Scandals

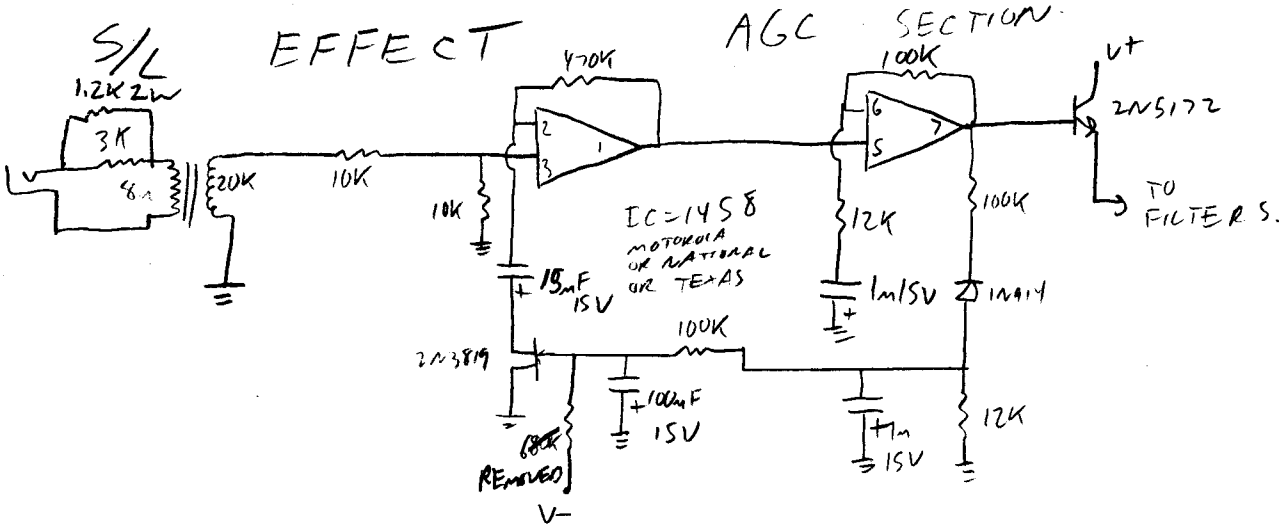
DISCOTHEQUE

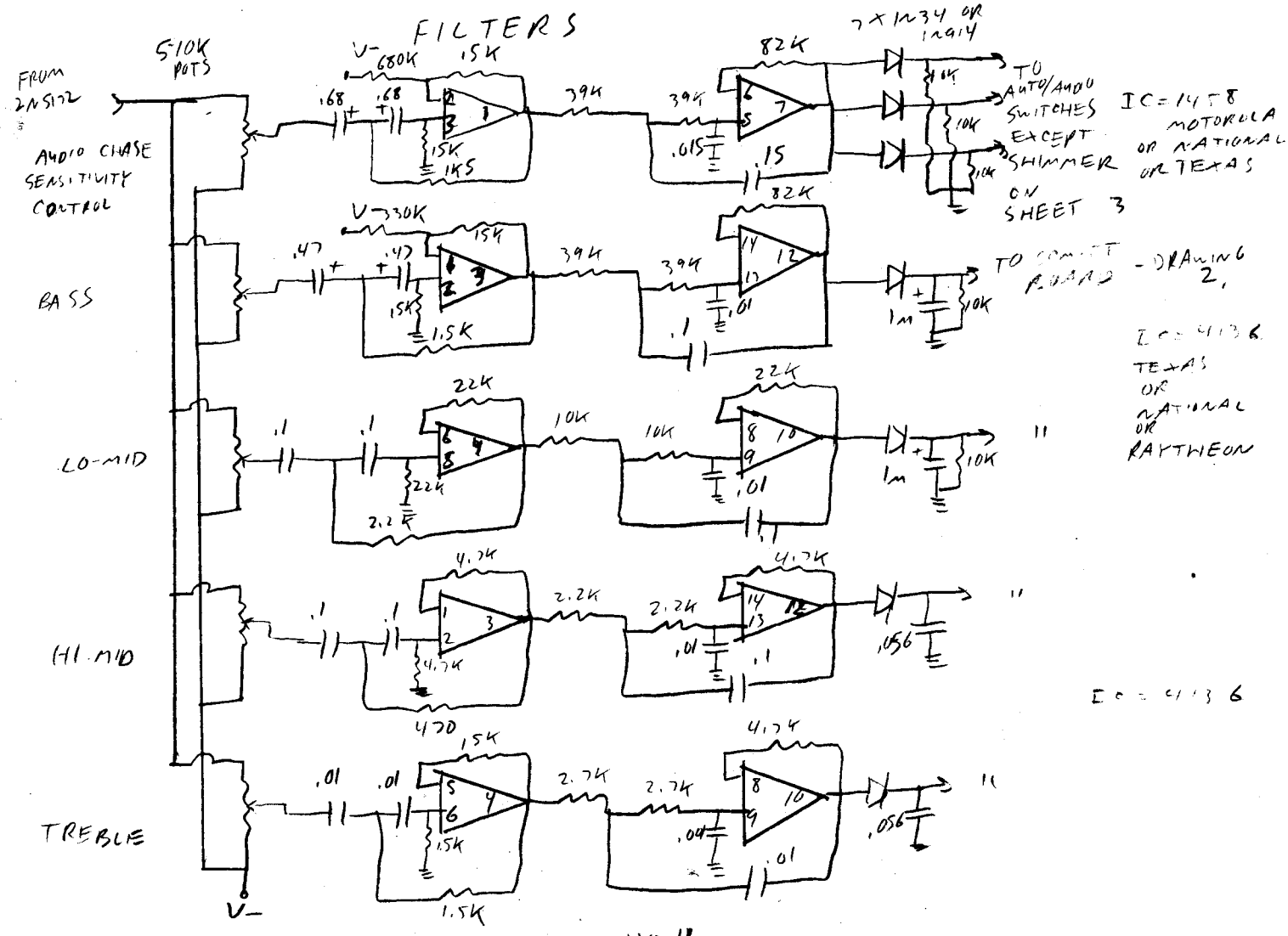
Anything can happen here—and it usually does. This exciting new disco is open Monday through Saturday till Midnight. It's hot!

FRASER ELECTRONICS

P.O. BOX 778 · EDMONTON, ALBERTA T5J 2L4 · (403) 428-9655

Yesterdays





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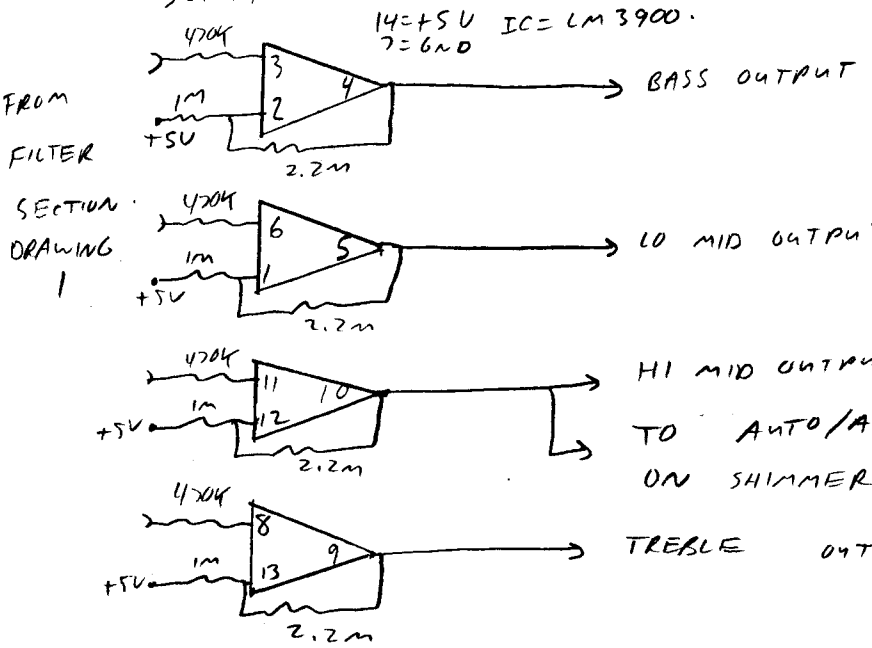
Yesterdays

