

GF-166 Versatile Radio Panel



Congratulations on your purchase of a **GoFlight GF-166 (VRP - Versatile Radio Panel)** module, part of the extensive family of GoFlight GF-AC Cockpit Control System modules.

The GF-46 is designed to operate with a

wide variety of aircraft and is sure to make your flight simulation experience more realistic and enjoyable.

The steps below will assist in the installation, configuration and operation of the GF-166 VRP. Following these instructions will help to get you up in the "virtual skies" as quickly as possible.

# Installing the GF-166 VRP

**NOTE** If you own other GoFlight hardware and have already installed the most current version of software on your system, you do not need to install the software again. Simply skip the software installation steps in the instructions below.

1. Get on line and go to <u>www.goflightinc.com</u>.

2. On the home page click Support/Downloads (Note – this will need to be changed to reflect the new website.)

3. Click on "Module Support Software" to download our latest module drivers and configuration software.

4. Click "Run" or "Save" and follow the instruction to load your software.

If the software installer detects that GoFlight software is already installed on your system, it will prompt you to overwrite. Click the **Yes** button to overwrite the existing version of GoFlight software. This is useful if you wish to keep the configuration settings for other GoFlight modules installed on your system. However, you should first make sure that the software you are overwriting is an older version and not a newer one.

1. If you are planning to install the GF-166 module into a GoFlight rack enclosure, install the module in any desired location in the enclosure. Fasten the module in place using the two thumbscrews that are included in the GF-166 packaging being careful not to over-tighten them.

2. Plug the USB cable "B" connector end (square) into the connector on the back of the GF-166 circuit board.

3. Plug the USB cable "A" connector end (rectangular) to a USB port on your computer or USB hub. Once the operating system recognizes the GF-166, you will see the GF-166's "wakeup" sequence. The LED displays will animate a sliding message that reads "GF" in the left-hand display and "166" in the righthand display, which will appear for a short time and then disappear. The left and right function LEDs will then briefly flash on and then off. This sequence will repeat any time you disconnect and re-connect the module, and each time you start up your computer. It indicates that the GF-166 has been detected by your computer and is ready to use.

4. After you install the GoFlight software and connect the GF-166 for the first time, run the GF-Config program, which is located in your Programs menu under "GoFlight". Verify that GF-Config displays an icon representing the GF-166 unit on the left-hand side of the window. Click on the GF-166 icon to show the configuration options in the right-hand side of the window.

Flight Sim 2002 Flight Sim 2000 Flight Sim 98

ATC\_WINDOW\_POPUP .

GF-166 Unit #1

Configuring the GF-166

To select the functions that you want your GF-166 to perform, you choose selections from function lists presented in the Configuration View, the right-hand panel in the GF-Config program window. The Configuration View presents a tab control for each flight simulator program that is detected on your computer. When selecting functions for the GF-166, make sure that you have selected the tab control corresponding to the flight simulator you wish to configure the GF-166 functions for assignment.

Three lists are available - one for the Main Avionics Function, one for the Left Function and one for the Right Function.



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Installing the GF-166 into the GoFlight Flight Deck Console.

GF-166 Icon

GF-166 MANUAL 2012 The Main Avionics Function list contains entries for all radio types including COM1, NAV1, COM2, NAV2, ADF and Transponder. When you select one of these function types, the behavior of the rotary knobs, dual displays, and center function button are configured to operate as the type of radio you have selected. The Left and Right Function buttons are unaffected by the Main Avionics Function selection.

The Left Function and Right Function lists contain entries for additional cockpit functions that may be assigned to the left and right function buttons, respectively.

The GF-166 cockpit function selections presented by GF-Config may change from one release of software to another, as GoFlight is continually developing new software features and releasing them via software updates. Because of this, we suggest that you consult the **GF-Config On-Line Help** facility, which contains details about all of the configuration options available in your release of software. The on-line help facility may be accessed within GF-Config simply by clicking the 'Help' tab of the GF-Config menu bar. On-line help can also be accessed from the Windows Start menu by selecting



 $\rightarrow$  Programs  $\rightarrow$  GoFlight  $\rightarrow$  GF-Config Help .

