

APPENDIX H
 OS SUBROUTINE LIBRARY

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NAME	PARAMETERS	DESCRIPTION	SECTION
ACTIVATE	Y X	Activates the video generator to VCR	3.2.2.4
ADDR16	X X	Addr 16-bit signed (16) to 16-bit unsigned (16) (16)	9.1
ADDR_16M		Saves controller port data to VCR	6.2
ADDR_16M	X X	Restores 16-bit significant address contained in 16 (16)	9.2
ADDR_16M	X X	Restores 16-bit significant address written to 16 (16)	9.3
ADDR_16M	X X	Calls ADDR_16M	6.3
ADDR_16M	X X X X X X X X	Restores the state of the original object	3.2.2.4
ADDR_16M	X X X X X X	Writes a specific value to VCR	3.1.2
ADDR_16M		Restores 16-bit data from 16-bit VCR to 16-bit VCR	9.4
ADDR_16M	X X X X X X	Saves VCR data to VCR	3.2.1.2
ADDR_16M		Restores 16-bit VCR data from VCR	3.2.2.1
ADDR_16M	X X	Initializes the VCR base address for 16-bit VCR	3.2.2.1
ADDR_16M	X X X X	Initializes timer data space	3.0
ADDR_16M	X X	Initializes game data, name and 16-bit address to VCR (16-bit VCR)	4.1
ADDR_16M		Writes 16-bit generator port to 16-bit generator (16)	9.6
ADDR_16M		Sets VCR to generate 16-bit and writes 16-bit	3.1.6
ADDR_16M	X X	(16) to 16-bit VCR to 16-bit VCR (16)	9.8
ADDR_16M		Called to start VCR	7.2
ADDR_16M		Saves frequency and attenuation data to VCR (16)	7.5
ADDR_16M		Reads, divides and generates all active portions of data controller	6.2
ADDR_16M		Changes an object's frame or location on the display	3.3.2
ADDR_16M	X X X X X X X X	Saves data from VCR to VCR (16)	3.2.1.1
ADDR_16M		16-bit random number generator	9.5
ADDR_16M		Reads and returns the address of the VCR register	3.1.5
ADDR_16M	X X X X X X X X	Reads from VCR writes to VCR on VCR	3.1.1
ADDR_16M	X X X X X X X X	Reflection of generator about the horizontal axis	3.2.2.2
ADDR_16M	X X X X X X X X	Reflection of generator about the vertical axis	3.2.2.1
ADDR_16M	X X	Sets up a VCR for the video	3.4
ADDR_16M	X X X X X X X X	90-degree clockwise rotation of generator	3.2.2.3
ADDR_16M	X X	Initializes various sound data space	7.2
ADDR_16M		Called every VCR interrupt, manages sound VCR (16)	7.4
ADDR_16M		Tests for a timeout of a VCR	3.7
ADDR_16M		Restores all 16-bit VCR (16)	3.5
ADDR_16M		Saves controller output sound (16)	6.4
ADDR_16M		Performs deferred VCR (16) operations	6.2
ADDR_16M		Writes a value to a selected VCR (16)	3.1.4
ADDR_16M	X X X X X X X X	Saves data from VCR to VCR	3.2.2.2
ADDR_16M	X X	Saves local VCR data to VCR (16)	3.2.2.2

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NAME	INPUT REGISTERS											DESCRIPTION	SECTION
	H	L	D	E	B	C	A	F	IX	IY			
ACTIVATE	X	X						X				Moves pattern and color generator to VRAM	3.3.3
ADD816	X	X					X					Adds 8-bit signed (A) to 16-bit unsigned (HL) - (HL)	9.1
CONT_SCAN												Saves controller port data to CRAM	6.4
DECLSN	X	X										Decrements least significant nibble pointed to by (HL)	9.2
DECMSN	X	X										Decrements most significant nibble pointed to by (HL)	9.3
DECODER	X	X										Calls COUNT_SCAN	6.3
ENLARGE	X	X	X	X	X	X	X					Double the size of the original object	3.2.2.4
FILL_VRAM	X	X	X	X			X					Writes a value DE times to VRAM	3.1.5
FREE_SIGNAL							X					Releases a timer to the free list based on SIGNAL_NUM	5.8
GET_VRAM	X	X	X	X			X			X		Copies VRAM table entry to CRAM	3.2.1.2
INIT_SPR_ORDER							X					Initializes SPRITE_ORDER data with zeros	3.2.3.1
INIT_TABLE	X	X					X					Initializes the VDP table address for given table	3.2.1.1
INIT_TIMER	X	X	X	X								Initializes timer data areas	5.4
INIT_WRITER	X	X					X					Initializes queue size, head and tail addresses to the beginning of the buffer, and head and tail to zero	4.1
LOAD_ASCII												Writes ASCII generator set to pattern generator table	9.6
MODE_1												Sets VDP to graphics mode 1 and sprite size 0	3.1.6
MSNTOLSN	X	X										(HL) - byte,MSN to (HL) - byte,LSN	9.4
PLAY_IT					X							Called to start a sound	7.3
PLAY_SONGS												Saves frequency and attenuation data to sound chip	7.5
POLLER												Reads, decodes and debounces all active portions of the controllers	6.2
PUTOBJ					X				X			Changes an object's frame or location on the display	3.3.4
PUT_VRAM	X	X	X	X			X			X		Saves data from CRAM to VRAM table	3.2.1.3
RAND_GEN												16-bit pseudo random number generator	9.5
READ_REGISTER												Reads and returns the contents of the VDP register	3.1.3
READ_VRAM	X	X	X	X	X	X						Reads from VRAM writes to buffer in CRAM	3.1.1
REFLECT_HORIZONTAL	X	X	X	X	X	X	X					Reflection of generators around horizontal axis	3.2.2.2
REFLECT_VERTICAL	X	X	X	X	X	X	X					Reflection of generators around vertical axis	3.2.2.1
REQUEST_SIGNAL	X	X					X					Sets up a timer for the caller	5.6
ROTATE_90	X	X	X	X	X	X	X					90-degree clockwise rotation of generators	3.2.2.3
SOUND_INIT					X							Initializes various sound data areas	7.2
SOUND_MAN												Called every VDP interrupt, manages sound data areas	7.4
TEST_SIGNAL							X					Tests for a time-out of a timer	5.7
TIME_MGR												Maintains all OS software timers	5.5
UPDATE_SPINNER												Processes controller spinner switch interrupts	6.5
WRITER												Performs deferred PUTOBJ operations	4.2
WRITE_REGISTER					X	X						Writes a value to a selected VDP register	3.1.4
WRITE_VRAM	X	X	X	X	X	X						Saves data from CRAM to VRAM	3.1.2
WR_SPR_NB_TBL							X					Saves local sprite data to VRAM sprite attribute table	3.2.3.2

