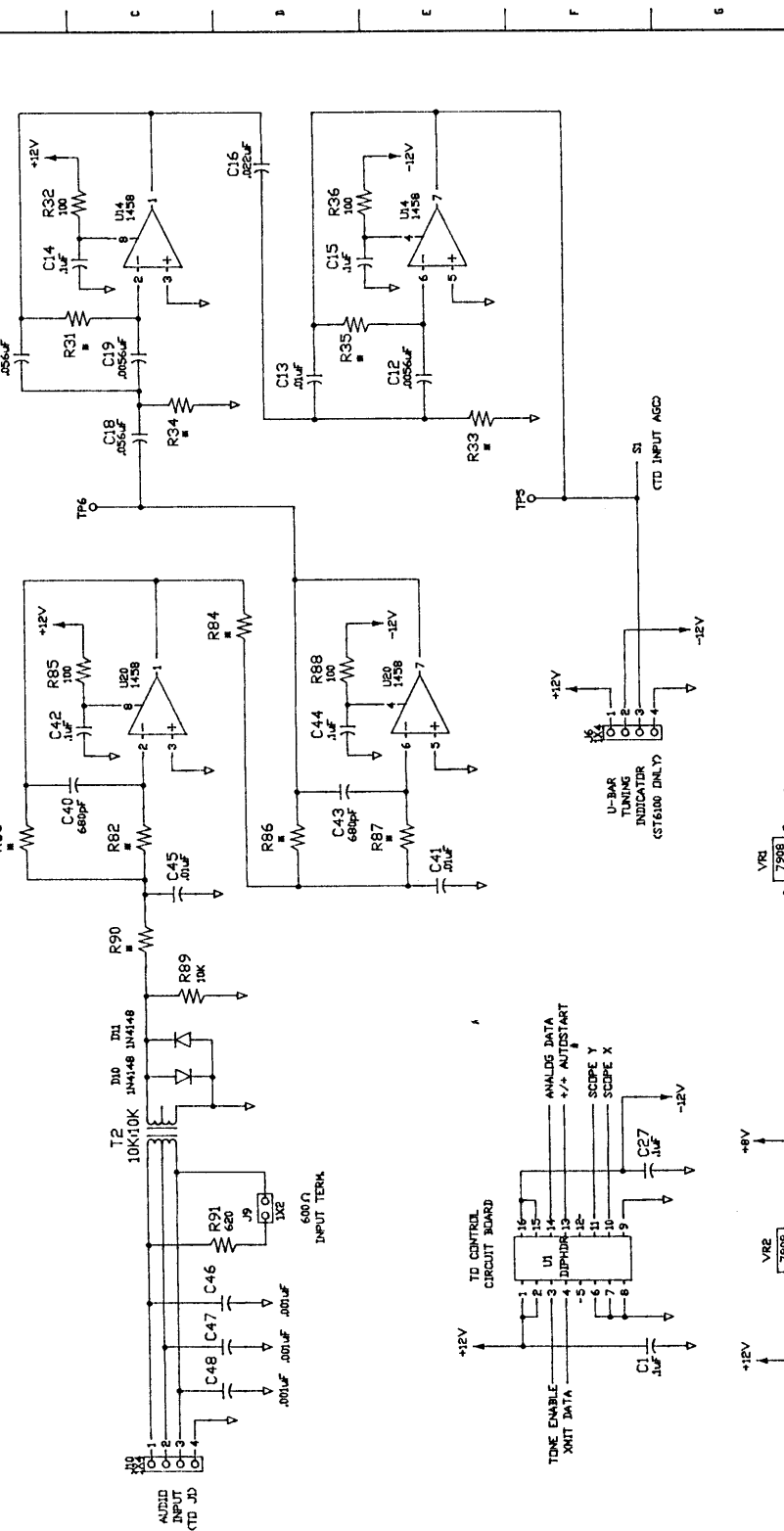
