

SHORT RANGE OPTICAL LOCATOR (SORTL)

LASTEC has developed a device for detection and location of front end optics of commonly used active and passive surveillance devices. It provides an important tool for detection of commonly used passive or active surveillance device like optical day sight or sniper telescope, Night Vision Device, CCD cameras or electronic sensors as in Laser Range Finder, binoculars during day and night operations in urban scenarios.

SROTL comprises of a laser source with appropriate divergence control and a customized optical assembly with a NIR sensor having high sensitivity at the wavelength of operation. It operates on Li ion rechargeable batteries and is ergonomically designed as a hand held equipment (with tripod mounting capability). The optics and the system electronics are highly customized for contrast limited imaging so that the detected target appears as a bright spot on the background scene on a display screen that can be viewed through the monocular.

The developed device presently has an operational range of the order of 300m in day/ night operations, but has a capability of further scale up to around 1km.

The developed Short Range Optical Target Locator (SROTL) finds application with military and para military forces. It can be used for active scanning and monitoring of specific areas, VIP security and detection of pointed optics viz., snipers and area sanitization.

The equipment has been extensively demonstrated to several potential users. Various agencies responsible for homeland security have shown keen interest in this device. SROTL has undergone user evaluation with Indian Army, several state police forces and other paramilitary forces and is short listed for procurement.

Although a few commercial systems are available internationally for detection of optical devices but following salient features of the developed device make it unique for the mentioned application:

- ✓ 1. Improved image quality
- ✓ 2. Additional target marking mode for confirmation of target detection
- ✓ 3. Audio buzzer for target confirmation
4. In built battery for powering the device
- ✓ 5. Laser 'On' at user's discretion for saving power
6. Video out for live video streaming at a remote location
7. Mostly maintenance free operation
8. Remote operation capability



Photograph of developed device

This technology is under patent (Patent pending).