

High contrast, high resolution D-ILA projector with IR light source for NVG training

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ABSTRACT

In the flight simulator used for night flight training using NVG, since the sensitivity of NVG has been increasing in recent years, it is desired that the projector to be used has higher resolution and higher contrast. JVCKENWOOD has over 20 years of experience since mass production of “D-ILA device” of LCOS characterized by high contrast and high resolution has started.

This time, we developed a D-ILA projector for NVG training equipped with IR light source.

The projector described in this paper installs the IR light sources and visible light source and performs training at the time of naked eye and NVG mounting at the same time by switching the image for NVG and the image for naked eye at high speed enable. In addition, the contrast in the IR band is 20,000: 1, the resolution is 8K resolution, and it is possible to train more realistically in the training using NVG of GEN 3 and later.

BIO

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