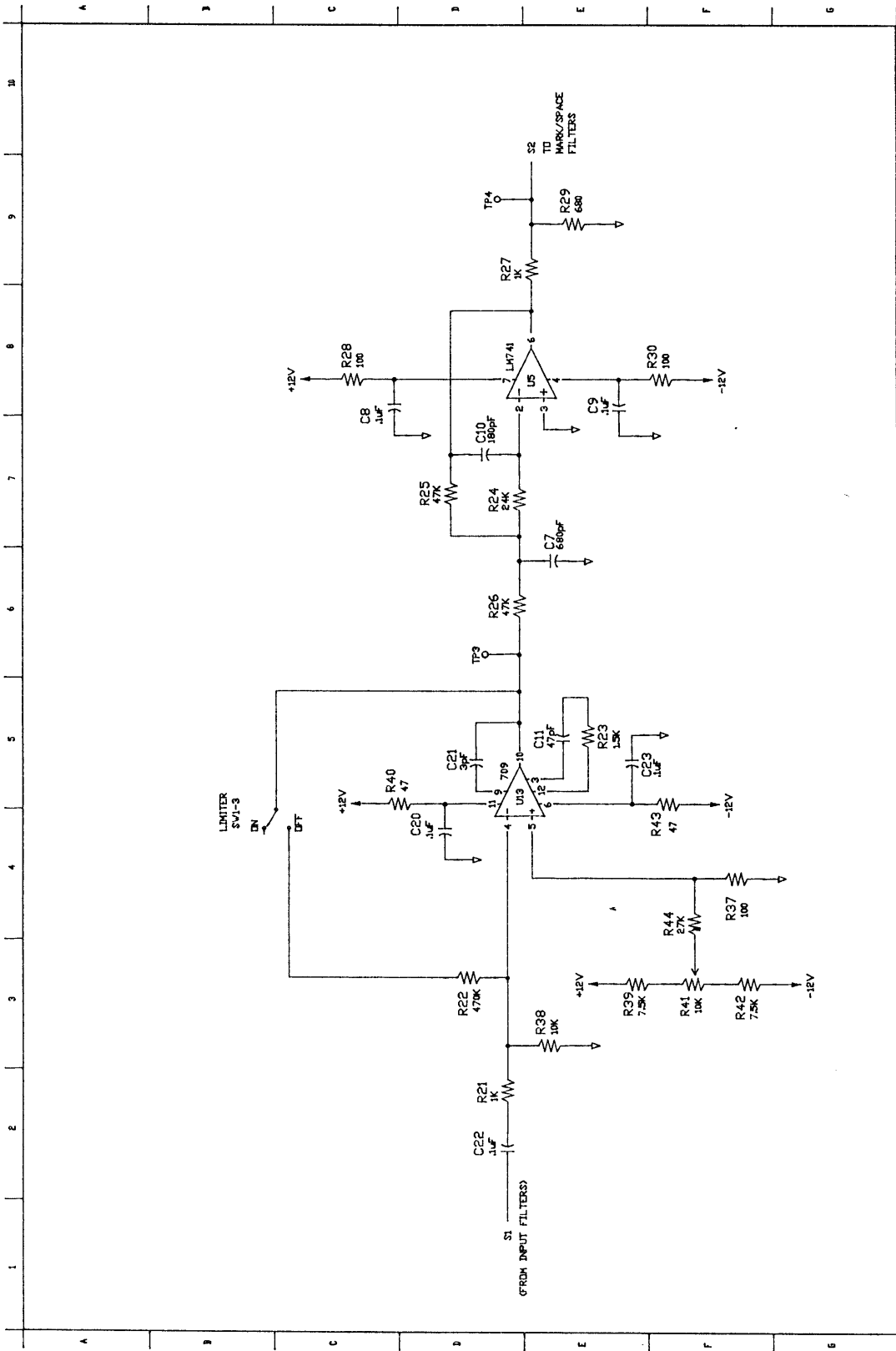