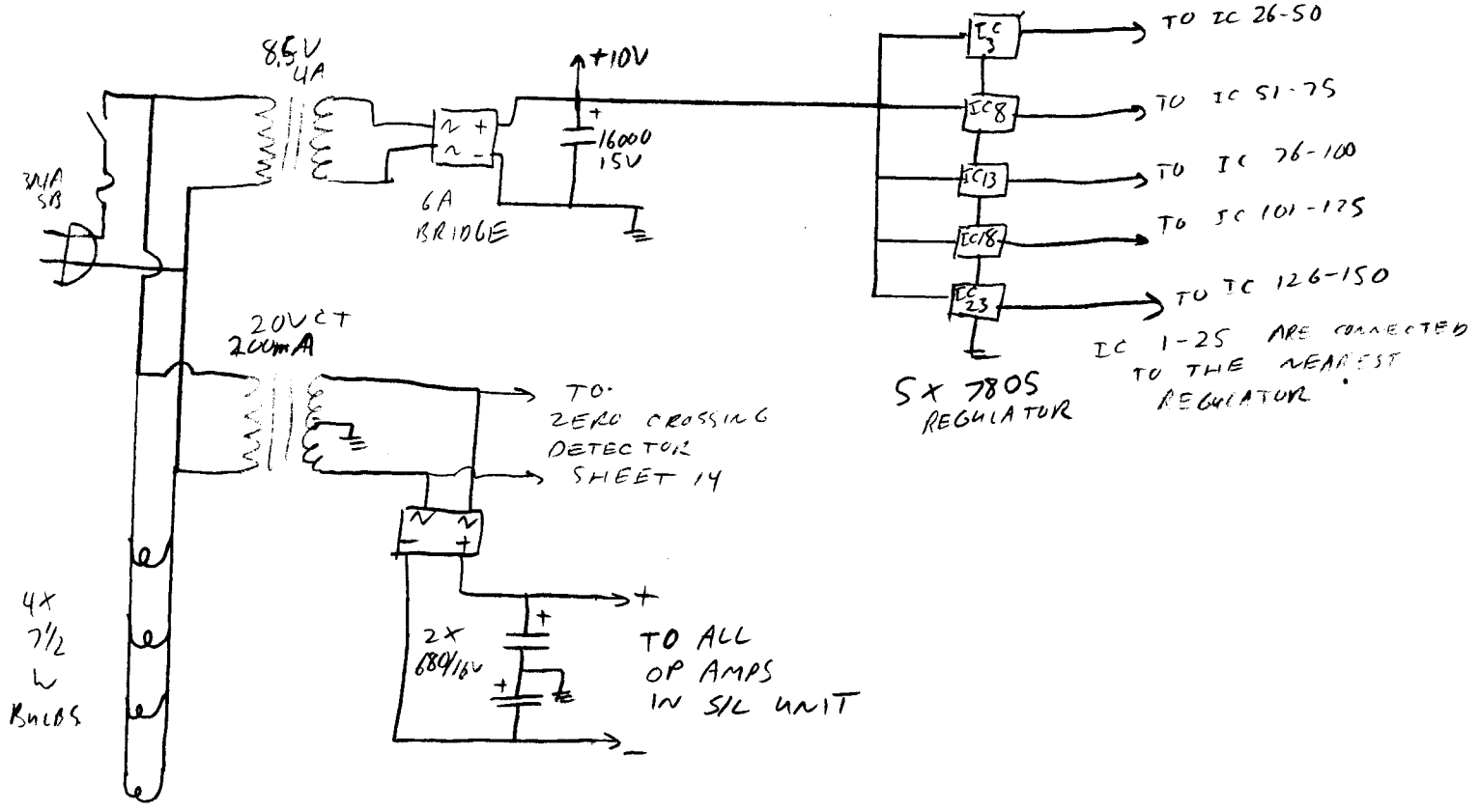
S/L Effect.

SCMITT BOARD



TO Effect = 8 Sheet 5

POWER SUPPLY



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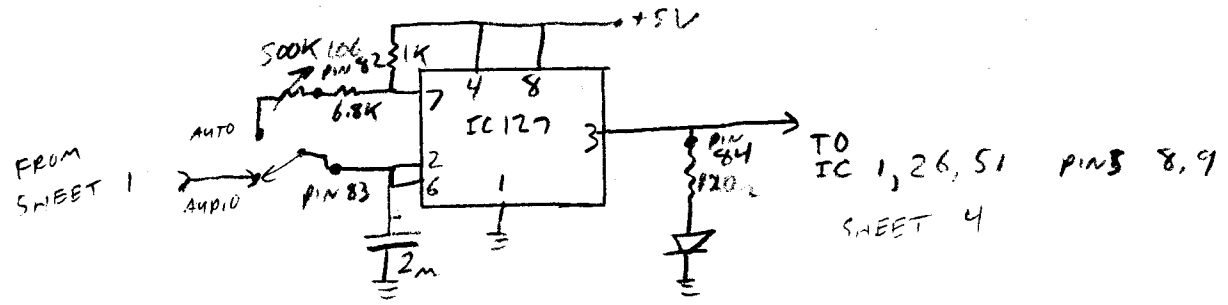
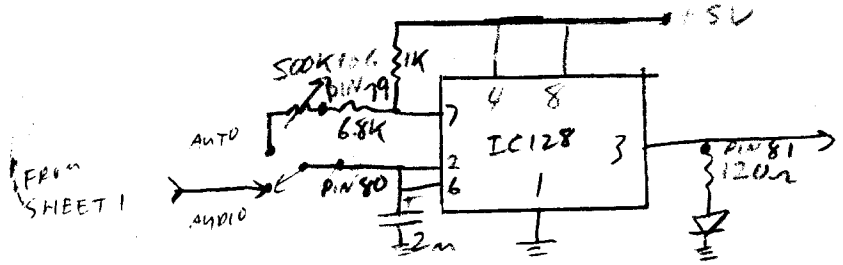
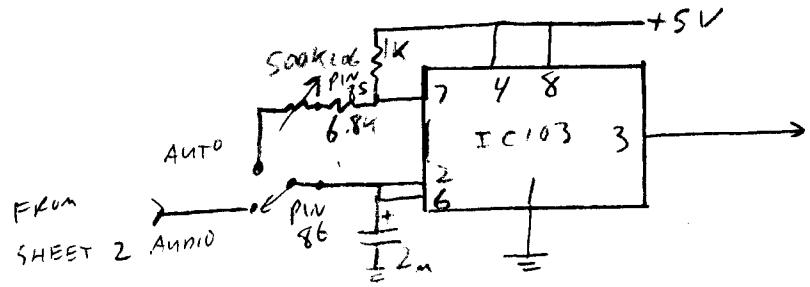
Yesterdays

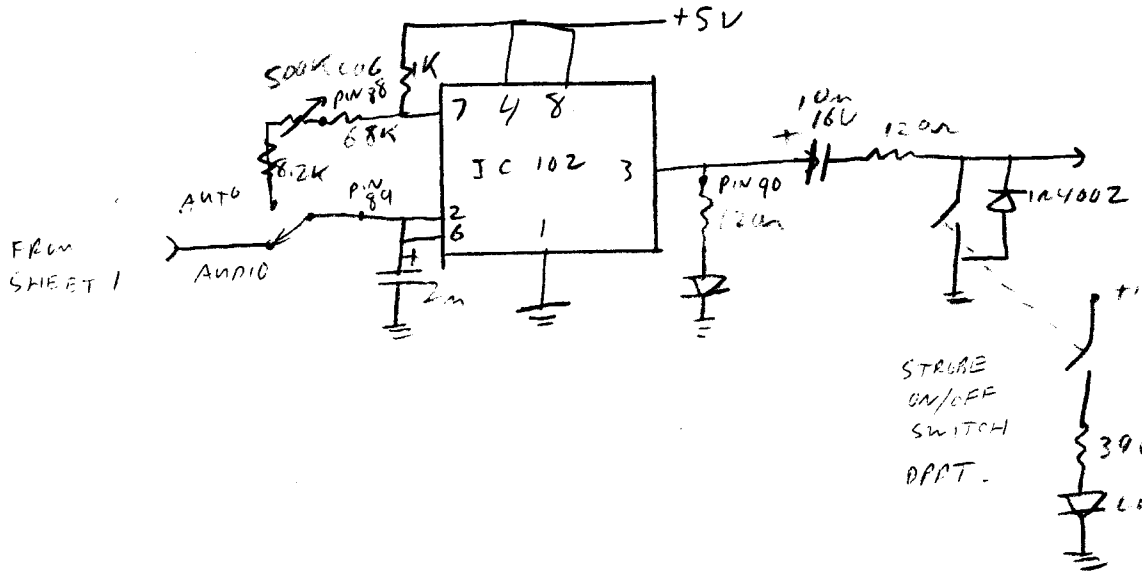
CLOCK CIRCUITS





ALL IC = 555 TIMER





STROBE JACK CONNECTS TO GATE OF SCR IN STROBE — NOTE USE ONLY STROBES WITH A POWER TRANSFORMER.

