

Different formats with and without anamorphic attachments

Abbreviations used:

w/o att = Without attachment

w/att = With Attachment

2.35:1 = Super widescreen format (Cinemascope)

Remark for SXGA: SXGA has an aspect ratio of 5:4, therefore an anamorphic attachment with factor 1.42X is needed to achieve 16:9 projection with full resolution.

However, the compression factor on a DVD video is 1.33X. Therefore, either an electronic scaler is necessary or some resolution has to be wasted by using the 1.33X attachment.

If you don't have a scaler, use the 1.33X attachment!

Native Format
of Projector

SXGA 1280x1024		1.42X				
		5:4	16:9 w/o att	16:9 w/att	2.35:1 w/o att	2.35:1 w/att
used pixels	1280x1024	1280x720	1280x1024	1280x545	1280x774	
area	1310720	921600	1310720	697600	990720	
brightness	100%	70%	100%	53%	75%	
light loss		30%		47%	25%	
light gain comp to w/o att			42%		42%	
Change in width	1.0X	1.0X	1.42X	1.0X	1.42x	

SXGA 1280x1024		1.33x				
		5:4	16:9 w/o att	16:9 w/att	2.35:1 w/o att	2.35:1 w/att
used pixels	1280x1024	1280x720	1280x962	1280x545	1280x724	
area	1310720	921600	1231360	697600	926720	
brightness	100%	70%	94%	53%	71%	
light loss		30%		47%	29%	
light gain comp to w/o att			33%		33%	
Change in width	1.0X	1.0X	1.33X	1.0X	1.33x	

XGA 1024x786						
		4:3	16:9 w/o att	16:9 w/att	2.35:1 w/o att	2.35:1 w/att
used pixels	1024x768	1024x576	1024x768	1024x430	1024x572	
area	786432	589824	786432	440320	585728	
brightness	100%	75%	100%	56%	75%	
light loss		25%		44%	25%	
light gain comp to w/o att			33%		33%	
Change in width	1.0X	1.0X	1.33X	1.0X	1.33X	

16:9 1280x720						
		4:3 w/o att	4:3 w/ att	16:9	2.35:1 w/o att	2.35:1 w/ att
used pixels		960x720	1280x720	1280x720	1280x545	1280x720
area		691200	921600	921600	697600	921600
brightness		75%	100%	100%	75%	100%
light loss		25%			25%	
light gain comp to w/o att			33%			33%
Change in width		0.75X	1.0X	1.0X	1.0X	1.33X

16:9		1024x576				
		4:3 w/o att	4:3 w/ att	16:9	2.35:1 w/o att	2.35:1 w/ att
used pixels		768x576	1024x576	1024x576	1024x435	1024x576
area		442368	589824	589824	445440	589824
brightness		75%	100%	100%	75%	100%
light loss		25%			25%	
light gain	comp to w/o att		33%			33%
Change in width		0.75X	1.0X	1.0X	1.0X	1.33X

16:9		854x480				
		4:3 w/o att	4:3 w/ att	16:9	2.35:1 w/o att	2.35:1 w/ att
used pixels		640x480	854x480	854x480	854x363	854x480
area		307200	409920	409920	310002	409920
brightness		75%	100%	100%	75%	100%
light loss		25%			25%	
light gain	comp to w/o att		33%			33%
Change in width		0.75X	1.0X	1.0X	1.0X	1.33X