1 2 3 4 5 6 7 8 9 10

HIGH TONES		INPUT HIGH-PASS					INPUT LDV-PASS				
F (Hz)	R (ohms)	R31	R34	R35	R82	R83	R84	R86	R87	R90	
1800	4.3K	5.1K	560	50K	3600	5.1K	30K	56K	110K	33K	
1000	7.5K	7.5K	1.0K	56K	2400	13K	47K	82K	160K	3.9K	
5200	6.8K	6.2K	820	47K	2800	12K	39K	75K	150K	3.3K	
FC = 2000 HZ		1000	7.5K	1.0K	2400	13K	47K	82K	160K	3.9K	
FC = 1700 HZ		5200	6.2K	820	2600	13K	43K	75K	150K	3.6K	
FM = 1650 HZ		800	100K	10K	2400	13K	47K	82K	160K	3.9K	
103 TONES		800	100K	10K	2400	13K	47K	82K	160K	3.9K	
202 TONES		800	100K	10K	2400	13K	47K	82K	160K	3.9K	



REV.	DATE	BY	HAL COMMUNICATIONS CORP. BOX 365, URBANA, IL 61801
			ST6000/ST6100 INPUT BOARD
			INPUT FILTERS Q DF 7, D2234A
			DATE 8-20-90
			DRN BY RD
			SCALE
			NO. A1776



REV.	DATE	BY

DATE	SCALE
8-20-90	

APP BY	RD

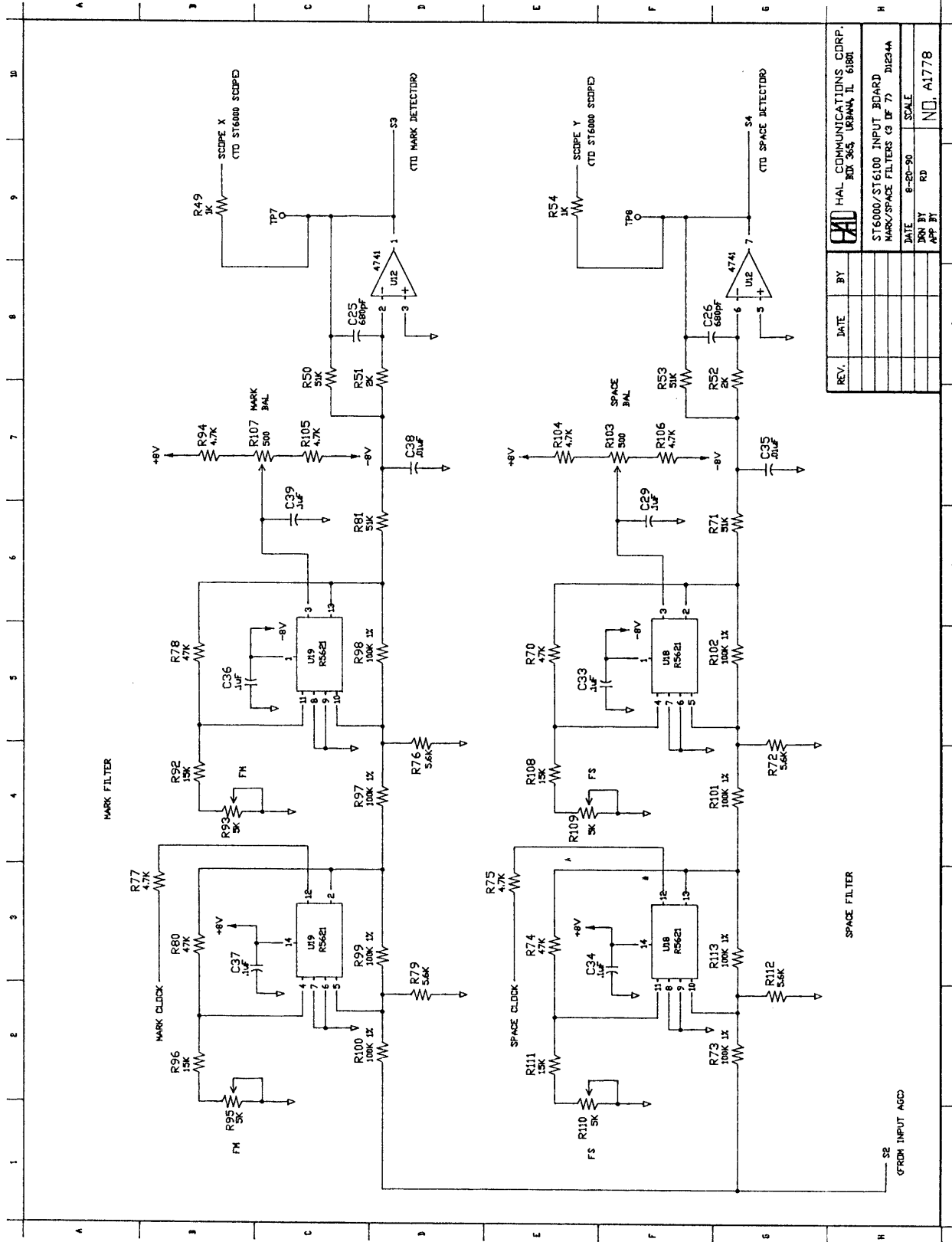
HAL COMMUNICATIONS CORP.
 BOX 365, URBANA, IL 61801

