

Make-A-Multi-Angle-Hybrid Bit-Budget™ V2.3
 Excel worksheet created by Bruce Nazarian (gnome@gnomedigital.com)
 © Gnome Digital Media 11/17/01 <revised>
 based on generally accepted Bit Budgeting principles

to use, enter data in the PINK areas; calculated results are GREEN; ENCODE Parameters are YELLOW

First, enter the MAX number of video angles (1-9) in this DVD -> **AGL**

Watch for error messages here: **ANGLE COUNT IS OK:** **AgIRat**

Now list all of the required audio streams and bit rates (1-8)

enter a number in the last column-->

AUDIO		AC3 2-CH = .192;	AC3 5.1 = .384;	MPEG = .192;	PCM = 1.6+		
1						<input type="text" value="0.194"/>	Mbps
2						<input type="text"/>	Mbps
3						<input type="text"/>	Mbps
4						<input type="text"/>	Mbps
5						<input type="text"/>	Mbps
6						<input type="text"/>	Mbps
7						<input type="text"/>	Mbps
8						<input type="text"/>	Mbps

Watch for error messages here: **AUDIO COUNT OK:**

TOTAL AUDIO Mbits/Sec Required -> **AUD**

Now, tell me - how many subpicture streams, worst case (1 - 32)?

SUBPIC *enter here>* *<- this quantity * .040 = ->* **SUB**

Watch for error messages here: **SUBPIX COUNT OK:**

Total of Audio & Subpix rates **A/S**

MAX VBR VIDEO ENCODE RATE -> **MAX!!**

Now, select a DVD disc size, to calculate the total gigabits available

SIZE	DVD Size	Overall Mbits	times factor	<i>enter 1 here to select size</i> (Clear [Cmd-B] any changed cell)	
	DVD5 (4.7B)	37,600	0.96	<input type="text" value="1"/>	<input type="text" value="36,096"/>
	DVD9 (8.5B)	68,000	0.96	<input type="text"/>	<input type="text"/>
	DVD-R V1 (3.95B)	31,200	0.96	<input type="text"/>	<input type="text"/>
	DVD-RAM I (2.6B)	20,800	0.96	<input type="text"/>	<input type="text"/>

Watch for error messages here: **DVD BIT COUNT OK:**

TOTAL MEGABITS ON DVD DISC -> **Mbits**

Enter the total Megabytes of Disc space needed for ROM data -> **Mbytes**

TOTAL DISC MEGABITS AVAILABLE for DVD VIDEO -> **Mbits**

Finally enter the total minutes of program (including Motion menus!)

TIME *enter total minutes of video here - remember to include Motion Menus!*
ENTER MINUTES -> **times** **Secs**

Watch for error messages here: **DVD TIME COUNT OK**

TOTAL Overall Average BitRate -> **AvgBR**

Watch for error messages here: **WARNING-CHECK RUN LENGTH**

TARGET Video-Only BitRate -> **VidBR**

Watch for error messages here: **DVD TARGET RATE OK**

HEY! Don't forget to adjust your encode rate accordingly if you are doing multi-angle block encoding - consult your DVD Technical Manuals