

## OPTIX Software NViS

### Surveillance system for long-range distances

**APPLICATIONS:**  
Border control & observation

OPTIX NViS software is user friendly and easy to use. The architecture is modular and allows upgrading with additional modules and functionalities.

The software provides the following capabilities:

- adding and controlling multi-sensor system;
- displaying video from all the cameras of the added multi-sensor system;
- turning ON and OFF the power supply for all the devices;
- creating and using presets and tours for the multi-sensor system;
- advanced control of all the cameras;
- measuring distances using laser rangefinder.

The main window consists of several main panels. The figure shows the arrangement of the panels.



*Figure: Main Window*

Available functional panels:

- View Panel;
- System Selecting Panel;
- PTZ Panel;
- Quick Access and Advanced Controls;
- Video images from the cameras.
- Panorama image

The software records and provides an overview of the following actions of administrators and operators, registered with date and time:

- entering or leaving the system;
- turn ON and OFF any single camera;
- other actions.

**Console:** The software provide complete management and control of all electro-optical systems and modules, as well as other existing modules, devices, pan/tilt mechanisms. It can be implemented as a software package based on the Windows operating system that provides a stable and logical operating framework. The software package is modular and provide a user friendly interface.

**Keyboard:** With programmable keyboard shortcuts for basic and advanced functions

**Mouse:** Full mouse control operations to assist the operator with control, navigation, and data entry.

**Joystick:** It is a full XYZ joystick control (Rotation) and programmable buttons for basic and advanced functions.

**Touch:** touch support and touch optimization for the software.

**System overview:** The software tool show the current status of the system and all components that support status reporting. This system tool provide overview of the health of the system and possible maintenance needs.

**Cameras:** fully and extensively control the cameras and other components of the EO.

**Control:** The software provide full control of the system's altitude and azimuth. Full lens control and full camera control of the system, separated by basic and advanced functionalities (depending on the devices).

**Picture in picture:** While controlling the selected (primary) camera, which is in full view, there is an option to display the video of the uncontrolled (secondary) camera in Picture-in-Picture mode. This window is resizable and movable on the desktop.

**Zoom synchronization:** There is an option to synchronize zooms between cameras so that an uncontrolled secondary camera follows the primary controlled camera.

**Secondary camera control:** There is the option to manually control the secondary camera lens, while the operator is in the primary camera view and observing the secondary camera in Picture-in-Picture mode.

**Panorama:** option to take panoramic photos with the selected camera. There is an option to export and import such images, and the EO will be controllable by navigating in the panoramic photo. When selecting the area in the panoramic photo will orient the EO to the selected position.

**Presets:** option to define and play presets of EO components (pan-tilt, cameras). There is an option to store at least 12 presets separately on different playlists. These playlists is played by the operator in the selected mode, where the operator defines the movement speeds, wait times and repeat behavior of the playlist. It supports at least 16 separate playlists.

**BIT:** tool that will start and record the EO status. This tool can be started manually and will run built-in tests to determine the health of the system. A report generated will serve as a possible service report.

**System information:** system information bar that reports the current system status, at a minimum Pan, Tilt, Azimuth, Heading, FOV, and Focus.

**Recording and snapshots:** option to trigger instant recordings of current video streams.

**Full screen:** option to enable full screen, where only the video image will be displayed full screen.

**Video tracking and Electronic image stabilization:** The video tracking module and Electronic image stabilization will be enabled in the software, which will allow for multi-sensor image fusion, target detection and tracking, automatic camera control, and will also provide performance indicators for this purpose.