ST6000/ST6100 INPUT BOARD
 DIM244A

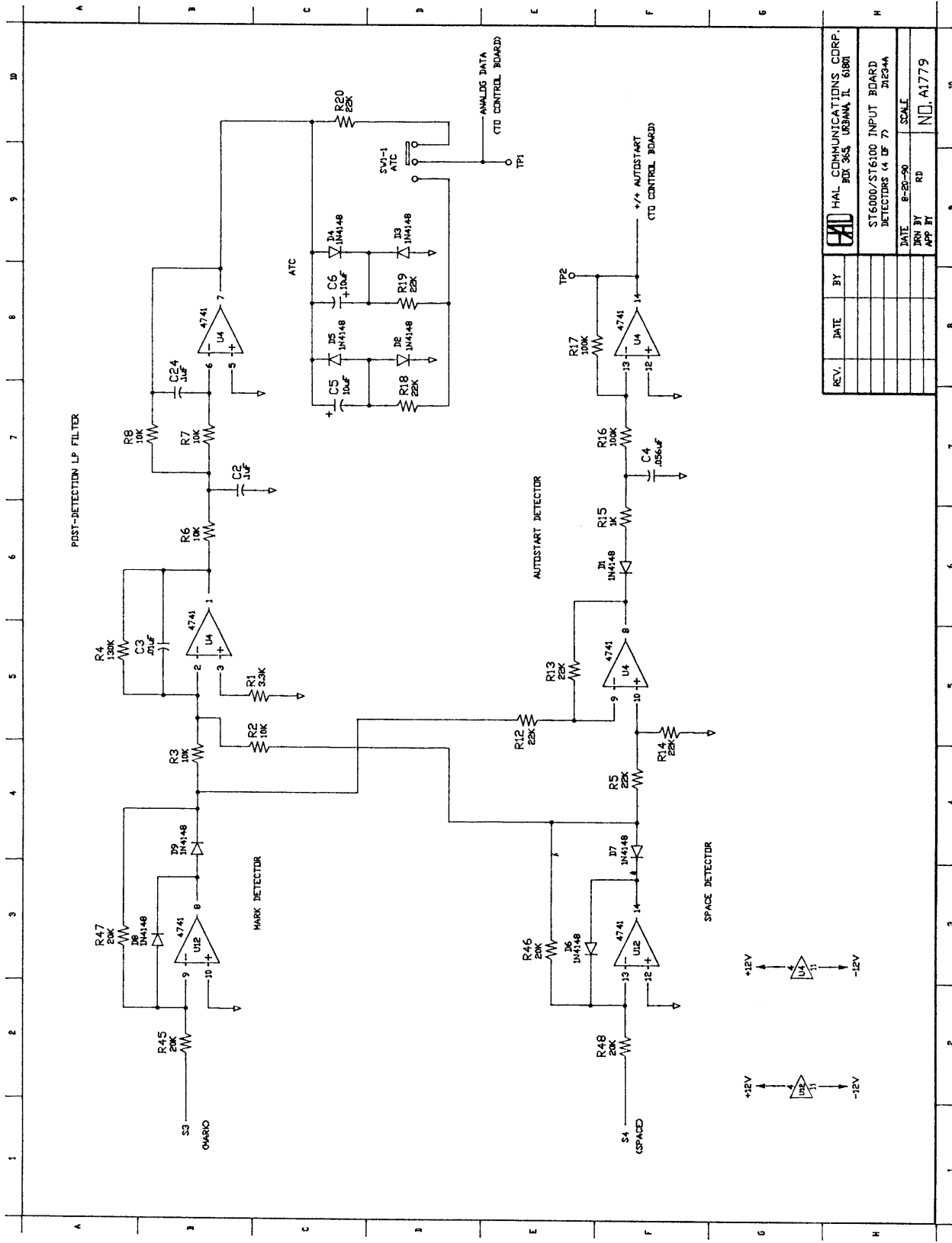
DATE 8-20-90
 DRAWN BY RD
 SCALE
 NO. A1777

