

Table 4: Video Display Memory Ranges					
Screen	Page	Begins at:		Ends at:	
		Hex	Decimal	Hex	Decimal
Text/Lo-Res	Primary	\$400	1024	\$7FF	2047
	Secondary	\$800	2048	\$BFF	3071
Hi-Res	Primary	\$2000	8192	\$3FFF	16383
	Secondary	\$4000	16384	\$5FFF	24575

Table 5: Screen Soft Switches					
Location:		Description:			
Hex	Decimal				
\$C050	49232	-16304	Display a GRAPHICS mode.		
\$C051	49233	-16303	Display TEXT mode.		
\$C052	49234	-16302	Display all TEXT or GRAPHICS.		
\$C053	49235	-16301	Mix TEXT and a GRAPHICS mode.		
\$C054	49236	-16300	Display the Primary page (Page 1).		
\$C055	49237	-16299	Display the Secondary page (Page 2).		
\$C056	49238	-16298	Display LO-RES GRAPHICS mode.		
\$C057	49239	-16297	Display HI-RES GRAPHICS mode.		

Table 9: Annunciator Special Locations					
Ann.	State	Address:		Hex	
		Decimal	Hex		
0	off	49240	-16296	\$C058	
	on	49241	-16295	\$C059	
1	off	49242	-16294	\$C05A	
	on	49243	-16293	\$C05B	
2	off	49244	-16292	\$C05C	
	on	49245	-16291	\$C05D	
3	off	49246	-16290	\$C05E	
	on	49247	-16289	\$C05F	

2000: 2A 55 GRN  
 55 2A BLUE VIA  
 D5 AA HO BLUE  
 AA D5 RED

10  
 01  
 01  
 10

0  
 \$80

COLOR

Q: Green Violet  
 A: Red Blue

123C: 0C 3D 12	1235	ENDSONG	BCC	ENDSONG
	1232		JMP	LOOP
123F: AD 52 C0	1233		LDA	%C052
1242: 20 CA 13	1234		JSR	KEYBOARD
1245: A5 DC	1235		LDA	KEY
1247: 10 F6	1236		BPL	ENDSONG
	1237	ENDTITLE		
1240: AD 52 C0	1238		LDA	%C052
124C: 60	1239		RTS	
	1240			
124D: C8	1241	GTVOICE	INY	
124E: B1 DD	1242		LDA	(NOTEBASE),Y
1250: 85 E5	1243		STA	VOICE1
1252: C8	1244		INY	
1253: B1 DD	1245		LDA	(NOTEBASE),Y
1255: 85 E6	1246		STA	VOICE2
1257: A5 DD	1247	INCNB	LDA	NOTEBASE

1259: 18	1258		CLC	
125A: 69 03	1259		ADC	%03
125C: 85 DD	1260		STA	NOTEBASE
125E: 90 02	1261		BCC	:1
1260: E6 DE	1262		INC	NOTEBASE+1
	1263	:1		
	1264		CLC	
1262: 18	1265		RTS	
1263: 60	1266	NEXTNOTE		
	1267		LDY	%0
1264: A0 00	1268		LDA	(NOTEBASE),Y
1266: B1 DD	1269		CMP	%01
1268: C9 01	1270		BEG	GTVOICE
126A: F0 E1	1271		BGE	STORDUR
126C: D0 0C	1272		SEC	
126E: 38	1273		RTS	
126F: 60	1274	GETPTCH	LDX	%49
1270: A2 49	1275		INY	
1272: C8	1276		LDA	(NOTEBASE),Y
1273: B1 DD	1277		BNE	OUT
1275: D0 02	1278		LDX	%C9
1277: A2 C9	1279	OUT	RTS	
1279: 60	1280	STORDUR	STA	DURATION
127A: 85 96	1281		JSR	GETPTCH
127C: 20 70 12	1282		STX	SELF1
127E: 8E 20 13	1283		STA	PITCH1
1282: 85 E7	1284		LDX	VOICE1
1284: A6 E5	1285	:1	LSR	
1286: 4A	1286		DEX	
1287: CA	1287		BNE	:1
1288: D0 FC	1288		STA	VAR1+1
128A: 8D 19 13	1289		JSR	GETPTCH
128D: 20 70 12	1290		STX	SELF2
1290: 8E 3C 13	1291		STA	PITCH2
1293: 85 E8	1292		LDX	VOICE2
1295: A6 E6	1293	:2	LSR	
1297: 4A	1294		DEX	
1298: CA	1295		BNE	:2
1299: D0 FC	1296		STA	VAR2+1
129B: 8D 55 13	1297			
	1298		LDY	YSAVE
129E: AC 69 03	1299		LDX	XSAVE
12A1: AE 62 03	1300		LDA	ASAVE
12A4: AD 61 03	1301		JSR	TONE2
12A7: 20 00 13	1302		JMP	INCNB
12AA: 4C 57 12	1303			
	1304			