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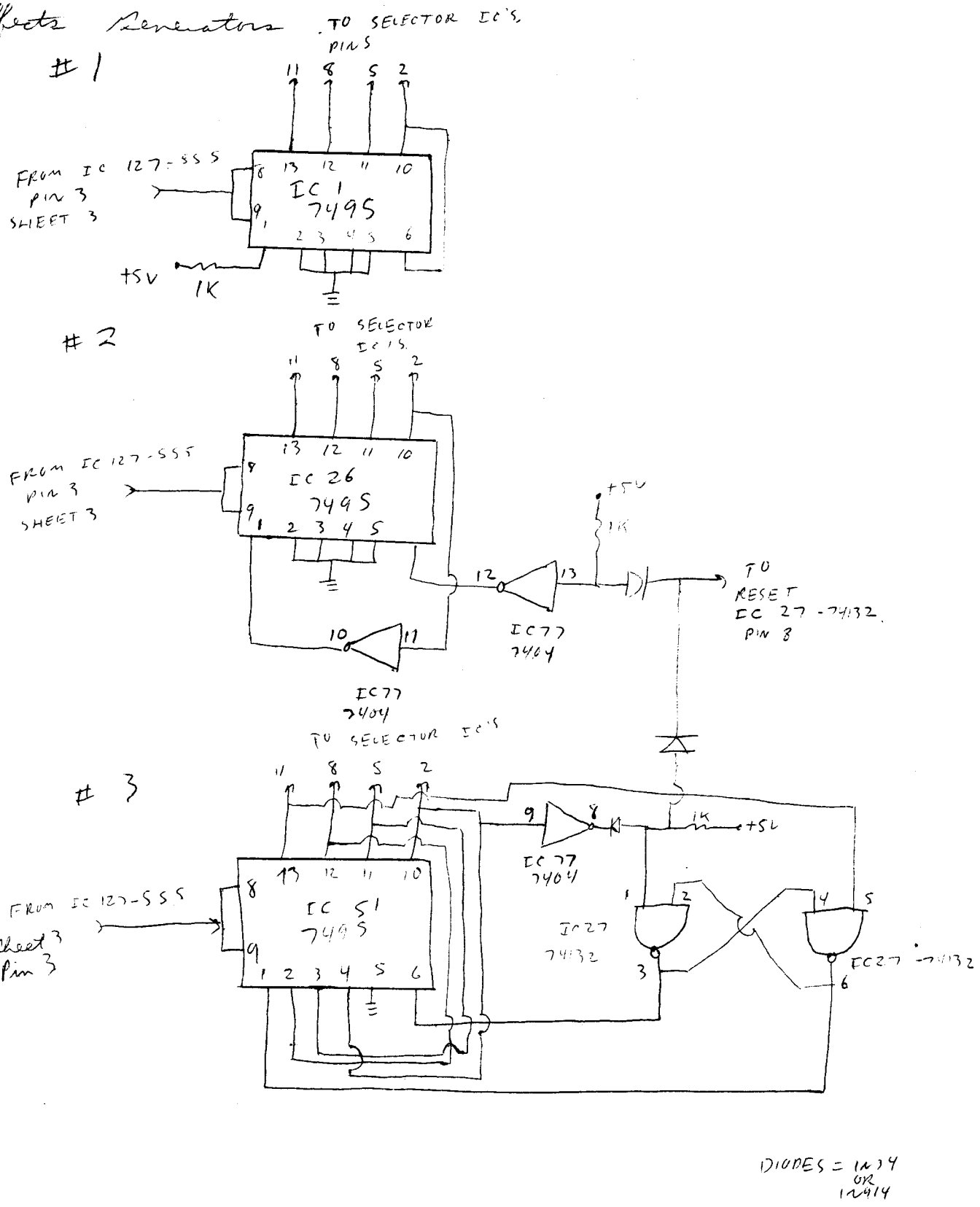
Yesterdays

Effects Generators



DIODES = 1N34 OR 1N914

Yesterdays

FRASER ELECTRONICS

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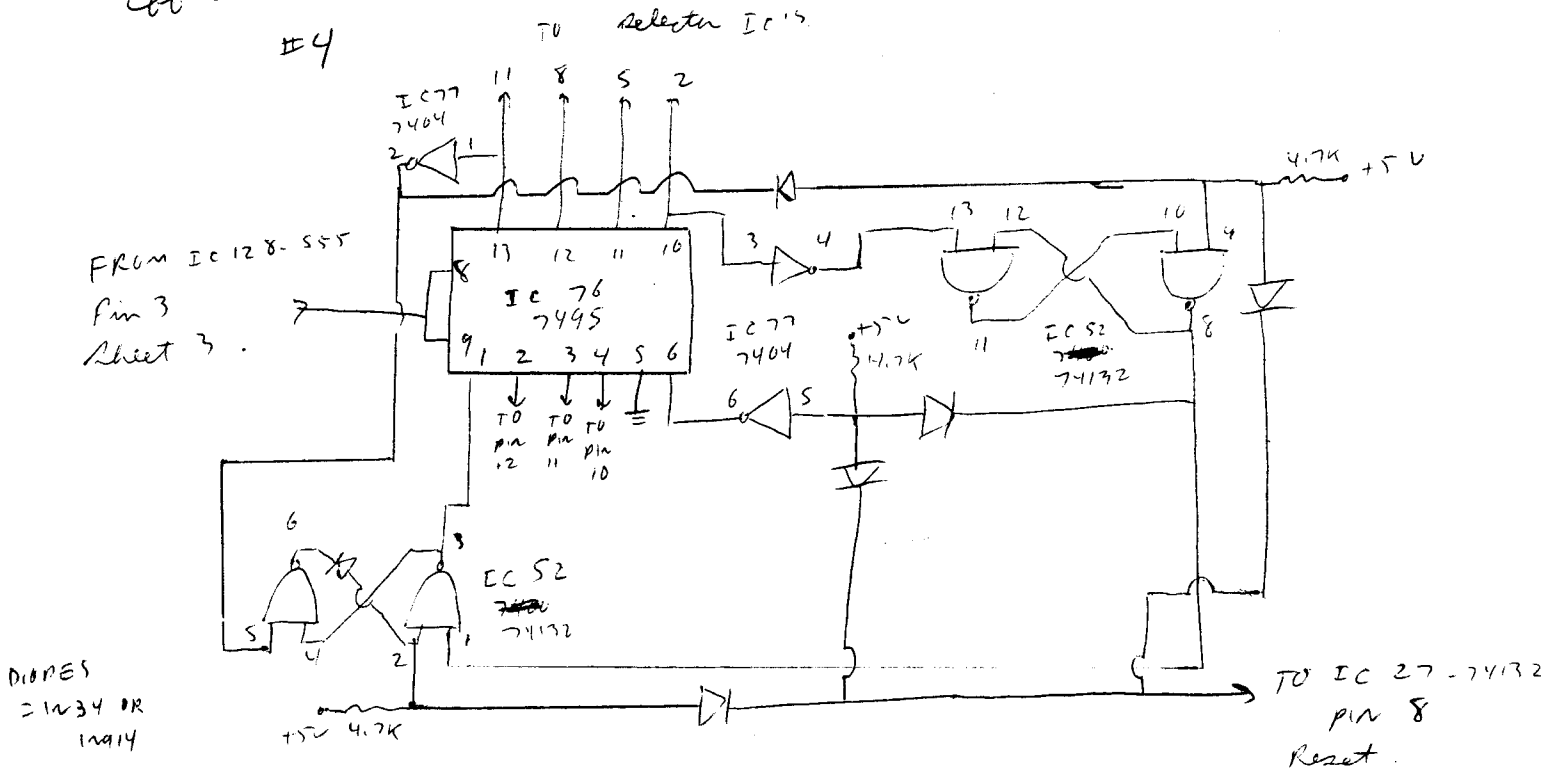
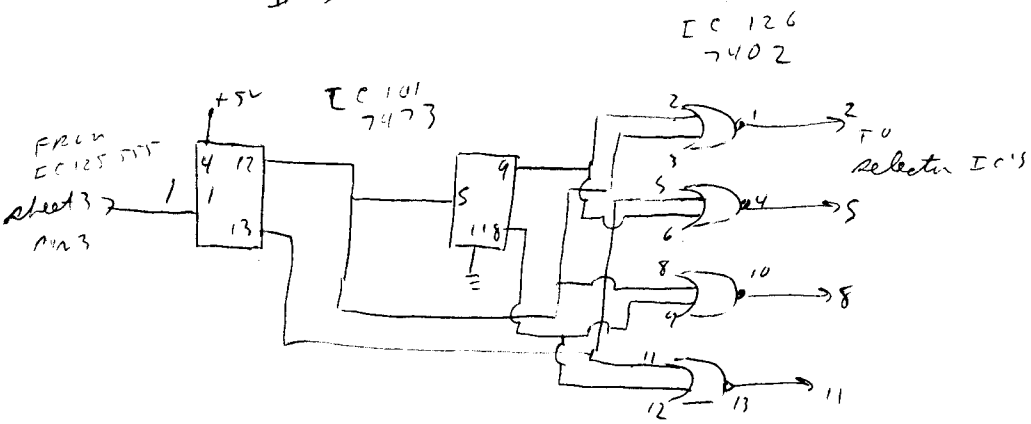
Effects Generators

#4



#5



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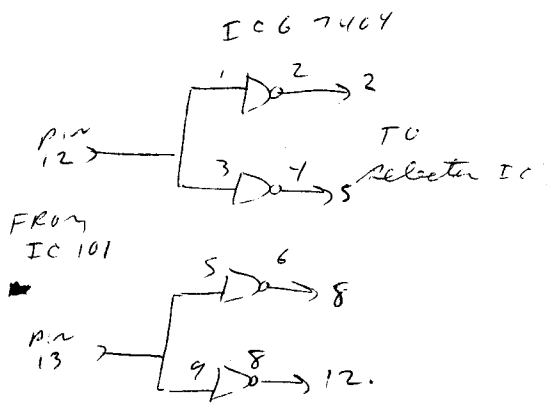
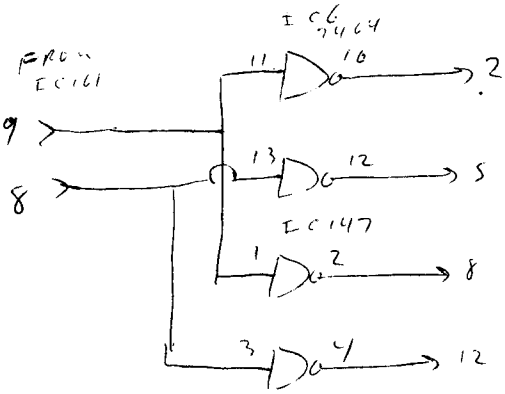
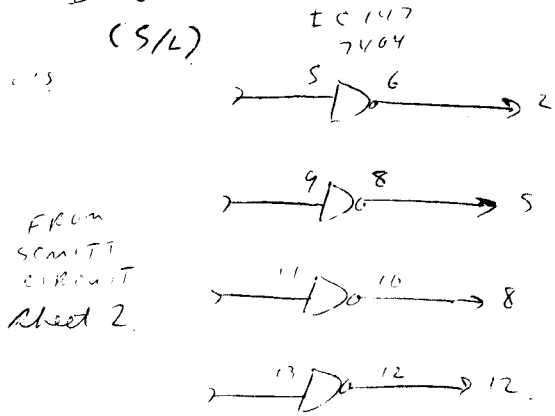


