Instruction manual for building your own GMC 710 for Flight Simulators

Version 0.1

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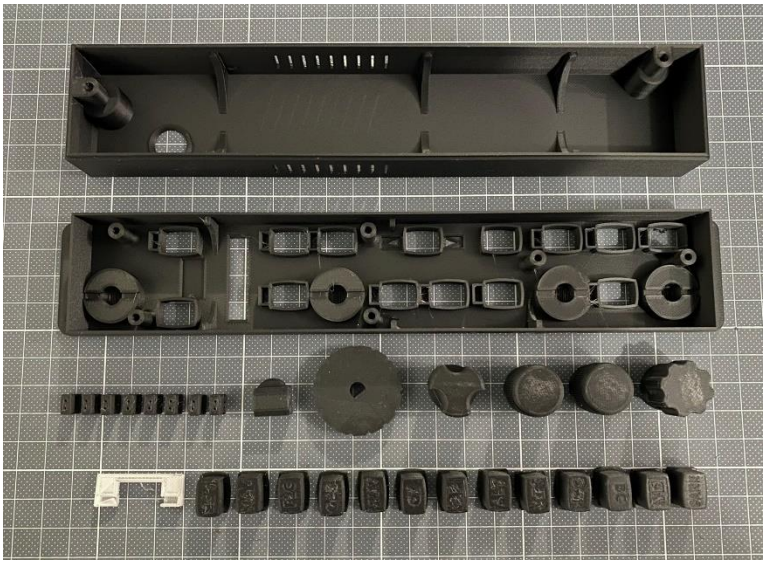
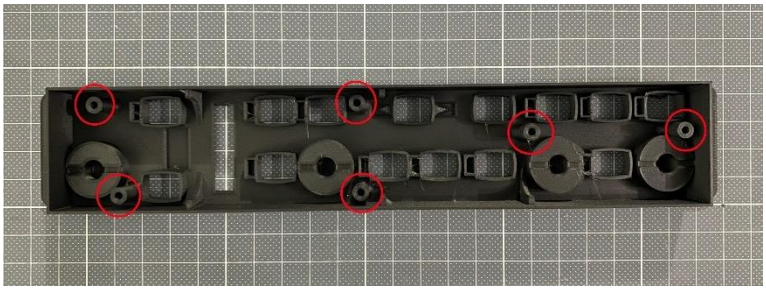
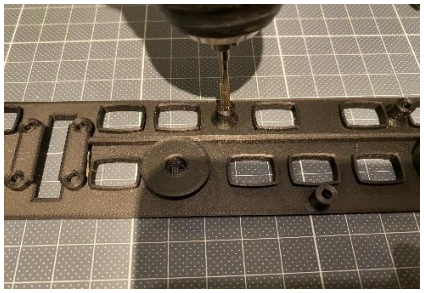
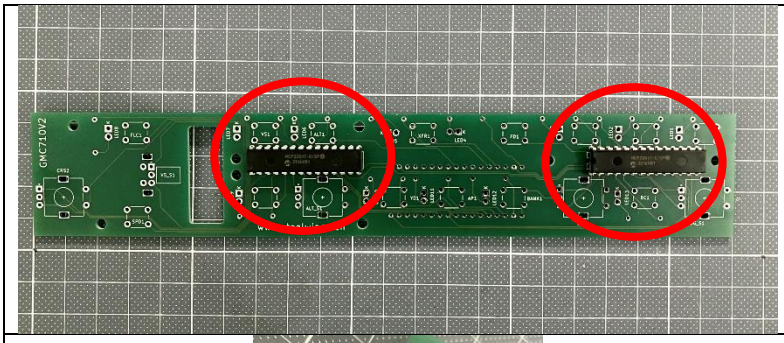
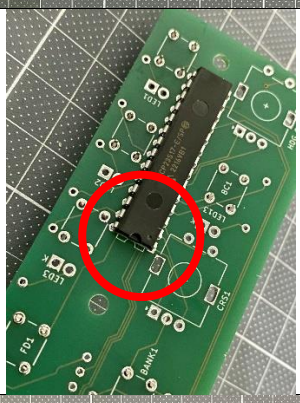
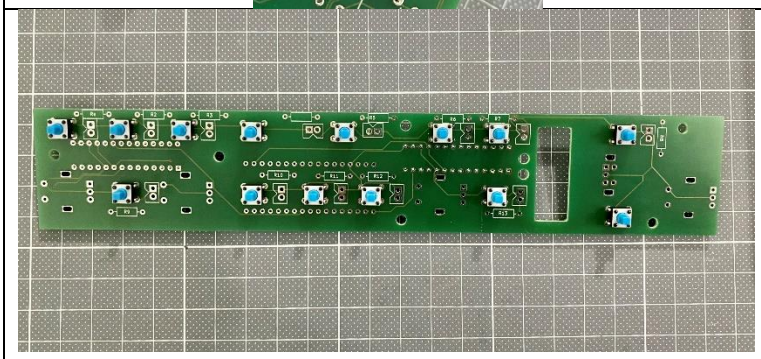
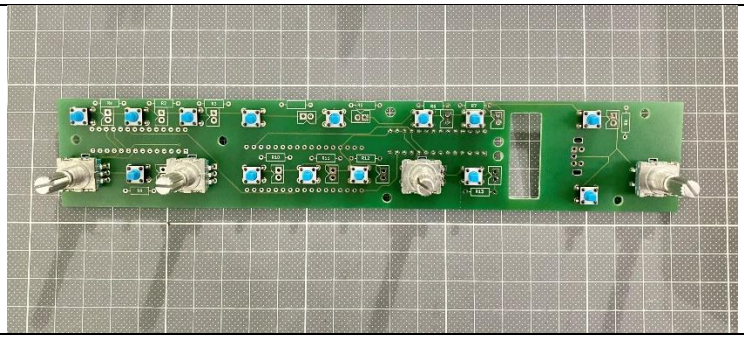
