

**ACOUSTICS2008/1536**  
**Information losses minimization in spectral devices based on**  
**acousto-optic Bragg cells**

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Spectral devices such as spectrophotometers are intended, as many other devices, for information transmission and processing. Hence, they can be characterized by specific information characteristics such as information transmission capability and information capacity, which can be connected with some physical and technical parameters of the devices. The use of acousto-optic components in these devices introduce some peculiarities in information transmission and processing in spectrophotometers. We have considered the information transmission limitations based on signal and noise in acousto-optic Bragg cells. The spectral resolving power is also considered as one of decisive characteristics influencing on acousto-optic spectral device transmission capability.