#7



#8 (S/L)



YESTERDAYS

FRASER ELECTRONICS

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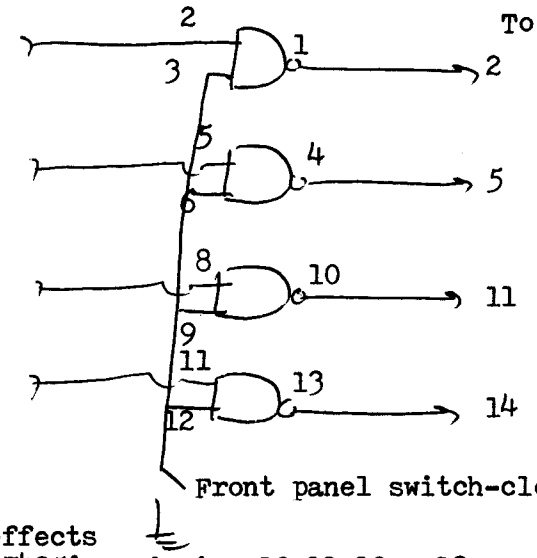
64 times type 7401



FROM Generators

To Invert/Shimmer Circuits 74157's

IC 54 to 71 the effects are generated by 7495's and pins 10,11,12 & 13 go to 7401 pins 2,5,8 & 11 in that order

7401 #	from 7495 #	to 74157 #	7401 #	fron 7495 #	to 74157 #	group #
54	1	30	55	26	30	1
56	1	32	57	26	32	2
58	1	34	58	26	34	3
60	1	36	61	26	36	4
62	1	37	63	26	37	5
64	1	39	65	26	39	6
66	1	41	67	26	41	7
68	1	43	69	26	43	8
70	1	45	71	26	45	9

&7401 79 to 96 are also from 7495's to 74157;s the same as IC;s 54 t0 71

79	51	30	80	76	30	1
81	51	32	82	76	32	2
83	51	34	84	76	34	3
85	51	36	86	76	36	4
87	51	37	88	76	37	5
89	51	39	90	76	39	6
91	51	41	92	76	41	7
93	51	43	94	76	43	8
95	51	45	96	76	45	9

FRASER ELECTRONICS
YESTERDAYS P.O. BOX 778 - EDMONTON, ALBERTA T5J 2L4 - (403) 428-9655

IC 104 to 121 The even numbered IC's switch effect #8(S/L) and come from IC 147 pins 6,8,10 & 12 and go to 7401 pins 2,5,8 & 11 in that order.

The odd numbered 7401's are effect # 6 and their signal comes from IC 6 pins 2,4,6 & 8 and go to 7401 pins 2,5,8 & 11 in that order.

All the 7401 output pins(1,4,10 & 13) go to 74157 pins 2,5,11 & 14 in that order.

7401#	from 7404#	to74157#	7401#	from7404#	to 74157#	GROUP #
104	147	30	105	6	30	1
106	147	32	107	6	32	2
108	147	34	109	6	34	3
110	147	36	111	6	36	4
112	147	37	113	6	37	5
114	147	39	115	6	39	6
116	147	41	117	6	41	7
118	147	43	119	6	43	8
120	147	45	121	6	45	9

7401's 129 to 146- the Odd numbers switch effect 7 and it comes from IC 6 pins 10 & 12 and from IC 147 pins 2 & 4 and goes to the 7401's pins 2,5,8 & 11 in that order

The even numbered IC's switch effect #5 and it comes from IC 126 pins 1,4,10 & 11, and it goes to pins 2,5,8 & 11 on the 7401's in that order. For the output pins, see the description above, for IC's 104 to 121

7401#	from IC#	to74157#	7401#	from IC#	to74157#	Group#
129	6/147	30	130	126	30	1
131	6/147	32	132	126	32	2
133	6/147	34	134	126	34	3
135	6/147	36	136	126	36	4
137	6/147	37	138	126	37	5
139	6/147	39	140	126	39	6
141	6/147	41	142	126	41	7
143	6/147	43	144	126	43	8
145	6/147	45	146	126	46	9

Yesterdays

FRASER ELECTRONICS

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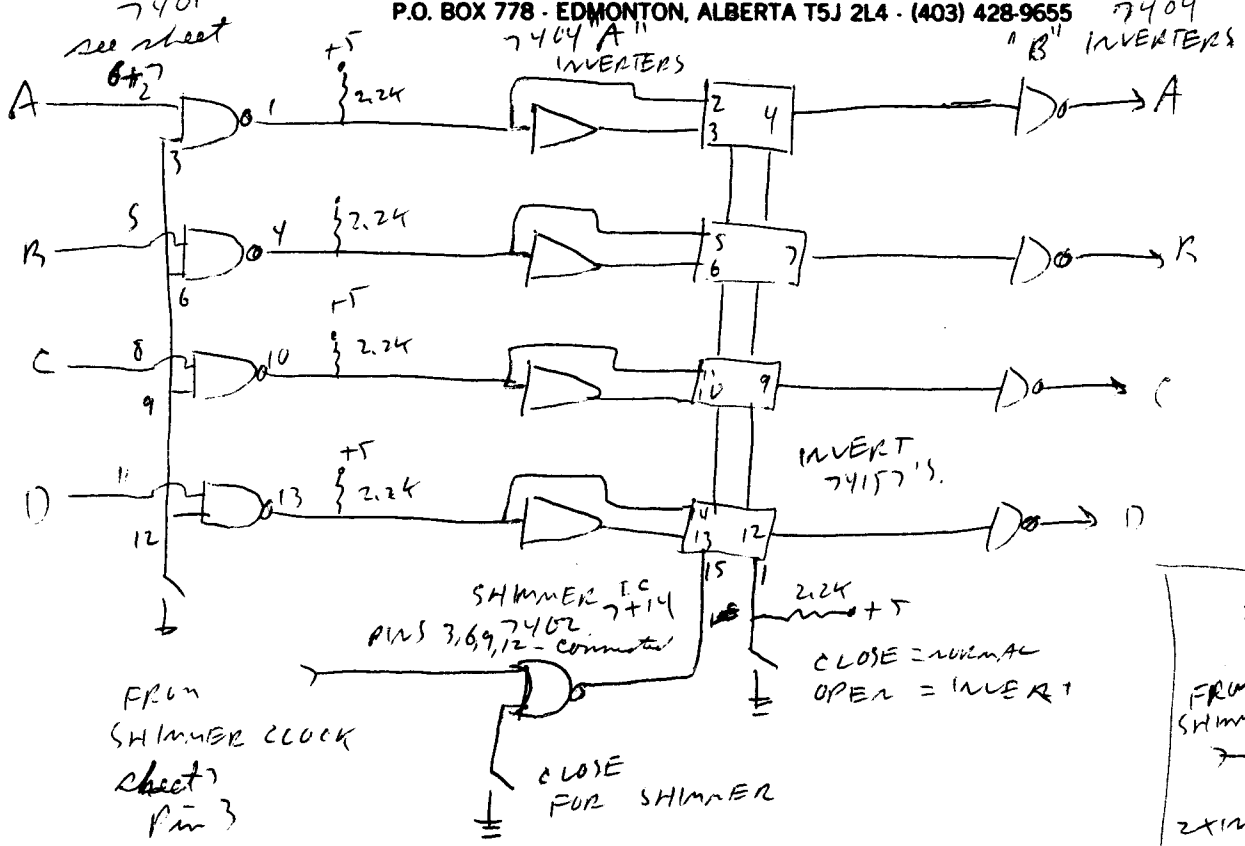

