



SENTINEL

GETTING STARTED GUIDE

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INTERFACE KEYS AND CONTROLS



ON/OFF, BRIGHTNESS: Sentinel is switched on or off by pushing or pulling the ON/OFF BRT knob. Rotate the knob clockwise to increase the display brightness.



INT/EXT VIDEO: This knob selects either the internal imagery or external video source for display. **CAUTION:** Whenever this control is set to EXT, all internal information (eg: airspace, traffic etc) is hidden.



SOFTKEY BUTTONS: There are 5 softkey buttons which perform the action specified on the on-screen labels.

MODE KEY: Steps through different ways of presenting a page. On map pages it steps through preconfigured views of the map; on flight planning pages it presents a graphical view of the flight plan, and on Stormscope pages it changes between 360° and 120° views.



JOYSTICK & ROTARY: The joystick is a pointing device that moves a mouse-like pointer around the Map mode display. It is also used to select data entry fields and to moving through menus and lists. The ROTARY Knob is located around the joystick. On many pages it is used to switch quickly between main operating modes (eg: MAP – Flight Plan – Traffic). The current mode is highlighted above the rotary control on the display when this feature is enabled. It is also used when navigating menus to cycle through lists and to scroll through the alphabet when entering data.

USB: The USB connector is used to save and upload user settings and flight plans. A Jeppesen® FliteStar flight plan saved as a simple text file with the name “route.txt” will be uploaded from the USB drive if present at power-on. Settings, User Waypoints and Sentinel flight plans can be saved and uploaded if a USB drive is present when you enter the System Setup menu (select either Save Profile or Load Profile, as required). Flight log data is saved to the USB drive if it is present when the unit is switched off. You can also create your own checklists for upload via the USB drive – see the Pilot Guide.

DATA CARDS

PRIMARY COMPACT FLASH CARD:

The OB3111-XXX primary card is inserted into the “Primary” card slot. It contains the Sentinel operating software and the standard continental aeronautical and topographic data.



AUXILIARY COMPACT FLASH CARD: Depending on customer requirements, one or two auxiliary cards (OB3222-XXX) may be required and are inserted into the auxiliary card slots. They hold the detailed raster mapping and supporting vector data.

START-UP and SHUT-DOWN

Push the ON/OFF knob in and the system will begin the start-up process during which a blue screen will be displayed, followed by the “Honeywell” logo and possibly a L-3 Stormscope notice (if Stormscope is configured). After a few seconds the Initial Title screen will appear and a Self Test will be performed. If all tests pass press the “OK” button and the “VFR Caution” message screen will appear. You must acknowledge the statement by pressing the “OK” button in order to access the main menu.

Switch off by pulling the ON/OFF knob out. Wait until the on-screen countdown is complete and the screen has gone blank before removing power. Sentinel saves data during its shut-down sequence, and removing power while this data is being saved could corrupt the data.

MAIN MENU



The menu system in Sentinel is tree structured. Each menu or page can have up to 5 main software branches (softkeys). Each branch is displayed as a softkey label on the right side of the screen.

MAP: Accesses the Map Mode - the primary mode of the system.

FLIGHT PLAN: Allows user waypoints and flight plans to be edited and/or created.

MISSION CONTROL Allows you to read system messages (“MSG” icon in the lower left of the screen), and view mission notepads and checklists.

MODE: Allows you to select the dedicated Traffic or Stormscope pages if configured.

SYSTEM SETUP Allows the setup of map, navigation display preferences and shows system status information for input/output devices.

MAP MODE

When in Map Mode there are 5 softkeys:

MAIN MENU:

Accesses the Main Menu page.

ZOOM IN/OUT: Changes the scale of the map, either in steps (press and release) or smoothly (press and hold)

MAP VIEW: Allows you to change the visibility of various features and information displayed on the map.

NAV/SEARCH: Gives access to the Database Selection screen, allowing you to obtain information on any waypoint within the database. If your unit's flight planning functions are not being overridden by an external flight plan source, then you can initiate "Direct To" guidance to selected items.

When the display is left in map mode without touching any control for more than thirty seconds, the on-screen softkey labels are removed from the screen. Move any control to reinstate them.

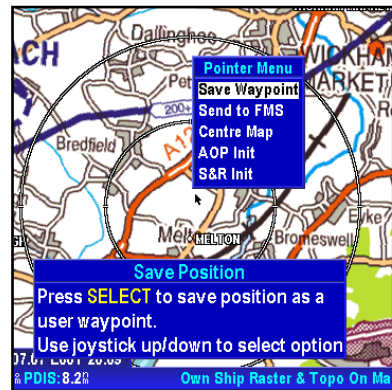
MAP MODE DISPLAYS

Predefined Map Mode displays accessible through the use of the Mode button allow you to select whether or not to view the map with topographic information, with raster mapping, or with close terrain and obstacles highlighted, or with combinations of these options. Note that in areas where no raster mapping is loaded, or at zoom scale settings beyond those defined for the available raster maps, the basic topographic mapping is shown instead. The current map display is shown at the bottom of the screen.

