

GF-DIO Digital Input/Output Board Custom Cockpit System

Congratulations on the purchase of a **GF**-**DIO Digital Input/Output Board**, a custom cockpit build essential. This unit is part of the extensive family of GoFlight Custom Cockpit System modules. The GF-DIO board is designed to maximize customization of any home built cockpit system by allowing unique placement of each and every knob, switch and rotary component.



The steps below will assist in the installation, configuration and operation of the GF-DIO Board. Following these instructions will help any vpilot get up in the "virtual skies" as quickly as possible.

Installing the latest GoFlight Technologies software

Note – If you own other GoFlight hardware and have already installed the latest version of GoFlight software, you do not need to install the software again. Simply skip Step 1 in the instruction manual below.

STEP 1:

- 1. Get online and go to www.goflightinc.com
- 2. On the GoFlight home page click "Support"
- 3. Click the link "GF Config Setup #.##" (# reflects latest release)
- 4. Click "Run" or "Save" and follow the instructions to install the software

If the software installer detects that GoFlight software is already installed on the system, it will prompt it to be overwritten. Click the Yes button to overwrite the existing version of GoFlight software. This is useful if it is desired to keep the configuration settings for other GoFlight

modules installed on the system, however, make sure that the software being overwriting is an older version and not a newer one.

STEP 2:

Mounting the GF-DIO Board

Mounting Options: Option 1 – Screw Mounted (not pictured)

The DIO board comes with standoff screws giving you the option to screw mount your DIO board where you place within your home built cockpit.

Option 2 – Double Sided Tape (pictured)

Another simple option is to use a few strips of double mounted sticky tape. As see here in the picture, you can run three long strips between the electronic placements on the board and place any where you please.



STEP 3:

Plugging in the hardware



Example:

To connect the individual hardware components to the DIO Board, use the cable assemblies that come with your DIO purchase. On both the components and the board itself, there are 3-pin connectors which simply plug into the connectors on the ends of the cable assemblies.

Each component takes a different amount of cables depending on the functions available. The small LED's plug directly into the wire assembly, and don't come with a small mounting board. The larger components such as the rotary selectors have multiple pin connectors to accommodate the many options for programming the different positions of the selectors.

STEP 4:

Connecting the hardware to the DIO Board

The GF-DIO Board comes with 88 positions for components to be added. Each position is a made up of a 3-pin connection. Once the hardware components are plugged into the wire assembly, plug the other end of the wire assembly into one of the positions on the DIO board, taking note of the number position for later configuration.

Take note the 3-pin connectors have two positions each and a ground wire in the middle. The order works like this, first pin is the first position, second pin is the ground wire and the third pin is the second position. Then on the next wire, the first pin repeats the second position, the second pin remains as the



ground and the third pin is the third position. The pattern repeats throughout the DIO board.

STEP 5:

Connecting the GF-DIO Board



Now the GF-DIO Board must be connected to the computer. With the provided USB cable, simply plug the appropriately matching ends into both the GF-DIO Board's USB slot and any non USB 3 port on the computer tower.

Once the GF-DIO board is completely connected to the computer, it is ready to be configured for use with your flight simulation software.

STEP 6:

Configuring the GF-DIO Board

Now that the GF-DIO Board is connected to the computer it is ready for configuration. Turn on the computer and start the GF-Config program. GF-Config starts up with a picture of all the connected GoFlight modules available for configuration. Select the image of the GF-DIO Board in the left window of the program. On the right side is the Input area, here are options to select each of the positions on the GF-DIO. Flip each of the switches that are connected to the board. Once the switch is flipped, a box will appear in use on the right side corresponding to each numbered position on the board. Click on the Cockpit Functions and use the pull down menu to select the unique function for that switch. You can see a screen shot of GF-Config below and what it will look like with the GF-DIO Board connected ready for configuration.



Below the Input section on the right side of the program is the Output section. This is where selections such as the LED functions are assigned. Start by connecting the LED to the GF-DIO Board on the LED side of the board. Now set the output function to the same function as above and when the switch is flipped, the LED light will activate.

STEP 7:

Configure the DIO with Keystrokes

If configuring the GF-DIO Board through key strokes is preferred, this too can be done through GF-Config. Start by flipping the desired switch to be programmed. Then select Key Sequence in the Input Function 1 Box in the GF-Config program. Now use the keyboard to set the keystrokes for the switch. The screenshot below shows an example of what this process looks like.

GFConfig2 - Flight Sim X - C:\Users\johnk\Documents\GoFlight\Prosim737.gfc		
File Help		
	Flight Sim X Flight Sim 2004	
	Input Function 1	Input Function / Key Assignments
	Bank1 💌	
	C Cockpit Function	50 (No Selection)
	(No Selection)	51 (No Selection)
	Key Sequence	52 (No Selection)
		53 (No Selection)
	+ Shift	54 (No Selection)
		55 (No Selection)
		56 (No Selection)
	GE-DIO Unit #1	Select Check Box For Push Button ≡
	Output Function 1	Output Function
	Bank1	1 (No Selection)
	 Cockpit Function 	2 (No Selection)
	(No Selection)	3 (No Selection)
	C Key Sequence	4 (No Selection)
		5 (No Selection)
		6 (No Selection)
		7 (No Selection)
	Clear Keys	8 (No Selection)
	< [

Congratulations! The steps to configure the GF-DIO Board have been completed. Once every switch has been configured, the unit is ready to fly!

Thank you, for purchasing the GF-DIO Digital (Input/Output) Board! if you have any question or problems setting up you board you can contact our Tech Support at <u>techsupport@goflightinc.com</u> or Call 503-895-7020

Be sure to check out the Accessories page on our website where additional cables and switches can be purchased in bundled packages.

Current and Future supported software:

iFly 737NG (in progress) PMDG 737NGX (in progress) Prosim737 (complete)

GF-DIO Board Virtual Pilot Operating Handbook

GF-DIO Warranty

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.

NO OTHER WARRANTIES ARE EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO IMPLIED WARRANTIES OF SALABILITY AND FITNESS FOR A PARTICULAR PURPOSE. GOFLIGHT TECHNOLOGIES, INC. IS NOT RESPONSIBLE FOR CONSEQUENTIAL DAMAGES. SOME STATES DO NOT ALLOW EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.







GoFlight Technologies, Inc. 163 SW Freeman Ave. Suite D, Hillsboro, Oregon, USA 97123 Phone: 1-503-895-0242 www.goflightinc.com

P/N GF-DIO Board Revision 1.0 16Aug2012 Copyright © 2010 GoFlight Technologies, Inc. All rights reserved.

6