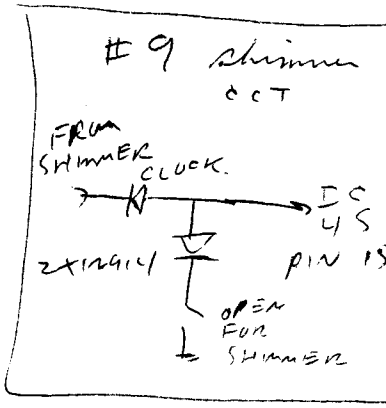

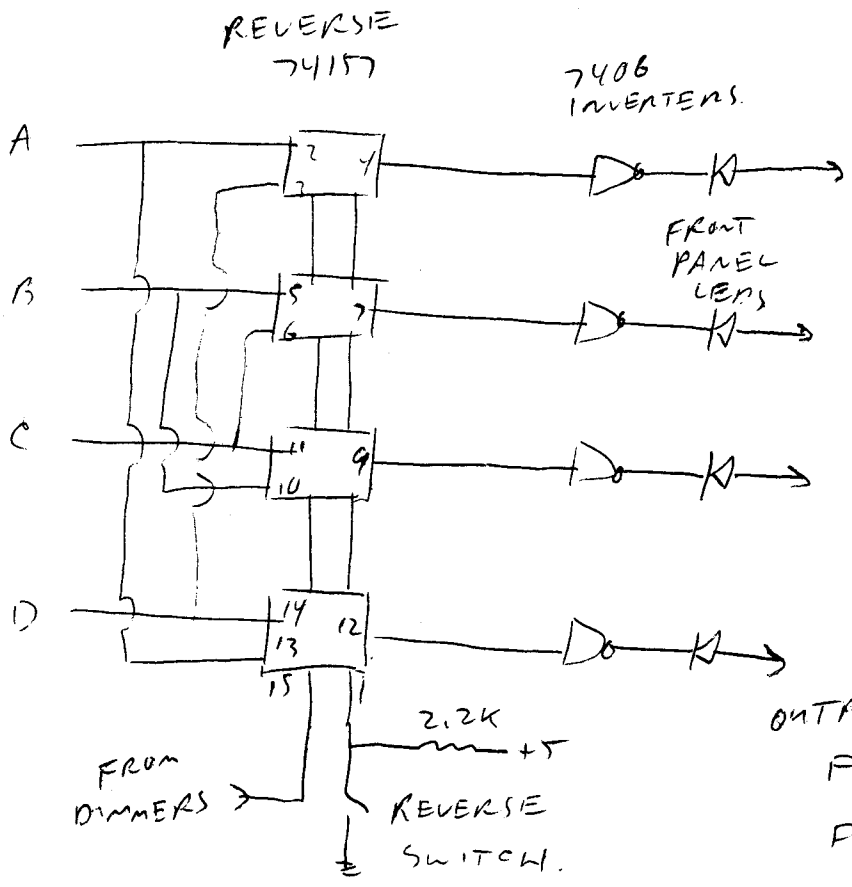

OUTPUT CIRCUIT FOR GROUPS 1-8

FOR GROUP 9 SEE NEXT PAGE (9)

Yesterdays

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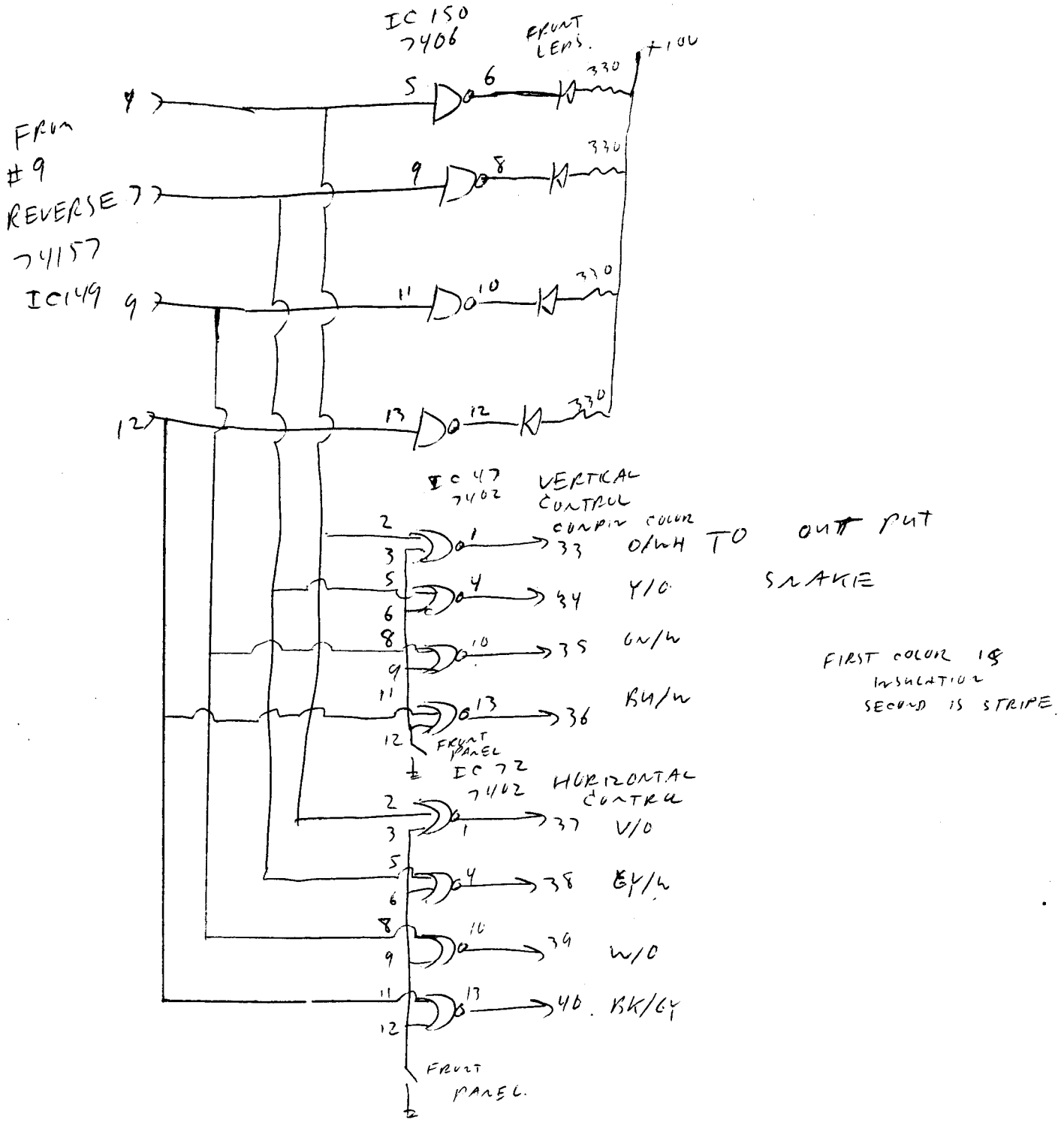

Yesterdays

XX/XX

FRASER ELECTRONICS

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First digit is IC # second digit is Pin #

Group/ line	A inverter in-out	74157 invert (in out)	B inverter in-out	Reverse 74157 (in out)	output 7406 (in out)	Invert 157 Pin 15 From	Reverse 157 Pin 15 From IC
1/A	53/1-2	30/2-4	53/11-10	24/2-4	25/1-2	7/1	11/3
1/B	53/3-4	30/5-7	53/13-12	24/5-7	25/3-4		
1/C	53/5-6	30/11-9	78/1-2	24/11-9	25/5-6		
1/D	53/9-8	30/14-12	78/3-4	24/14-12	25/9-8		
2/A	9/1-2	32/2-4	78/5-6	49/2-4	25/11-10	7/4	12/3
2/B	9/3-4	32/5-7	78/9-8	49/5-7	25/13-12		
2/C	9/5-6	32/11-9	78/11-10	49/11-9	50/1-2		
2/D	9/9-8	32/14-12	78/13-12	49/14-12	50/3-4		
3/A	28/1-2	34/2-4	28/11-10	74/2-4	50/5-6	7/10	15/3
3/B	28/3-4	34/5-7	28/13-12	74/5-7	50/9-8		
3/C	28/5-6	34/11-9	31/1-2	74/11-9	50/11-10		
3/D	28/9-8	34/14-12	31/3-4	74/14-12	50/13-12		
4/A	31/5-6	36/2-4	33/1-2	99/2-4	75/1-2	7/13	16/3
4/B	31/9-8	36/5-7	33/3-4	99/5-7	75/3-4		
4/C	31/11-10	36/11-9	33/5-6	99/11-9	75/5-6		
4/D	31/13-12	36/14-12	33/9-8	99/14-12	75/9-8		
5/A	33/13-12	37/2-4	355-6	123/2-4	75/11-10	14/1	17-3
5/B	33/11-10	37/5-7	35/ 9-8	123/5-7	75/13-12		
5/C	35/1-2	37/11-9	35/11-10	123/11-9	100/1-2		
5/D	35/3-4	37/14-12	35/13-12	123/14-12	100/3-4		
6/A	38/1-2	39/2-4	38/11-10	124/2-4	100/5-6	14/4	19/3
6/B	38/3-4	39/5-7	38/13-12	124/5-7	100/9-8		
6/C	38/5-6	39/11-9	40/1-2	124/11-9	100/11-10		
6/D	38/9-8	39/14-12	40/3-4	124/14-12	100/13-12		
7/A	40/5-6	41/2-4	42/1-2	48/2-4	125/1-2	14/10	20/3
7/B	40/9-8	41/5-7	42/3-4	48/5-7	125/3-4		
7/C	40/11-10	41/11-9	42/5-6	48/11-9	125/5-6		
7/D	40/13-12	41/14-12	42/9-8	48/14-12	125/9-8		
8/A	42/11-10	43/2-4	44/5-6	148/2-4	125/11-10	14/13	21/3
8/B	42/13-12	43/5-7	44/9-8	148/5-7	125/13-12		
8/C	44/1-2	43/11-9	44/11-10	148/11-9	150/1-2		
8/D	44/3-4	43/14-12	44/13-12	148/14-12	150/3-4		
9/A	46/1-2	45/2-4	46/11-10	149/2-4	150/5-6	See detail for group 9 on sheet 9 AND	
9/B	46/3-4	45/5-7	46/13-12	149/5-7	150/9-8		22/3
9/C	46/5-6	45/11-9	9/11-10	149/11-9	150/11-10		
9/D	46/9-8	45/14-12	9/13-12	149/14-12	150/13-12		

