

ABSTRACT

The present invention makes it possible to reduce the size of an optical system for multiplex recording or reproduction of information utilizing holography.

A pick-up (11) of an optical information recording/reproducing apparatus generates information light by spatially modulating laser light emitted by a light source device (25) with a spatial light modulator (18) depending on the information to be recorded and generates reference light for recording having a spatially modulated phase by spatially modulating the phase of laser beam emitted by the light source device (25) with a phase-spatial light modulator (17). The information light and the reference light for recording are projected upon an optical information recording medium (1) such that they converge in different positions, and information is recorded in the hologram layer (3) in the form of an interference pattern as a result of interference between the information light reflected by a reflecting film (5) and the reference light for recording. The positioning of the information light and the reference light for recording is carried out based on information recorded in address servo areas (6).