When you have finished selecting functions for your GF-166, exit GFConfig and run your Flight Sim program.

NOTE The GFConfig screens shown in these instructions were taken from an earlier version of GFConfig, and shows GFConfig's configuration view for the GF-166. If you have a different version of software, the options and the layout of the window may differ slightly from the one shown here

# GF-166 MagLabels

Included with your GF-166 is a MagLabel sheet as illustrated in the following depiction:



GoFlight's MagLabels are used to label the displays and buttons on the GF-166 for easy reference during flight. Using a pair of scissors, carefully cut out the labels that you wish to place on the panel to correspond with functions you have assigned using GFConfig.

Due to the thickness of the magnetic material, we recommend using a high-quality pair of scissors such as FISKARS or DURASHARP, which allow you to get a nice clean edge when cutting out the labels. Once cut out, the labels will fit into rectangular indentations on the GF-166 panel, and will be retained by the magnetism present in the material.

# Flight Operations with the GF-166

This section describes a few of the functions that the GF-166 can perform for you during a simulated flight. Please note that this list is not complete, due to changes in the functionality of the GF-166 introduced by new software releases. And for a recommended configuration when having three (3) GF-166 modules – please download a copy of the Jet Captain Systems.

### <u>COM1, COM2</u>

Using the COM1 or COM2 functions, you can use the GF-166 to tune communication radio frequencies to interact with air traffic control, if your flight simulator supports an air traffic control feature. When in COM1 or COM2 mode, the left-hand numeric display on the GF-166 shows the *Active Frequency* (the one currently tuned), and right-hand display shows the *Standby Frequency*. To tune a new frequency, you adjust the Standby Frequency using the rotary knobs on the panel. The large knob adjusts the MHz portion of the frequency, and the small knob adjusts the kHz portion. The center function button, positioned between the two displays, acts as *Frequency Swap* button, moving the standby frequency while tuning another, a feature of most real-world aircraft communications radios in use today.

### Transponder (XPDR)

With the GF-166 in XPDR mode, you can "squawk" a 4-digit ID code for in-flight tracking by an air traffic control center. The right hand display on the GF-166 shows the currently-set **Squawk Code**. The large knob adjusts the first two digits of the code, and the smaller knob adjusts the second two digits. In XPDR mode, the left-hand display and center function button are not used.

### NAV1/NAV2 Radio Toggle

One of the functions assignable to a Left or Right Function button selection is **NAV1\_NAV2\_TOGGLE**. This is a useful function which allows you to operate both NAV1 and NAV2 radios on a single GF-166 unit. When this function is assigned to either of these buttons, the LED next to the button will be lit when the panel is in NAV1 mode, and unlit when the panel is in NAV2 mode.

# In-Flight Selection of GF-166 Radio Modes

When used together with at least one GoFlight GF-P8 8-pushbutton/LED module, the GF-166 radio mode can be linked to one or more buttons on the GF-P8. This allows you to select between one of the six radio modes while in flight, allowing one GF-166 to operate GoFlight software provides a group of GF-P8 button functions with names GF166\_<n>\_FUNC\_COM1, GF166\_<n>\_FUNC, COM2, etc., where <n> equals a GF-166 unit number between 1 and 7. When these functions are assigned, the GF-166 radio mode is changed when the associated GF-P8 button is pushed.

### **GF-166 Warranty**

Please be sure to also refer to the GF-166 functionality as described in **GFConfig** under *Help* on the menu bar and then select the *Contents* tab. Select the *GF-AC Function Reference* and then select the *GF-166 Function Reference*. Here you will find all the usable functions with their definitions and Usage Notes for the GF-166 module

This product is warranted to the original purchaser to be free from defects in materials and workmanship for a period of one (1) year from the date of purchase. During this warranty period, GoFlight Technologies, Inc. ("GoFlight") will, at its option, repair or replace, at no charge, any component determined to be defective. The liability under this warranty is limited to the repair and/or replacement of the defect or defective part, and does not include shipping expenses. This warranty does not apply if, in the determination of GoFlight, this product has been damaged by accident, abuse, improper usage, or as a result of service or modification by anyone other than GoFlight.

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Virtual Pilot Operating Handbook