\* START OF TIME CRITICAL CODE

12AD: 00 00 00	1305	DS	*/100*100+1100-1
	1306	TONE2	
1300: 2C 30 C0	1307	SPKR1	BIT
1303: C9 00	1308	H0365	CMP
1305: 30 03	1309		BMI
1307: EA	1310		NOP
1308: 10 03	1311		BPL
130A: 2C 30 C0	1312	SPKR2	H036F
130D: 8D 01 02	1313	H036F	BIT
	1314		STA
	1315		T1

1310:	EA		1925	NOP	
1311:	EA		1926	NOP	
1312:	EA		1927	NOP	
1313:	88		1928	DEY	
1314:	D0 02		1929	BNE	VAR1
1316:	F0 06		1930	BEQ	H0381
1318:	C0 00		1931	CPY	0000
131A:	F0 04		1932	BEQ	SELF1
131C:	D0 04		1933	BNE	H0385
131E:	A4 E7		1934	LDY	PITCH1
1320:	49 40		1935	EOR	0040
1322:	2C 01 02		1936	BIT	T1
1325:	50 07		1937	BVC	H0390
1327:	70 00		1938	BVS	H038B
1329:	10 09		1939	BPL	SPKR3
132B:	EA		1940	NOP	
132C:	30 09		1941	BMI	H0399
132E:	EA		1942	NOP	
132F:	30 09		1943	BMI	SPKR3
1331:	EA		1944	NOP	
1332:	10 03		1945	BPL	H0399
1334:	CD 30 C0		1946	CMP	0C030
1337:	CE 00 02		1947	DEC	T0
133A:	D0 13		1948	BNE	H03AE
133C:	C6 96		1949	DEC	DURATION
133E:	D0 0F		1950	BNE	H03AE
1340:	50 03		1951	BVC	ENDNOTE
1342:	2C 30 C0		1952	BIT	0C030
			1953	ENDNOTE	
1345:	8D 61 03		1954	STA	ASAVE
1348:	8E 62 03		1955	STX	XSAVE
134B:	8C 63 03		1956	STY	YSAVE
134E:	60		1957	RTS	
134F:	CA		1958	DEX	
1350:	D0 02		1959	BNE	VAR2
1352:	F0 06		1960	BEQ	H03B9
1354:	E0 00		1961	CPX	0000
1356:	F0 04		1962	BEQ	SELF2
1358:	D0 04		1963	BNE	H03BD
135A:	A6 E8		1964	LDX	PITCH2
135C:	49 80		1965	EOR	0080
135E:	70 A0		1966	BVS	SPKR1
1360:	EA		1967	NOP	
1361:	50 A0		1968	BVC	H0365
			1969		
			1970	TONE	
1363:	A5 96		1971	LDA	DURATION
			1972	TN1	
1365:	A6 95		1973	LDX	PITCH
1367:	AC 30 C0		1974	LDY	0C030
			1975	TN2	
136A:	CA		1976	DEX	
136B:	D0 FD		1977	BNE	TN2
			1978		
136D:	38		1979	SEC	
136E:	E9 01		1980	SDC	01
1370:	D0 F3		1981	BNE	TN1

RTS