FRASER ELECTRONICS

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Output cable to power box

Group/line	pin#	Wire colour(Insulation/stripe)
1/A	1	Brown/Black
1/B	2	Red/Grey
1/C	3	Orange/Black
1/D	4	Yellow/Green
2/A	5	Green/Black
2/B	6	Blue/Black
2/C	7	Violet/Green
2/D	8	Grey/Black
3/A	9	White/Grey
3/B	10	Black/Brown
3/C	11	Brown/Violet
3/D	12	Red/Brown
4/A	13	Orange/Violet
4/B	14	Yellow/Brown
4/C	15	Green/Grey
4/D	16	Blue/Violet
5/A	17	Violet/Brown
5/B	18	Grey/Violet
5/C	19	White/Brown
5/D	20	Black/Blue
6/A	21	Brown/Red
6/B	22	Red/Green
6/C	23	Orange/Red
6/D	24	Yellow/Blue
7/A	25	Green/Red
7/B	26	Blue/Red
7/C	27	Violet/Grey
7/D	28	Grey/Red
8/A	29	White/Green
8/B	30	Black/Orange
8/C	31	Brown/White
8/D	32	Red/Orange
9/A Vert.	33	Orange/White
9/B "	34	Yellow/Orange
9/C "	35	Green/White
9/D "	36	Blue/White
9/A Horiz.	37	Violet/Orange
9/B "	38	Grey/White
9/C "	39	White/Orange
9/D "	40	Black/Grey
A Static Switch	41	Brown/Yellow
B " "	42	Red/Blue
C " "	43	Orange/Yellow
D " "	44	Yellow/Grey
10 Volts	45	Green/Yellow
10 Volts	46	Blue/Yellow
Strobe control	47	Violet/Blue
Strobe ground	48	Grey/Yellow
5 Volts	49	White/Blue
	50	Black/Green

Jones Connectors on Power Box

10 Pin Connector

1 Static switch Circuit A
2 Rain Lights Circuit A
3 Static Switch Circuit B
4 Rain Lights Circuit B
5 Static Switches Circuit C
6 Rain Lights Circuit C
7 Static Switch Circuit D
8 Rain Lights Circuit D
9 AC Neutral for Static Switches
10 AC Neutral for Rain Lights.

Note: Rain Lights are Group 5 on the controller

21 Pin Connector-For Wall Circuits Group then Line

1	1/A	6	3B	11	2D	16	4 Neutral	21	4D		
2	2A	7	1C	12	3D	17	-				
3	3A	8	2C	13	1 Neut.	18	4A				
4	1B	9	3C	14	2 Neut.	19	4B				
5	2B	10	1D	15	3 Neut.	20	4C				

24 Pin connector for Dynolites-All 24VAC Dyno1 is 6;Dyno2 is 7; Border is 8; and center is 9

1	8A	7	8C	13	-	19	9V D		
2	6A	8	6C	14	6,7,8 Neut	20	9H A		
3	7A	9	7C	15	- 6B	21	9H B		
4	8B	10	8D	16	9V A	22	9H C		
5	6B	11	6D	17	9V B	23	9H D		
6	7B	12	7D	18	9V C	24	-		

Yesterdays

POWER BOX

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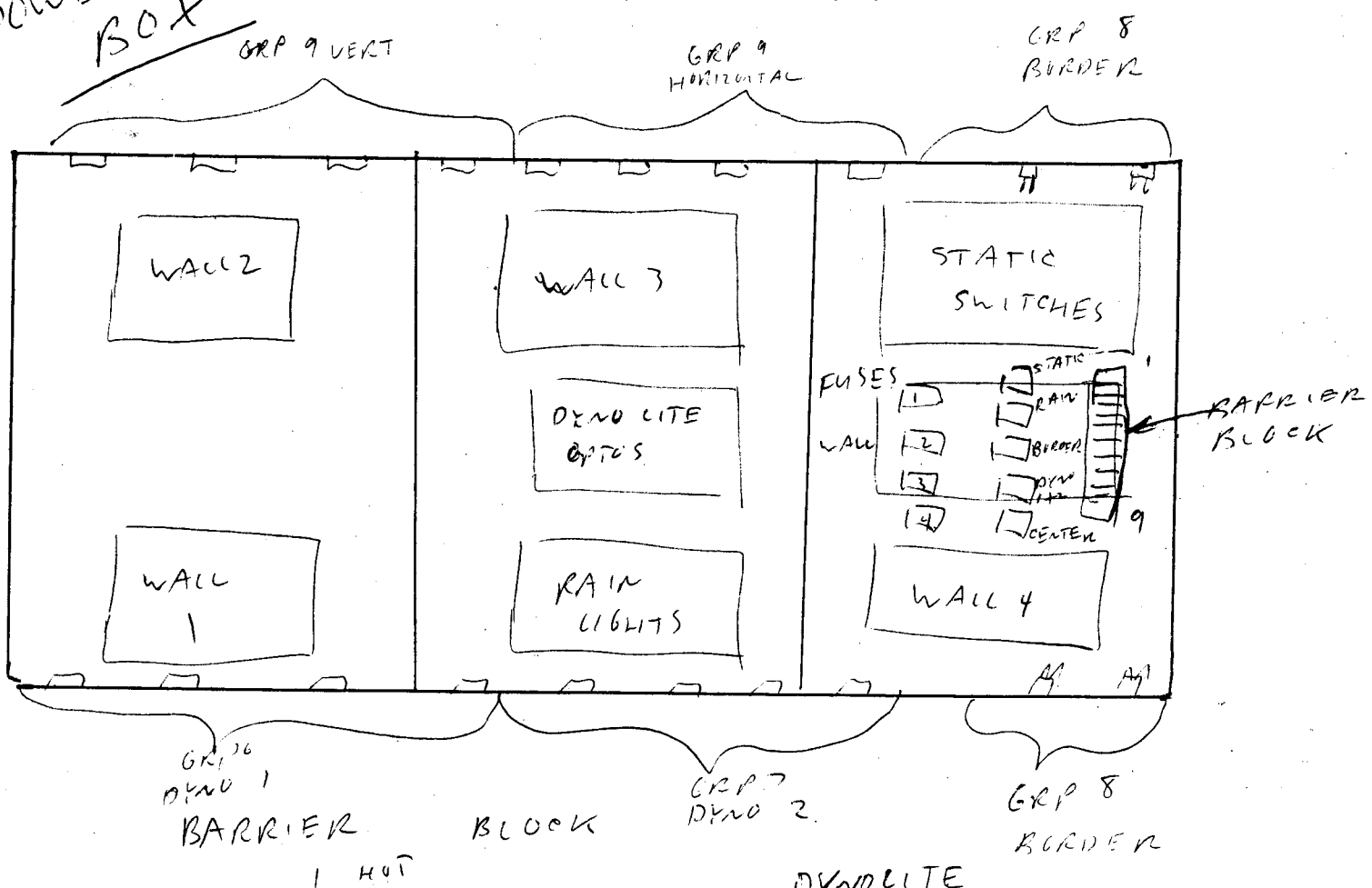
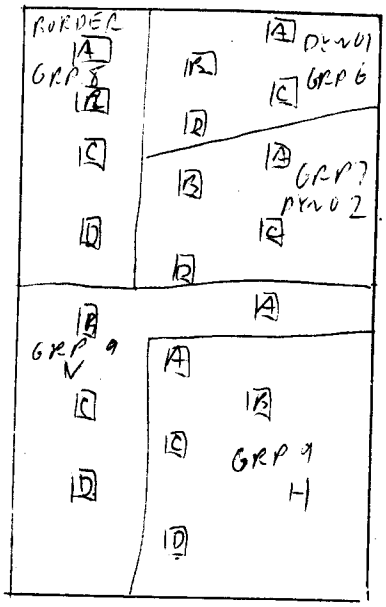


BARRIER BLOCK

1 HOT
2 "
3 "
4 "
5 NEUTRAL
6 NEUTRAL
7 24VAC
8 24VAC
9 GND

DYNOLITE OPTO BOARD.



