DMD-BASED PROJECTOR FOR INSTITUTIONAL USE

ABSTRACT OF THE DISCLOSURE

A baseline display system (10) is capable of receiving different types of input signals, analog or digital, having different horizontal and vertical input resolutions. The system uses serial video processors (SVPs) (33, 34, 43, 83) that have a given input size and spatial light modulators (SLMs) (18) that have a given output (display) resolution. The baseline system (10) is configurable to meet bandwidth requirements for displaying real time images on SLMs of increasing resolution. Data is decimated (downscaled) when appropriate to fit the SVP input size (FIGUREs 4 and 8) and upscaled, vertically or horizontally, when appropriate to fit the SLM display resolution (FIGUREs 3, 4, 7, and 8). Four systems (20, 50, 60, 90), each appropriate for a different SLM resolution are described.

Figure 1