

Abstract

Since a laser light source emits a bundle of rays having a divergence angle, a laser light transmitted through a plurality of level difference parts of an optical path difference creating member impinges on one lens part of an array lens to cause interference inevitably when an image is formed on an illumination target object. The invention includes: splitting/reducing means (2, 3) for splitting and reducing laser light 1 into plural split rays 9 in one side view of a laser light source A that emits the laser light 1 as a bundle of rays that have a divergence angle θ , and then turning the split rays 9 into individual bundles of reduced rays to obtain reduced split rays 10; an optical path difference creating member 7 having block portions 7a, through which the reduced split rays 10 are individually transmitted while reducing reflection on the side of splitting surfaces, to thereby create an optical path difference therebetween in a manner in which the coherence is adjusted; and a condenser lens 5 for collecting the reduced split rays 10 that have been transmitted through the optical path difference creating member 7, and the illumination target surface 6 is illuminated with laser light overlapped through the condenser lens 5.