Yesterdays

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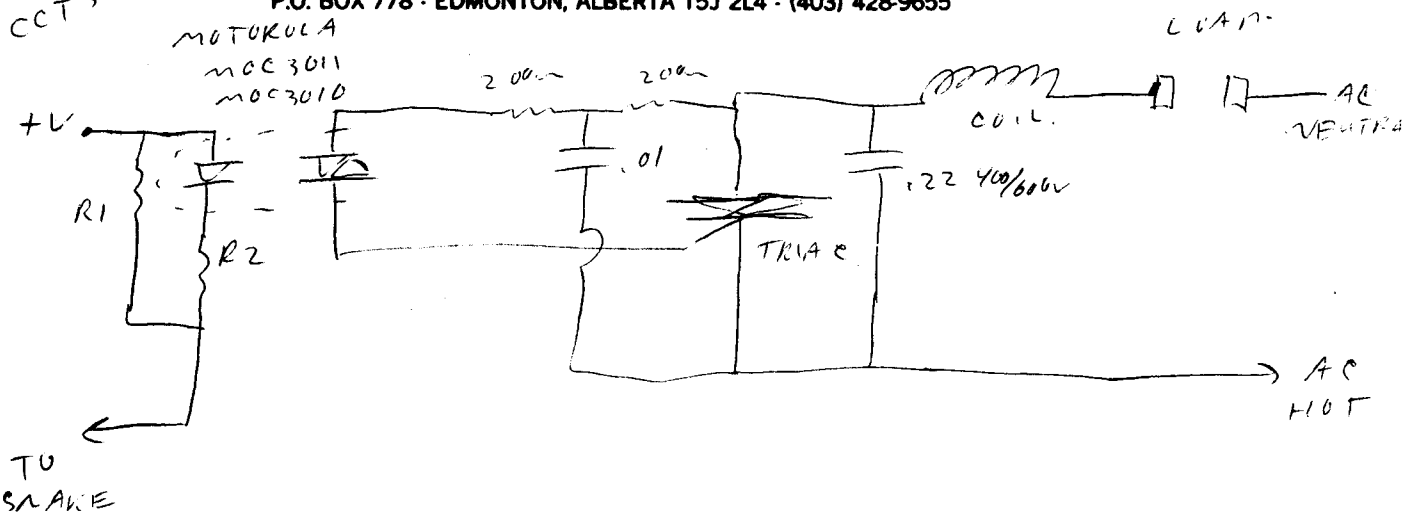
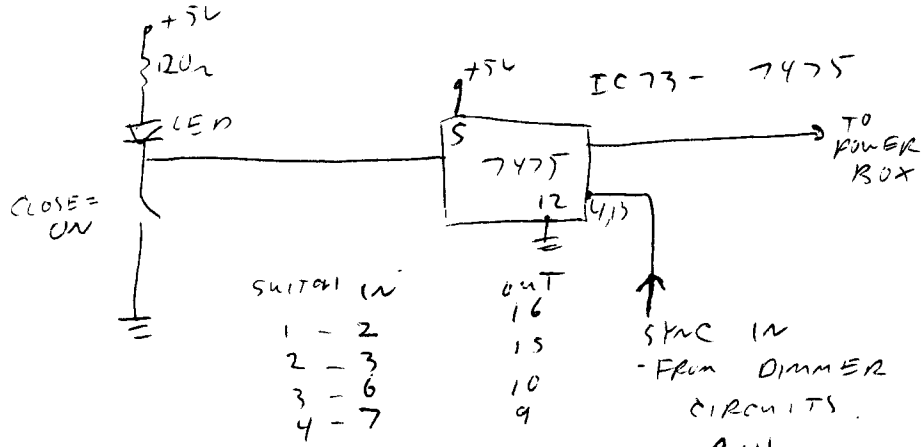
Power BOX output CCTS



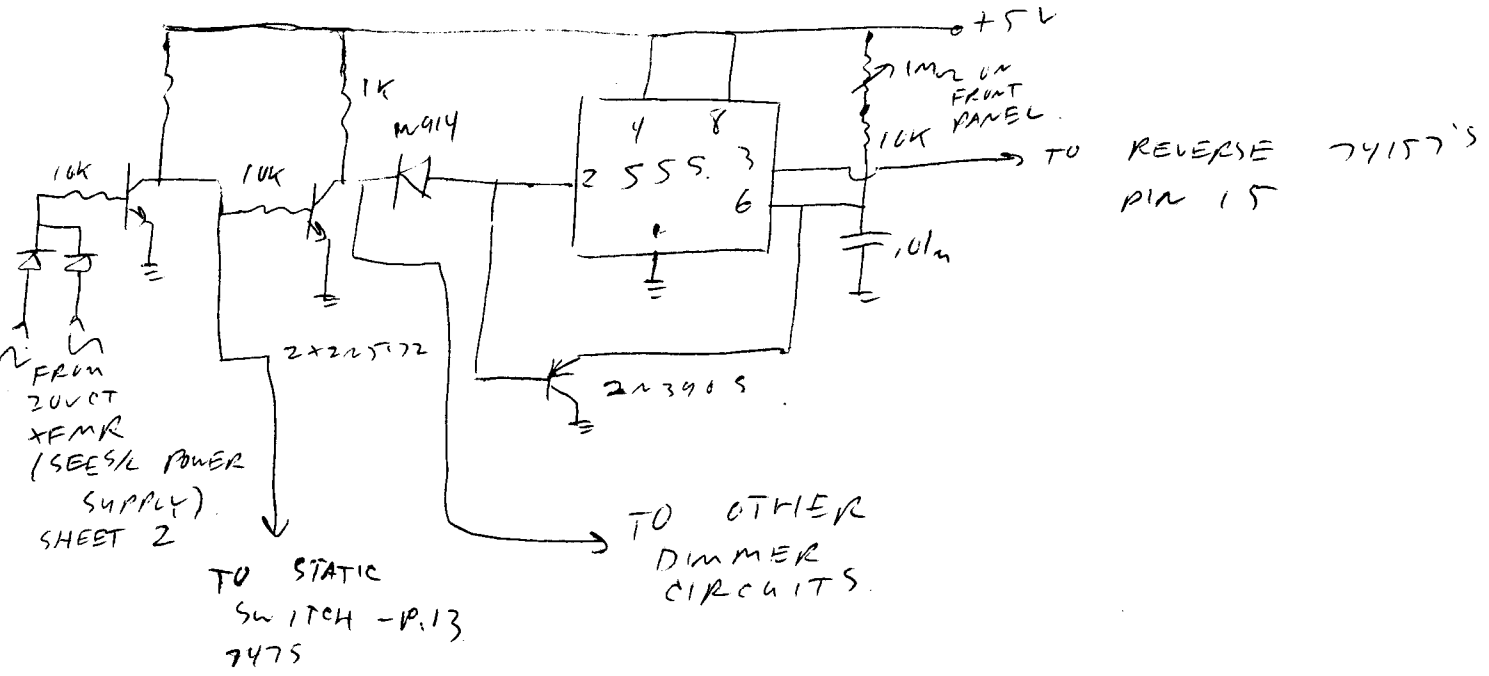
GROUP	V+	R1-R2	TRIAC
WALL THERMOSTAT	10V	390Ω 680Ω	SC142B - TIC236B OR EQUIVALENT
RAIN (S)	10V	390 680Ω	TIC236D OR TIC246D
STATIC SWITCH	5V	∞ - 180Ω.	TIC236D OR TIC246D — NO COIL
6-7 - [redacted]	10V	∞ - 330Ω	TIC263B
8 - BURNER	10V	∞ - 330Ω	SC60BX
9 - CENTER V+H	5V	∞ - 200Ω	TIC263B

STATIC SWITCH CIRCUIT

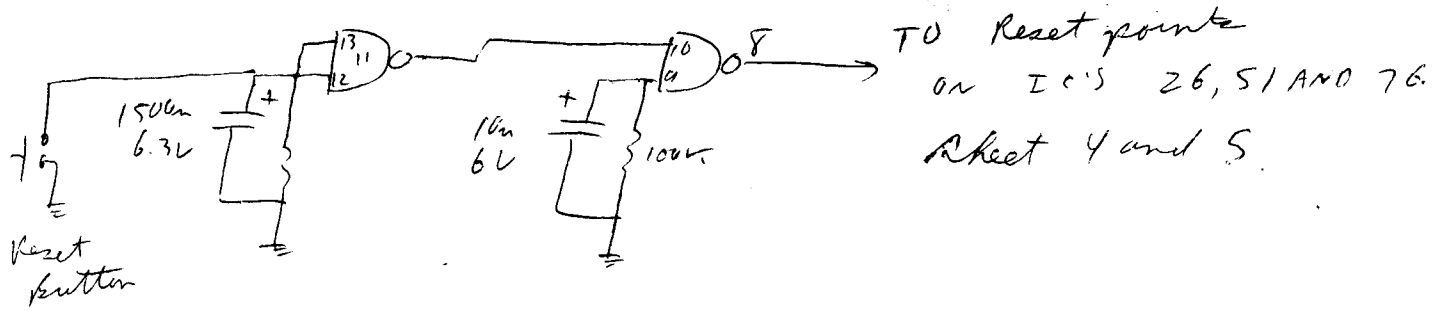


FRASER ELECTRONICS
P.O. BOX 778 - EDMONTON, ALBERTA T5J 2L4 - (403) 428-9655

Yesterdays DIMMER CIRCUITS.



Reset Circuit IC 27. - 74132

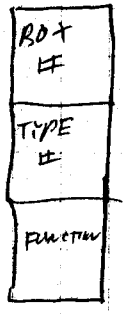


Wirewrap Board Layout

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
95	-	7805	RESET	04	02	7805	04	-	555	555	7805	02	555	555	555	7805	555	555	555	555	7805	157	06
C1		REG	CAPS	C6 C7	SHIM	REG	G2 G9		DIM 1	DIM 2	REG	SHIM	DIM 3	DIM 4	DIM 5	REG	DIM 6	DIM 7	DIM 8	DIM 9	REG	REV 1	G1 G2
26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
95	132	04	-	157 INV	04	157 INV	04	157 INV	04	157 INV	157 INV	04	157 INV	04	157 INV	04	157 INV	04	157 INV	04	02	157	157	06
C2	C3 RST	G3		G1	G3 G4	G2	G4 G5	G3	G5	G4	G5	G6	G6	G6 G7	INV G7	G7 INV 6 8	INV 8	G8	INV 9	G9	G9 VERT	REV 7	REV 2	G2 G3
51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75
95	132	04	01	01	01	01	01	01	01	01	01	01	01	01	01	01	01	01	01	01	02	75	157	06
C3	C4	G1	G1 C1	G1 C2	G2 C1	G2 C2	G3 C1	G3 C2	G4 C1	G4 C2	G5 C1	G5 C2	G6 C1	G6 C2	G7 C1	G7 C2	G8 C1	G8 C2	G9 C1	G9 C2	G9 HOR	STAT SW	REV 3	G4 G5
76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
95	04	04	01	01	01	01	01	01	01	01	01	01	01	01	01	01	01	01	01	01	ZERO CROSSING		157	06
C4	C3 C4	G1 G2	G1 C3	G1 C4	G2 C3	G2 C4	G3 C3	G3 C4	G4 C3	G4 C4	G5 C3	G5 C4	G6 C3	G6 C4	G7 C3	G7 C4	G8 C3	G8 C4	G9 C3	G9 C4	DETECTOR	REV 4	G5 G6	
101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125
73	555	555	01	01	01	01	01	01	01	01	01	01	01	01	01	01	01	01	01	01	-	157	157	06
C5, 6, 7	STROBE	SHIMMER	G1 S/L	G1 C6	G2 S/L	G2 C6	G3 S/L	G3 C6	G4 S/L	G4 C6	G5 S/L	G5 C6	G6 S/L	G6 C6	G7 S/L	G7 C6	G8 S/L	G8 C6	G9 S/L	G9 C8		REV 5	REV 6	G7 G8
126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150
02	555	555	01	01	01	01	01	01	01	01	01	01	01	01	01	01	01	01	01	01	04	157	157	06
C5	CLK A	CLK B	G1 C7	G1 C5	G2 C7	G2 C5	G3 C7	G3 C5	G4 C7	G4 C5	G5 C7	G5 C5	G6 C7	G6 C5	G7 C7	G7 C5	G8 C7	G8 C5	G9 C7	G9 C5	S/L	REV 8	REV 9	G8 G9

C numbers stand for GROUP.

