

**Oric Tape Format (tap file format)**  
**By Chloé Avrillon (aka Ladywasky, formerly waskol)**

**Multi-byte values are in big-endian convention : Value or Address=byte1\*256+byte2**

**Arrays are zero based in basic !**

	Bloc (explanation)	Number of bytes	Possible values	Comment
Typical Bloc BASIC or memory bloc (data or machine code)	Synchronisation (N+1) bytes	N ≥ 4 Typically : Fast : 16bytes Slow : 8bytes	\$16	synchronisation bytes
		1	\$24	end of synchronisation
	Header 9 bytes	2	varies (unused)	reserved bytes
		1	\$00	BASIC
			\$80	Machine code or memory bloc
		1	\$00	Autorun OFF
			other value (\$C7)	Autorun ON
		1	EndAddress1 (high)	Memory locations
		1	EndAddress2 (low)	
		1	StartAddress1 (high)	Address=byte1*256+byte2 <b>SizeOfData</b> =EnAdrr-StartAdrr+1
		1	StartAddress2 (low)	
		1	varies (unused)	
	File name	15 max	ASCII values	Name
	15 bytes max + \$0	1	\$00	end of name
	File data	<b>SizeOfData</b>	varies	succession of bytes

Note : no ending byte in oricfiles.

Array of integers (STORE/RECALL)	Bloc (explanation)	Number of bytes	Possible values	Comment
	Synchronisation (N+1) bytes	N ≥ 4 Typically : Fast : 16bytes Slow : 8bytes	\$16	synchronisation bytes
		1	\$24	end of synchronisation
	Header	1	\$80	Flag integer/real (used by v1.1 ROM only)
		1	\$00	Flag string
			\$40	Array
		1	\$00	Autorun OFF
			other value (\$C7)	Autorun ON
		1	StartAddress1 (high)	Address of array when saved.
		1	StartAddress2 (low)	Unused. \$FFFF for bi-dim.
		1	SizeOfData1 (high)	SizeOfArray=byte1*256+byte2
		1	SizeOfData2 (low)	SizeofData=SizeOfArray(*)
		1	\$FF	unused
	File name	15 max	ASCII values	Name
	15 bytes max + \$0	1	\$00	end of name
	File data	(SizeOfData div 2) "integers"	varies	succession of integers (2 bytes)

Note : no ending indicator, The values are stored sequentially without dimension, nor variable name

(\*) Not accurate : it's seems to be a bug in Oric rom, the Size of the array is wrong. In reality, SizeofData=SizeOfArray-offset  
 The offset value is typically 6 for a single dimensional array, 8 for a bi-dimensional array (and it is not always true).  
 Either the datalength provided is false, either are missing the array descriptors in the data (dimensions for instance)

Array of reals (STORE/RECALL)	Bloc (explanation)	Number of bytes	Possible values	Comment
	Synchronisation (N+1) bytes	N ≥ 4 Typically : Fast : 16bytes Slow : 8bytes	\$16	synchronisation bytes
		1	\$24	end of synchronisation
	Header	1	\$00	Flag integer/real (used by v1.1 ROM only)
		1	\$00	Flag string
			\$40	Array
		1	\$00	Autorun OFF
			other value (\$C7)	Autorun ON
		1	StartAddress1 (high)	Address of array when saved.
		1	StartAddress2 (low)	Unused. \$FFFF for bi-dim.
		1	SizeOfData1 (high)	SizeOfArray=byte1*256+byte2
		1	SizeOfData2 (low)	SizeofData=SizeOfArray(*)
		1	\$FF	unused
	File name	15 max	ASCII values	Name
	15 bytes max + \$0	1	\$00	end of name
	File data	SizeOfData x 5bytes	varies	succession of reals (5 bytes)

Note : no ending indicator, The values are stored sequentially without dimension, nor variable name

(\*) same as for array of integers

Array of strings (STORE/RECALL)	Bloc (explanation)	Number of bytes	Possible values	Comment
	Synchronisation (N+1) bytes	N ≥ 4 Typically : Fast : 16bytes Slow : 8bytes	\$16	synchronisation bytes
		1	\$24	end of synchronisation
	Header	1	\$00	Flag integer/real (used by v1.1 ROM only)
		1	\$FF	Flag string
			\$40	Array
		1	\$00	Autorun OFF
			other value (\$C7)	Autorun ON
		1	\$FF	unused
		1	\$FF	
		1	SizeOfData1 (high)	Value=byte1*256+byte2
		1	SizeOfData2 (low)	SizeofData=SizeOfArray(*)
		1	\$FF	unused
	File name	15 max	ASCII values	Name
	15 bytes max + \$0	1	\$00	end of name
	File data	SizeOfData+strings	varies	succession of bytes
	n=SizeOfData/3	1	varies	String length
	n of theses -->	2	varies	Address of the string (useless !)
	(n descriptors of 1 string)			
	Strings	len(0)+len(1)+..+len(n-1)	varies	N Strings concatenated

Note : no ending indicator, The string values are stored sequentially without dimension, nor variable name, nor separators

(\*) same as for array of integers