

Third Laureate Research & Development

◆ **Project title:** Optical seeker with free gyro

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Abstract:

This System is a generic 2 degrees of freedom TV Seeker set that has various usage inn aerospace applications and is used to detect and track the targets. It is a passive System so it can be a suitable substitute for active seekers.

This system includes the main subsystem such as camera, optical window, gyroscope and accurate two degrees of freedom servo mechanism set, image processing software and control unit.

Camera makes high quality images from the target. Free gyroscope is used to stabilize the camera against disturbances due to vibrations.

In order to decrease the environmental effects a special optical dome is used to cover the system and completely seal it.