C # is for chart #



NOTE - eg. 74157 WRITTEN AS 157 (74 left off).

- ALL IC's except 7805 & 555 add 74 to the beginning of the type #

Bx CABLE

CABLE 1 — CIRCUIT 1
" 2 — " 2
" 3 — " 3
" 4 — " 4
} RAIN LIGHTS
" 5 — SPINNER
" 6 — LEFT ½ ARC
" 7 — RIGHT ½ ARC

BELDEN CABLE

CABLE 8 — FRONT Y DISP. (BAR SIDE)
" 9 — BACK Y "
" 10 — CENTRE CONE

CABLE 8, 9 COLOUR CODES

BLACK / WHITE	CIRCUIT	1 / 2	LONG TUBES
BLACK / BROWN	"	3 / 4	LONG TUBES
BLACK / GREEN	"	1 / 2	SHORT TUBES
BLACK / YELLOW	"	3 / 4	SHORT TUBES
BLACK / RED			COMMON

CABLE 10 COLOUR CODE

BLACK / WHITE	CIRCUIT	1 / 2
BLACK / BROWN	"	3 / 4
BLACK / GREEN	COMMON	1 / 2
BLACK / YELLOW	"	3 / 4

FRASER ELECTRONICS
P.O. BOX 778 - EDMONTON, ALBERTA T5J 2L4 - (403) 428-9655

OPERATION OF Controller

The controller consists of eight effects generators, three modifiers, nine sets of effects selection circuits, nine dimmers, and a set of static switches.

Chase effects 1,2 & 3 are controlled by the knob marked "Trigger 1,2,3". This knob sets the rate at which these effects will run at. A switch marked "Auto/Audio" is also provided. In the Auto position the speed of the chase is constant, set by the knob, but in the Audio position, the knob marked "AUDIO CHASE" sets the speed of the chase, so that it will follow the bass line in the music. Effects 4,5,6 & 7 are controlled similarily by the knob marked "TRIGGER 4,5,6,7". The last effect, the S/L is controlled by four knobs marked "BASS, LO-MID, HI-MID, TREBLE" which set the sensitivity of each of the four sections.

To select an affect all that is necessary is to flip one of the mini-toggle switches in the row you wish. If more that one effect is selected, the effects superimpose, which can give you a much wider range of effects. There are such a large number of switches because there is a seperate set of selectors for each of the nine sets of lights in the room. This may be confusing at first, but if you think of it as a single set of switches, for each of nine sets of lights it becomes easy to understand. The nine sets are "Wall 1,Wall 2, Wall 3 Wall 4, Rain Lights, Dynolite 1, Dynolite 2, Border Dynolites, and Center Dynolites" The four Wall sets are for four sets of lamps in the wall display. The others are for the lights in the ceiling and are self-descriptive.

After the selectors, are the three modifier switches. These are "INVERT, REVERSE & SHIMMER". On the inverse, when flipped up, the lights that are normallyoff in an effect are now on, and the ones normally on are now off. The reverse switch reverses the direction of the chase, and the shimmer switch causes the lights that are off in the effect to shimmer at a rate determinned by the knob marked "SHIMMER". The shimmer khob also has an Auto/Audio switch to allow the shimmer to be in time to the music. This music shimmer is controlled by the knob marked Hi-Mid. Each group of lights also has its own dimmer control at the end by the little red lights.

If you wish to have the lights on steady, you switch off all the effects for that group, and switch the invert switch to the upper position.

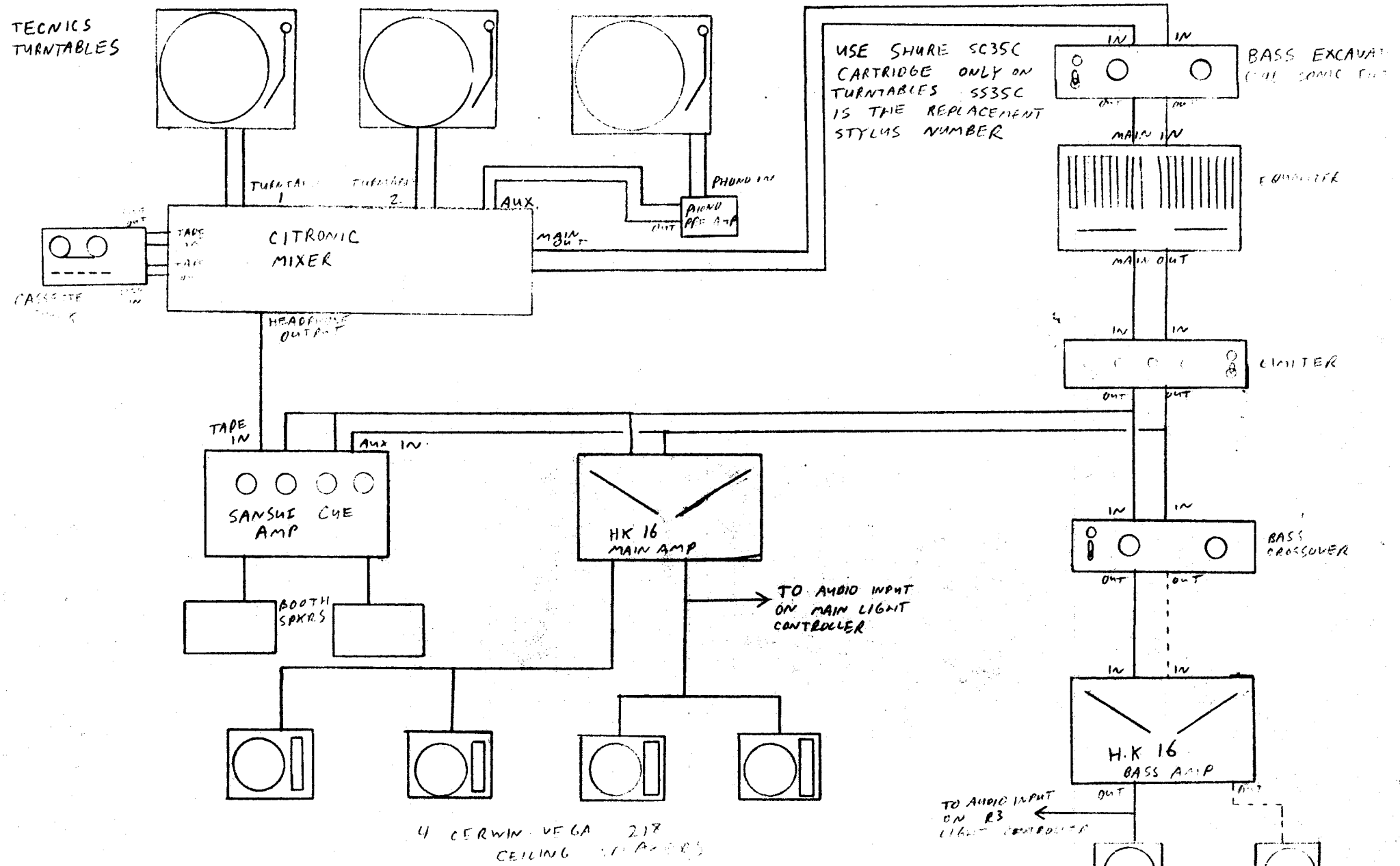
There are also four static switches marked "SPECTRASTAR MOTOR & LIGHT, LEFT HALF ARC SPINNER & RIGHT HALF ARC SPINNER". These are just on/off switches.

There are two unmarked switches by the mododier switches for group 9. These control the center section of Dynolites.They control the Vertical or Horizontal movement of the Dynolites in the center section. With only one of the two switches activated, the lights go either vertically or horizontally. With both down, the lights are on steady, and with both up, the lights move in a psuedo-diagonal pattern.

There is also a speed control for strobe lights, with an Auto/Audio switch and an on off switch. At the time of installation these were not yet installed, but may be at a later date.

IF THE CHASE EFFECTS 2-3 ONLY GO OUT OF SYNC - PRESS THE RED RESET BUTTON ON THE PIECE OF BLACK PLASTIC.

Daniel Fraser
Oct.25/1978



SOUND SYSTEM DIAGRAM
SCANDALS DISCO
CARAVAN HOTEL
MARCH 23 1981
David