1 2 3 4 5 6 7 8 9 10

A B C D E F G H

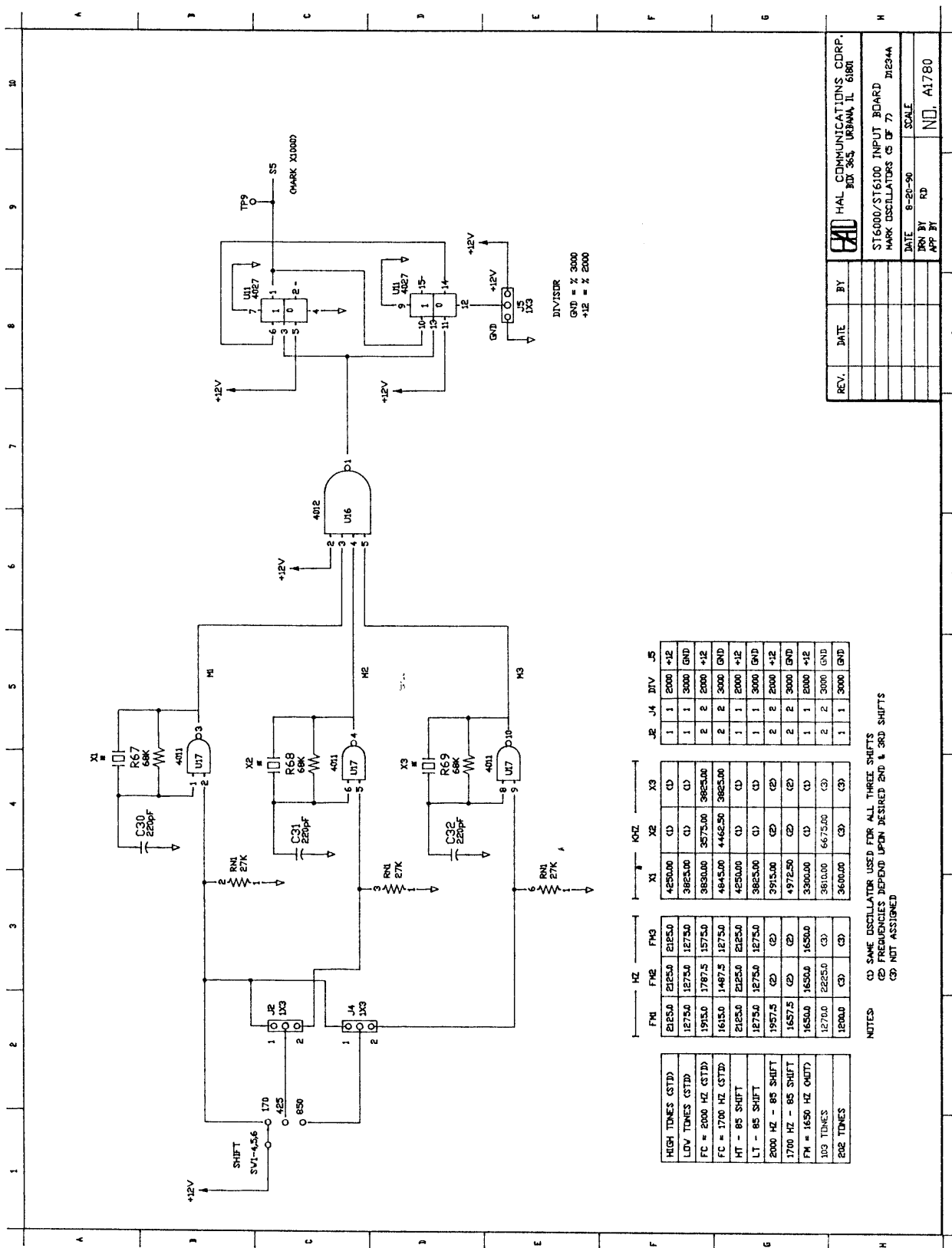


REV.	DATE	BY	HAL COMMUNICATIONS, CORP. BOX 365 URBANA, IL 61801
			ST6000/ST6100 INPUT BOARD MARK/SPACE FILTERS (3 OF 7) D12344
			DATE 8-20-90 SCALE
			DRN BY RD
			APP BY NO. A1778



