In this video-contribution we describe in details a protocol for encoding the amplitude and phase of laser beams by using a phase-only spatial light modulator. The corresponding complex field is retrieved at the output plane of an imaging optical system after the spatial filtering of all frequency components of the light but the zero one. The lack from random or diffuser elements within the optical setup allows obtaining amplitude and phase patterns without coherent noise. The encoding protocol is based on a direct codification algorithm, whereas all light management is performed on-axis. In addition, arbitrary and independent amplitude and phase modulation can be dynamically carried out at the frequency refresh time of the spatial light modulator. We believe that this encoding protocol can be employed for shaping the amplitude and phase of laser beams in several applications that range from material micro-processing to linear and nonlinear microscopy.