



PHOTONAV Precision Guidance System

The Photo-Nav is a system designed specifically to provide real-time aerial navigation for photogrammetry applications. The Photo-Nav software consists of two programs: NAVTRAIN and NAVIGATE.

The NAVTRAIN program is provided to familiarize personnel with the program operations, set up areas for grids, generate camera trigger points, print-out graphic screens, etc. No real-time operations are carried out, positions are generated internally and the keyboard arrows are used to move around the screen. The NAVIGATE software is the real-time program allowing carrying out operations in four basic modes:

MAP MODE: Is generally used to view the area and grid lines.

GRID MODE: Is used to fly areas with pre-defined grid of parallel lines. The maximum number of grid lines is 500.

LINE MODE: Is used when flying in any direction (following roads, rivers, power lines etc.). A maximum of 100 lines can be defined.

WAYPOINTS MODE: Any position to which the user may wish to fly (airport, notable features, start of the survey area, etc.). Each waypoint is defined by coordinates and a name. The maximum number of waypoints is 100.

The survey area can be generated by digitizing the required points from a map or by typing in area corner crosses, or on the fly, by press-



ing a key when over each area corner. The program operates internally in an extended UTM zone. The camera trigger points are pre-defined and stored. When the aircraft approaches a camera trigger point within the camera trigger pre-set radius, the camera is automatically triggered when closest to the camera trigger point. The coordinates of the trigger point, triggered time and camera point number are recorded to disk, and the trigger point number is displayed on the screen. The user can also trigger the camera manually.

SPECIFICATIONS:

CPU: Intel Atom 1.6 GHZ

SATA Hard Drive: Flash 2 GB to 32 GB

RAM: 1GB

LCD Screen: 6.5" Full colour, sunlight readable, LED backlit

Serial: 4 x RS232 serial ports

USB (2.0): 2 x USB ports

Keypad: Electrometric tactile keypad, 6 soft keys for program navigation, 3 control keys: on/off, brightness, up/down

Other: Remote Boom Switch

Dimensions: 179 mm (W) x 134 mm (L) x 38.455 mm (H)

Material: Aluminum Alloy

Mount: Chassis mount bracket, Adjustable Ram Mount

Enclosure: Dust proof and splash proof

Weight: 1.5 kg

Input voltage: 10-30 VDC (Reverse Polarity Protected)

Operating Temp: 14 °F to 149 °F (-10 °C to +65 °C)