REV.	DATE	BY

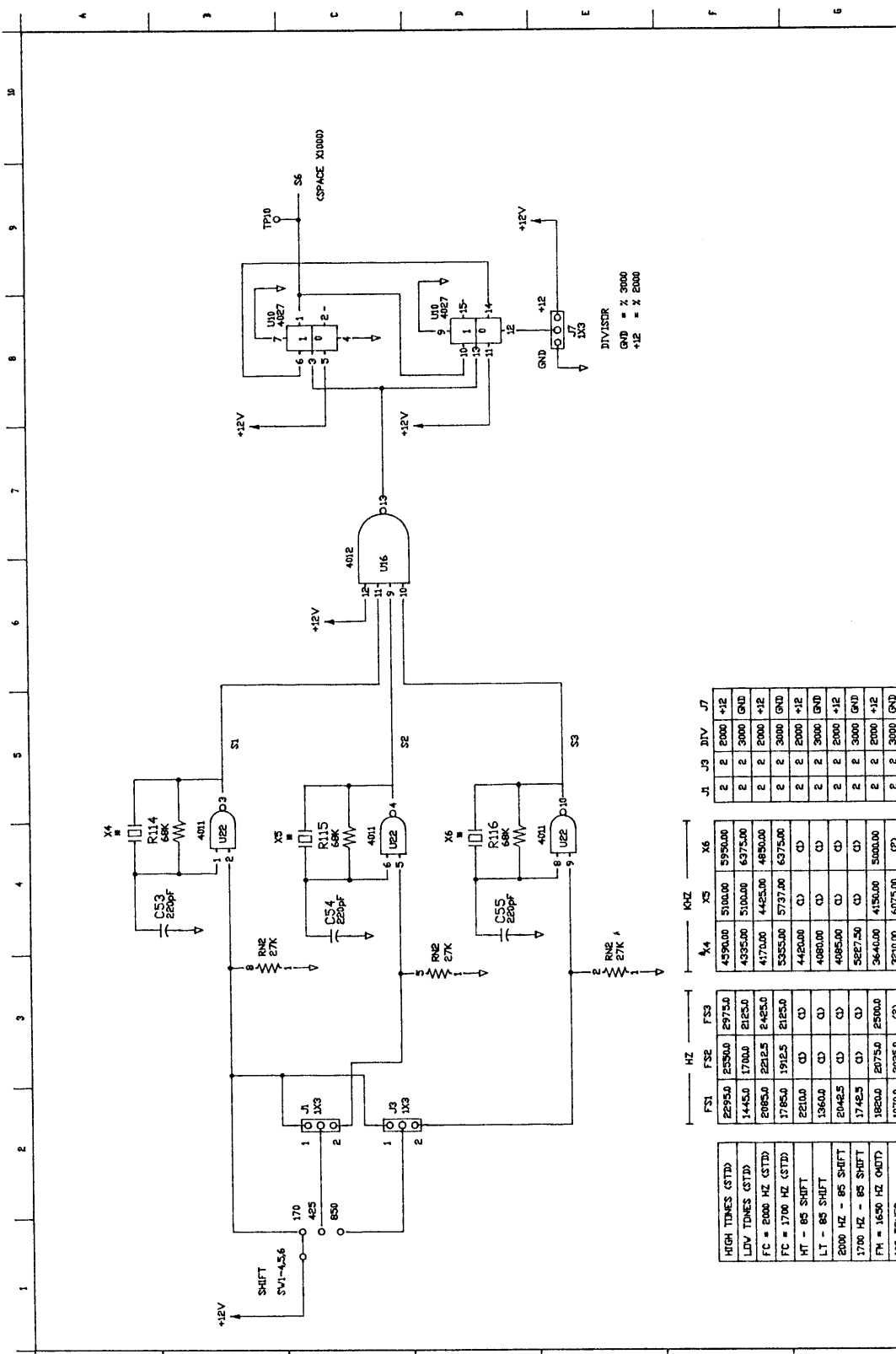
HAL COMMUNICATIONS CORP. BOX 365, URBANA, IL 61801	
ST6000/ST6100 INPUT BOARD DETECTORS (4 OF 7)	
DATE	SCALE
8-20-90	RD
DRN BY	APP BY
NO. A1779	