The Close Terrain display highlights known terrain above you in red, and terrain close to your current altitude in yellow. It does not provide active terrain warning and is only intended as an aid to help direct your attention towards terrain and known obstacles that should be visible – please refer to the Pilot Guide.

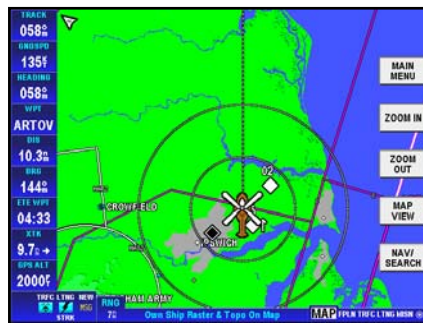
CREATING USER WAYPOINTS

There are 2 ways to add a user waypoint:



Method 1: In map mode, use the joystick to move the cursor to the desired position and press the PTR MENU softkey button. Ensure that Save Waypoint is selected in the Pointer mode window and press the SELECT softkey.

Metho2: From the Main Menu screen, press softkey FLIGHT PLAN followed by USER WPTS. Press softkey NEW WPT and enter the waypoint details followed by softkey SAVE & EXIT.

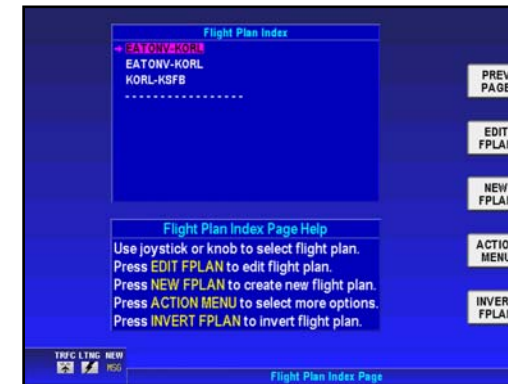


GRAPHICAL DIRECT TO and OBS

If your Sentinel is configured to use internal flight plans, then you can do simple navigation by moving the pointer to a desired location on the map and pressing PTR MENU. Get guidance straight to the point by pressing the DIRECT TO softkey. If you need to arrive at the point from a specific direction, then press the OBS softkey and use the rotary control to select the desired course. You can cancel a DIRECT TO or OBS that is already running by pressing the NAV/SEARCH key on the map page, after which the "DIRECT TO OFF" or "CANCEL OBS" key is available.

FLIGHT PLANNING

To create a flight plan, select softkey FLIGHT PLAN on the Main Menu page followed by STORED FPLANS (when in Map Mode, using the rotary will also get you to the Flight Plan menu page). Select the NEW FPLAN softkey and enter the sequence of waypoints using the joystick and rotary. Alternatively, press the Mode button and then USE STICK to designate waypoints on a map. Select softkey DONE when you have finished to save the flight plan. To fly a flight plan, highlight the desired flight plan within the Flight Plan Index page and select softkey FLY FPLAN followed by OK. Note: you cannot activate internal flight plans if your unit is configured to receive its flight plans from an external source.



TRAFFIC DISPLAY

If a suitable Traffic data source is connected (either TIS, TAS, or TCAS I) then Sentinel can display known traffic as an aid to "see and avoid" operations. If this option is available, then the "TRFC" option will be offered by using the rotary control from the map page. If suitable data is available to allow traffic icons to be overlaid on the map, then the icons will be seen as overlays on the normal map pages. Where data is available, icons are normally shown with their height in hundreds of feet above or below you, and a vertical trend arrow. Low-threat icons are shown as hollow white shapes, intermediate-threat icons are shown as filled white shapes, and icons associated with a Traffic Alert (high threat) are shown as filled yellow shapes.

STORMSCOPE DISPLAY

If a lightning sensor is connected, then Sentinel can display lightning data on a dedicated page accessible either through the "LTNG" option on the rotary control from the map page, or through the MODE button on the Main Menu. If aircraft heading data is also available, then the Stormscope information can be overlaid on the map. If aircraft heading data is not available, then you must manually "CLEAR STRIKES" on the lightning page whenever you change heading. You can change between Cell and Strike mode, using either 120° or 360° views, by pressing the MODE & VIEW softkey on the Stormscope page.

FURTHER INFORMATION

Refer to the Pilot's Guide (11001-12280) for detailed instructions on operating Sentinel.