

GF-MCP PRO MCP Pro Advanced Auto Pilot Cockpit Control System



Congratulations on your purchase of the GoFlight **GF-MCP** Advanced (Adv) Autopilot Control Module, part of the extensive family of GoFlight (GF-AC) Cockpit Control System modules. The GF-MCP Advanced Autopilot has been designed to operate with a wide variety of simulated 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-MCP. Following these instructions will help to get you up in the "virtual skies" as quickly as possible.

Installing the GF-MCP Adv

NOTE If you own other GoFlight hardware and have already installed the most current version of GFConfig 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>http://www.goflightinc.com</u>.
- 2. On GoFlight home page click Support
- 3. Click on "GF-Config SetUp #.##" to download the latest module drivers and configuration software.

4. Click "Run" or Save" and follow the instruction to install the 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.

5. If you are planning to install the GF-MCP module into a GoFlight rack enclosure, install the module in any desired location in the enclosure and fasten it in place using the two thumbscrews that are included in the GF-MCP packaging.

NOTE: When tightening the GF-MCP mounting thumbscrews, be careful not to over-tighten the screws as it is possible to strip the threads in the mounting holes or break the mounting screws if excessive force is applied.

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

7. Plug the USB cable "A" connector end (rectangular) to a USB port on your computer or hub. The message "New Hardware Found" may appear briefly, showing that the GF-MCP was detected. When the operating system recognizes the GF-MCP, you will see the GF-MCP's "wakeup" sequence – the LED displays light up with messages "123" in the 3-digit displays and "123456" in the 6-digit displays, sweeping across left to right, followed by a quick left-to-right sweep of all the lighted pushbuttons. 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 GFMCP is ready to use.

8. After you install the GF-Config software and connect the GF-MCP 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-MCP unit on the left-hand side of the window. Click on the GF-MCP icon to show the configuration options in the right-hand side of the window.

Configuring the GF-MCP Adv

Using GF-Config, you can change certain characteristics of the GF-MCP's operation, so that it can operate most realistically with different types of aircraft. You select the GF-MCP for configuration by left clicking on its icon in the left-hand portion of the GF-Config window. Once the GF-MCP is selected for configuration, you can then select from the various options presented on the right-hand side of the GF-Config window.

The options 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-ConfigOn-Line Help** facility, which contains details about the configuration options available in your release of software. The sample screen shot above was taken from

an earlier version of GF-Config, and shows GF-Config's configuration view for the GF-MCP. 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-MCP Adv Operation

The GF-MCP has numerous displays, knobs, and other controls on its panel, and is capable of simulating autopilot equipment that is typically found on a wide range of aircraft. The GF-MCP's panel design is not intended to "copy" any one specific real-world autopilot, but rather to provide as much autopilot functionality as possible while you enjoy flying many different types of simulated aircraft. Following are descriptions of each of the elements on the GF-MCP control panel:

CRS (Course) Adjustment Knob and Display

This knob selects a heading value from 1 to 360 degrees, which represents a radial to the VOR station that is currently tuned on the NAV1 radio. This heading value is also known as the OBS1 heading. The currently set value is shown on the 3-digit LED display under the CRS label on the panel. The CRS value is used in conjunction with the NAV button beneath the knob.

HDG (Heading) Adjustment Knob and Display

This knob selects a heading value from 1 to 360 degrees, and is used to establish and maintain the aircraft's heading when the HOLD button beneath the knob is activated. The currently-set value is shown on the 3-digit LED display under the HDG label on the panel.

IAS/MACH (Speed) Adjustment Knob and Display

This knob selects an airspeed value, displayed either in Knots Indicated Airspeed (IAS) or MACH Number, on the 3-digit LED display under the IAS/MACH label on the panel. On aircraft featuring an auto throttle, this is used to establish and maintain the aircraft's speed when the HOLD button beneath the knob is activated.

SEL (Speed Display Select) Button

The Speed Display Select button switches the airspeed display value between Knots Indicated Airspeed and MACH Number. On aircraft panels where MACH Hold and IAS Hold are represented using individual buttons, when Speed Hold is engaged, pushing the Speed Display Select button will toggle between IAS Hold and MACH Hold, to remain synchronized with the value shown in the speed readout.

VERT SPD (Vertical Speed) Adjustment Wheel and Display

The Vertical Speed adjustment wheel selects a rate of climb or descent, the currently-selected value being shown on the 6-digit LED display under the V/S label on the panel.

ALT (Altitude) Adjustment Knob and Display

This knob selects an altitude value, and is used to establish and maintain the aircraft's altitude whenever the HOLD button beside the knob is activated. The currently-selected altitude is shown on the 6-digit LED display beneath the ALT label on the panel.

NAV Button

This button engages and disengages the NAV Hold function. When the button's internal LED is lit, the NAV Hold mode is engaged.

HDG HOLD Button

This button engages and disengages the Heading Hold function. When the button's internal LED is lit, the Heading Hold mode is engaged.

Speed HOLD Button

This button engages and disengages the Speed Hold function. When the button's internal LED is lit, the Speed Hold mode is engaged.

Altitude HOLD Button

This button engages and disengages the Altitude Hold function. When the button's internal LED is lit, the Altitude Hold mode is engaged.

Approach Hold (APPR) Button

This button engages and disengages the Approach Hold function. When the button's internal LED is lit, the Approach Hold mode is engaged.

Autopilot Command (A/P CMD) Button

This button engages and disengages the Autopilot Command function. This is the master switch for all other autopilot modes, and must be activated in order for any other autopilot modes to function. When the button's internal LED is lit, Autopilot Command is engaged.

Disengage Control Bar

The disengage control bar is similar to those found on large commercial jet aircraft. Its purpose is to quickly turn off any and all functions of the autopilot. This allows the pilot to regain manual control of the aircraft at any desired time. When the disengage control bar is in the DOWN position, the autopilot is disengaged and no autopilot modes will function. When the bar is in the UP position, the autopilot can be activated, and its modes engaged or disengaged using the individual HOLD buttons.

GF-MCP Advanced Autopilot 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.







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