



## FSUIPC: Lua Tutorial For Microsoft Flight Simulator and GoFlight Equipment



### Home

#### Get Started

Okay! In our first steps... we will accomplish several things at once

### About Lua

1. We will learn a few Lua commands.
2. We will create a Lua script (file).
3. We will program FSUIPC to run the script manually.
4. We will program FSUIPC to run the program automatically.

### Executing Code

So let's open your Lua Library Reference and your editor. If you tabulated your Library reference, go to the GoFlight (gfd) section. On the first page you'll see a list of GoFlight modules. I bet almost everyone has at least a GFP8 or GFT8. All of those Module names are Constant variables.

### Binary

1. The first "command" we find on the next page is `gfd.BlankAll()`. Type that into your editor.

### Hexadecimal

2. Move down the page until you find `gfd.SetBright(model, unit, n)`. Here's our real introduction to Constants and Variables.

### Bits & Bytes

Look at that command carefully and take note of the stuff in the (...)... *model, unit, n* Those are the *parameters* for the command. They indicate we need to put in values that represent those items. For model, we use the constants listed on the first page. If you have a GFT8, we'll use that. If not, try using GFP8. Go ahead and type in the following...

### Memory Offsets

`gfd.SetBright(GFP8, unit, n)`

### Variables

Now what's this "unit" thing? It's the number of your GF module. When computers count anything, they ALWAYS start with zero. Your trigger may be *called* button #1, but it's *actually* button #0 (zero).

### The Code

We are going to use the variable "unit" to represent the number zero, so add the new line in your code so it looks like this...

```
gfd.BlankAll()
Unit = 0
gfd.SetBright(GFP8, unit, n)
```

### The Editor

Our last parameter is "n". We won't be using a Constant or Variable, we are going to use a *direct value* of 15...

```
gfd.SetBright(GFP8, unit, 15)
```

### Get Started

No go back and "check your case". Meaning, make sure the correct letters are Upper or Lower case. Lua commands ***ARE CASE SENSITIVE!!!*** So far, all this does is blank all the GF modules and set there brightness to 15 (full). But there's a big difference between "setting the brightness" and "turning on a light". So let's do that. Go back to your reference and find the command `gfd.SetLight(model, unit, id)`.

### FlightSim

Go ahead and enter that command. Your script should look like this...

### Cleaning Up

```
gfd.BlankAll()
Unit = 0
gfd.SetBright(GFP8, unit, n)
gfd.SetLight(model, unit, id)
```

### Assignments

Since we are using the constant GFP8 to tell FSUIPC which model to operate, let's change "model" to "GFP8". You can leave "unit" alone since we've already assigned unit to equal zero. But now we have a new parameter... id. This is the number of the light, on the GF module. Remember, everything starts at zero... so to change things up, let's make that a one.

```
gfd.SetLight(GFP8, unit, 1)
```

You've just written your very first Lua script. Now let's save that, with the filename "MyTestLua.Lua", into your FS/Modules directory. Now run your FlightSim and start a flight so we can open the FSUIPC GUI.

If you have a spare button, make a button assignment (as shown below) with the control being "Lua MyTestLua". Now, when you press that button, it will run that Lua script.

## RESOURCES

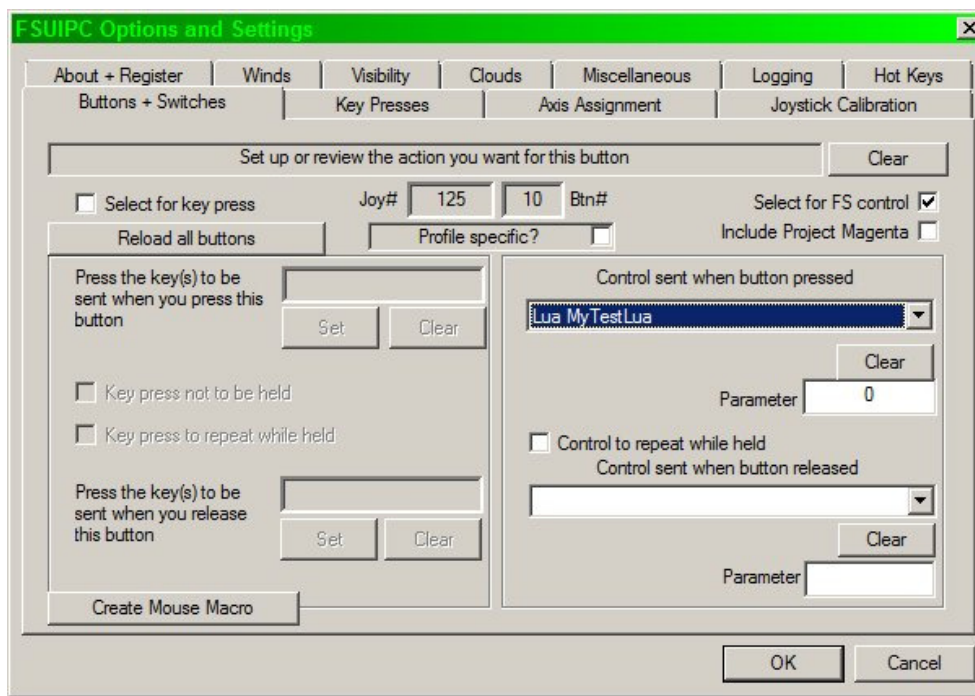
[FSUIPC Support Forum](#)

[GoFlight Inc.](#)  
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[Lua Website](#)  
[Lua Reference Manual](#)  
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And again, if you can, choose another unused button and assign it to "Lua Kill All".

You should find a copy of the file "MyLuaTest.Lua" in the FLG Tutorials folder.

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