SHIFT	FM	FHz	FHz	X1	X2	X3	J4	Div	J5
HIGH TONES (STD)	2125.0	2125.0	2125.0	4250.00	(1)	(1)	1	1	2000 +12
LOW TONES (STD)	1275.0	1275.0	1275.0	3825.00	(1)	(1)	1	1	3000 GND
FC = 2000 HZ (STD)	1915.0	1787.5	1575.0	3825.00	3575.00	3625.00	2	2	2000 +12
FC = 1700 HZ (STD)	1615.0	1487.5	1275.0	4845.00	4462.50	3825.00	2	2	3000 GND
HT - 85 SHIFT	2125.0	2125.0	2125.0	4250.00	(1)	(1)	1	1	2000 +12
LT - 85 SHIFT	1275.0	1275.0	1275.0	3825.00	(1)	(1)	1	1	3000 GND
2000 HZ - 85 SHIFT	1915.0	1787.5	1575.0	3825.00	(2)	(2)	2	2	2000 +12
1700 HZ - 85 SHIFT	1615.0	1487.5	1275.0	4845.00	(2)	(2)	2	2	3000 GND
FM = 1650 HZ (M1)	1270.0	2225.0	(3)	3300.00	(1)	(1)	1	1	2000 +12
303 TONES	1270.0	2225.0	(3)	3810.00	6675.00	(3)	2	2	3000 GND
202 TONES	1270.0	2225.0	(3)	3600.00	(3)	(3)	1	1	3000 GND

NOTES
 (1) SAME OSCILLATOR USED FOR ALL THREE SHIFTS
 (2) FREQUENCIES DEPEND UPON DESIRED 85 & 303 SHIFTS
 (3) NOT ASSIGNED

REV.	DATE	BY	HAL COMMUNICATIONS CORP. BOX 365, URBANA, IL 61801
			ST6000/ST16100 INPUT BOARD
			MARK OSCILLATORS (S OF 7)
			DATE 8-26-90
			DRN BY RD
			SCALE
			NO. A1780

