

CHALK RIVER GRAPHICS

CrgSim Expanded Instrument Modes

Expanded Modes Description

Chalk River Graphics

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Table of Contents

What Are Expanded Modes?.....	3
Show Labels at 80 NM.....	3
Declutter Mode.....	4
Advanced Declutter Mode.....	4
Display Nav Aid Frequencies.....	4
Clock Time Selection.....	4
Barometric Pressure Units Selection.....	5
Map Scale Selection.....	5
Mode Selection in CrgSim.....	6
Changing an instrument mode through the FSX window.....	7
Changing an instrument mode using the instrument window.....	7
Changing an instrument mode with the Mode Select Panel.....	7
Contact.....	9

What Are Expanded Modes?

The additional modes of operation described below are ones that are not found in FSX and/or may not be found in prototypical operation. If you do not want to use any instrument features not found in the “real world” you may ignore the following descriptions. Some of the mode changes are included here for convenience (for example: toggle display of airports, ground stations, or waypoints).

Note that keys listed in the Key Assign Document are unaffected. They still work through the other CrgSim Utilities windows. ***In some cases a key may have a different meaning depending on which window is selected.***

Both the Communications Manager and the Utilities program have a button that starts up the mode selection window. The window may be started with both programs at the same time but this is not expected to be common.

Show Labels at 80 NM

As the range on the Nav Display is increased the possibility of congestion on the display of the displayed items increases. Normally CrgSim does not display Nav Aid, waypoint, or airport labels at the 80 NM range.

The display of labels can be turned on/off with the Nav Display. If the display looks congested it can be cleaned up with the declutter modes below.

Declutter Mode

If this mode is turned on then the Nav Display attempts to avoid overlapping labels by displaying one nav or airport label at a time in a cluster of labels. The label congestion is usually greatly reduced although some overlapping of labels can still occur in areas of high congestion.

The display of the nav and airport symbols can also overwrite the labels in high congestion areas. In this case even further decluttering can be tried by selecting the advanced declutter mode below.

Advanced Declutter Mode

When this mode is selected the Nav Display will attempt to display one label and one symbol at a time in congested areas. This can change a display from unreadable to usable enough to find the nav aid or airport of interest. *Note that “declutter” above must also be turned on for this mode to function.*

Display Nav Aid Frequencies.

This Nav Display mode will display the frequencies of the nav aids instead of the Nav Aid ID.

Clock Time Selection

The clock display can show either computer local time or Zulu time as reported by FSX. The source of time information may be changed at any time.

Barometric Pressure Units Selection

FSX provides the ability to select different units of measure. The selections are U.S. system (feet, inches of mercury), hybrid (feet, millibars), and metric (meters, millibars).

CrgSim does not read the FSX units selection. Instead the display units for barometric pressure is set internally. The selection of pressure units may be changed at anytime.

Map Scale Selection

The moving map display has 4 levels of map scales. At any time a different map scale may be requested. If that map scale exists for the aircraft location it is displayed. Some areas of the world will have 4 map scales available, some areas will have only one scale, and some areas have no maps available.

Mode Selection in CrgSim

The different modes of operation described above can usually be selected in 3 different ways:

- with key strokes entered through the FSX display
- with key strokes entered through a selected instrument
- with key strokes entered through the mode select panel
- with mouse clicks entered through the mode select panel

Key strokes entered through the FSX window must be combined with the TAB key (TAB + key). The ability to entered CrgSim keys through FSX can be optionally turned off. If this feature is turned off then modes of operation cannot be changed via the FSX window.

The mode keys are:

- | | |
|---|---|
| A | toggle airport display in the Nav Display |
| D | toggle declutter mode in the Nav Display |
| E | toggle Nav Display of labels at 80NM range. |
| F | toggle display of Nav Aid frequencies |
| L | show local computer time on the clock |
| M | toggle inches of mercury, millibars on the PFD |
| S | toggle Nav Aid display in the Nav Display |
| U | show Zulu time on the clock |
| W | toggle waypoint display on the Nav Display |
| Z | toggle advanced declutter mode on the Nav Display |
| | |
| 1 | select map scale 1 (most detailed) |
| 2 | select map scale 2 |
| 3 | select map scale 3 |
| 4 | select map scale 4 (about 10 degrees of lat/long) |

Although there are buttons/switches on some the FSX panels to make changes to the Nav Display range and Nav Display mode the following are provided for convenience:

Arrow Left	Next Nav Display Mode
Arrow Right	Previous Nav Display mode
Arrow Up	Increase Nav Display range
Arrow Down	Decrease Nav Display Range

Changing an instrument mode through the FSX window.

As with all mode select keys entered through the FSX window the arrow keys must be pressed along with a TAB key:

TAB + Arrow Up to increase CrgSim Nav Display range.

The line below is an example of using keys entered through the FSX window to turn on declutter mode. The FSX window is usually selected while flying (necessary for sound). So while the FSX window is selected enter:

TAB + D or TAB + d

Changing an instrument mode using the instrument window

Select the instrument (click on the instrument window) and press the 'D' key.

Changing an instrument mode with the Mode Select Panel

In the CrgSim Utilities panel or the Com Manager window click on "Mode Select".

In the Mode Select panel enter the keystroke 'N' or 'O' to select the desired Nav Display (Captain or First Officer)). Then press the 'D' key to toggle declutter mode.

The mouse can also be used in the Mode Select panel.

Enter Key To Select Instrument

C - Clock	N - Nav Left	P - PFD Left
E - EICAS	O - Nav Right	R - Nav Right
M - Maps	X - Exit	

TAB - Done

Selected Instrument - Nav Left

A - Show Airports	D - Declutter Normal
E - 80 NM Labels	F - Display Nav Aid Freq
S - Show Nav Aids	W - Show Waypts
Z - Declutter Advanced	

Arrow Keys

UP - Increase Range	DN - Decrease Range
Right - Previous Mode	Left - Next Mode

Mode Select Panel

Contact

You can contact us at sim30@[crgsim.com](mailto:sim30@crgsim.com). We are especially interested in your comments, any problems you might have with the programs, and things that you like (or don't like) about them.

After spending a large amount of time removing non-flight sim posts (drugs, counterfeit boots, ... for sale) we reluctantly had to convert the web site to read only.