

13 DVD Structure

total capacity of disc data is 1,459,978,240 bytes (1.5 GB approx.). that's exactly 712880 DVD raw sectors (each 2048 bytes).

start	end	size	Description
0x00000000		0x0440	Disk header ("boot.bin")
0x00000440		0x2000	Disk header Information ("bi2.bin")
0x00002440		(0x2000 ?)	Apploader ("appldr.bin")
			FST ('fst.bin')

[index](#)

13.1 Disk header

start	end	size	Description	
0x0000	0x0003	0x0004	Game Code	
			1	Console ID
			2	Gamecode
			1	Country Code
0x0004	0x0005	0x0002	Maker Code	
0x0006		0x0001	Disk ID	
0x0007		0x0001	Version	
0x0008		0x0001	Audio Streaming	
0x0009		0x0001	Stream Buffer Size	
0x000a	0x001b	0x0012	unused (zeros)	
0x001c	0x001f	0x0004	DVD Magic Word (0xc2339f3d)	
0x0020	0x03ff	0x03e0	Game Name	
0x0400	0x0403	0x0004	offset of debug monitor (dh.bin) ?	
0x0404	0x0407	0x0004	addr (?) to load debug monitor ?	
0x0408	0x041f	0x0018	unused (zeros)	
0x0420	0x0423	0x0004	offset of main executable DOL (bootfile)	
0x0424	0x0427	0x0004	offset of the FST ("fst.bin")	
0x0428	0x042B	0x0004	size of FST	
0x042C	0x042F	0x0004	maximum size of FST (usually its same as FST size) (*)	
0x0430	0x0433	0x0004	user position (?)	
0x0434	0x0437	0x0004	user length (?)	
0x0438	0x043b	0x0004	(?)	
0x043c	0x043f	0x0004	unused (zeros)	

(*) multiple DVDs must use it, to properly reside all FSTs.

[index](#)

13.2 Disk header Information

this is loaded to the Address in 0x800000f4 when a disc is initialized by the IPL

offset	end	size	Description

0x0000		4	Debug-monitor Size
0x0004		4	Simulated Memory Size
0x0008		4	Argument offset
0x000c		4	Debug flag
0x0010		4	Track Location
0x0014		4	Track size
0x0018		4	Countrycode
0x001c		4	?

[index](#)

13.3 Apploader

offset	end	size	Description
0x0000	0x0009		Date (version) of the apploader in ASCII
0x000A	0x000F		padding (0)
0x0010	0x0013	4	Apploader entryptpoint
0x0014	0x0017	4	size of the apploader (32 bit) (usually 0x2000)
0x0018	0x001b	4	trailer size
0x0020			Apploader code (loaded to 0x81200000 in RAM)

[index](#)

13.4 Format of the FST

start	end	size	Description
0x00	0x0c	0x0c	Root Directory Entry
0x0c	...	0x0c	more File- or Directory Entries
...	String table

[index](#)

13.4.1 Format of a File Entry

start	end	size	Description
0x00		1	flags; 0: file 1: directory
0x01		3	filename, offset into string table
0x04		4	file_offset or parent_offset (dir)
0x08		4	file_length or num_entries (root) or next_offset (dir)

[index](#)