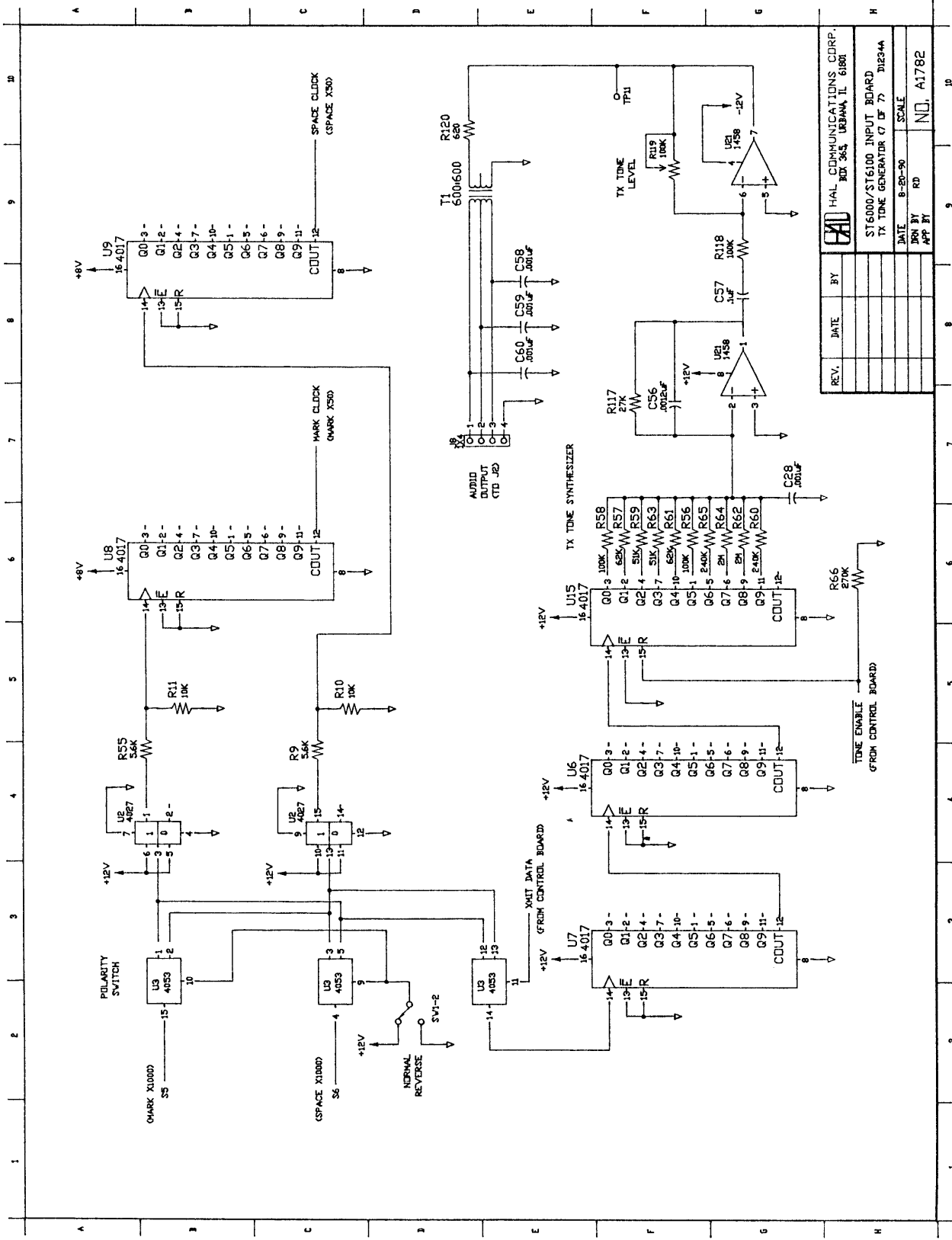


REV.	DATE	BY

HAL COMMUNICATIONS CORP. P.O. BOX 363, URBANA, IL 61801		
ST6000/ST6100 INPUT BOARD SPACE DETECTORS (6 OF 7) 312344		
DATE	8-20-90	SCALE
DRN BY	RD	NO. A1781
APP BY		

	F S1	H Z	F S2	F S3	X 4	X 5	X 6	J 1	J 3	D IV	J 7
HIGH TONES (STD)	2295.0	2390.0	2485.0	2580.0	4590.0	5100.0	5950.0	2	2	2000	+12
LOW TONES (STD)	1445.0	1700.0	2125.0	2125.0	4395.0	5100.0	6375.0	2	2	3000	GND
FC = 2000 HZ (STD)	2085.0	2212.5	2425.0	2425.0	4170.0	4425.0	4850.0	2	2	2000	+12
FC = 1700 HZ (STD)	1765.0	1912.5	2125.0	2125.0	3355.0	3737.0	4375.0	2	2	3000	GND
HT = 85 SHIFT	2210.0	CL	CL	CL	4450.0	CL	CL	2	2	2000	+12
LT = 85 SHIFT	1860.0	CL	CL	CL	4080.0	CL	CL	2	2	3000	GND
2000 HZ - 85 SHIFT	2042.5	CL	CL	CL	4085.0	CL	CL	2	2	2000	+12
1700 HZ - 85 SHIFT	1742.5	CL	CL	CL	3827.5	CL	CL	2	2	3000	GND
FM = 1650 HZ (MOT)	1620.0	2075.0	2500.0	2500.0	3640.0	4150.0	5000.0	2	2	2000	+12
103 TONES	1070.0	2025.0	CL	CL	3210.0	6075.0	CL	2	2	3000	GND
202 TONES	2200.0	CL	CL	CL	4400.0	CL	CL	2	2	2000	+12

NOTES: (1) FREQUENCIES DEPEND UPON DESIRED 2ND & 3RD SHIFTS
 (2) NOT ASSIGNED



REV.	DATE	BY

HAL COMMUNICATIONS CORP.
 BOX 363 URBANA, IL 61801

ST6000/ST16100 INPUT BOARD
 TX TONE GENERATOR (7 OF 7) 30234A

DATE: 8-20-90
 DRAWN BY: RD
 APP BY: NO. A1782

REV.	DATE	BY

SCALE

NO. A1782