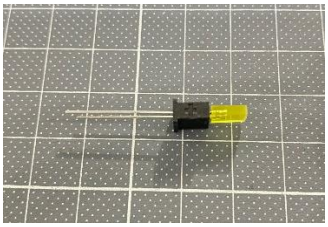
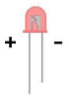
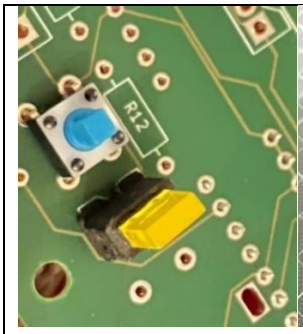
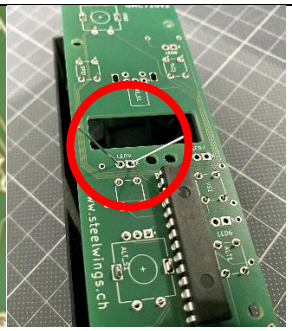
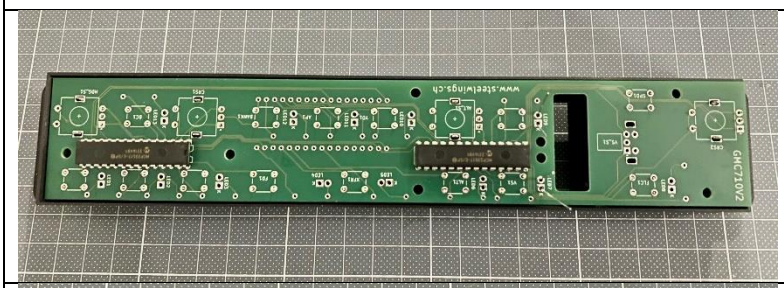
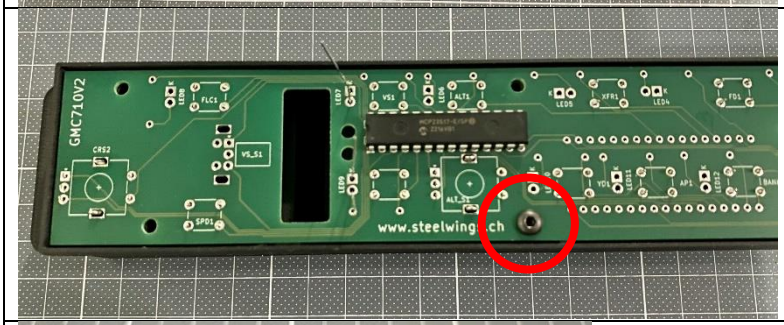
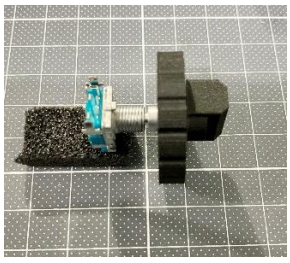
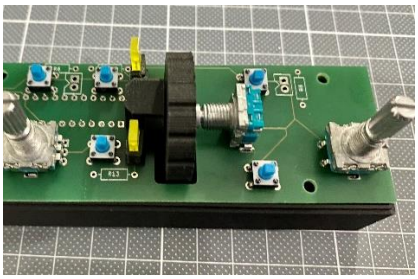
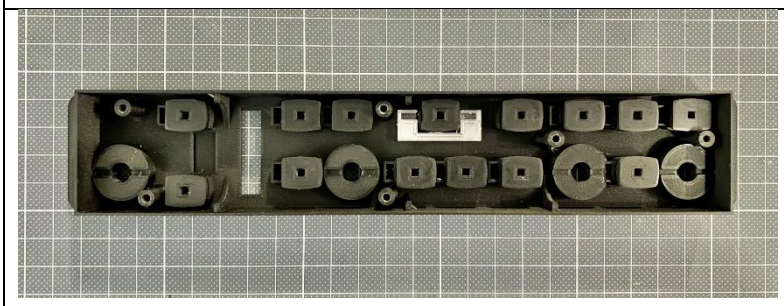
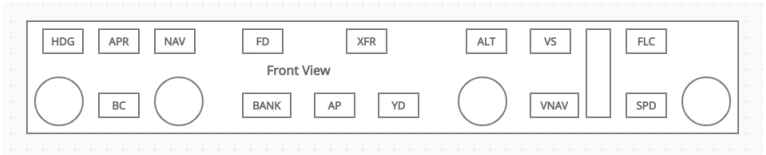
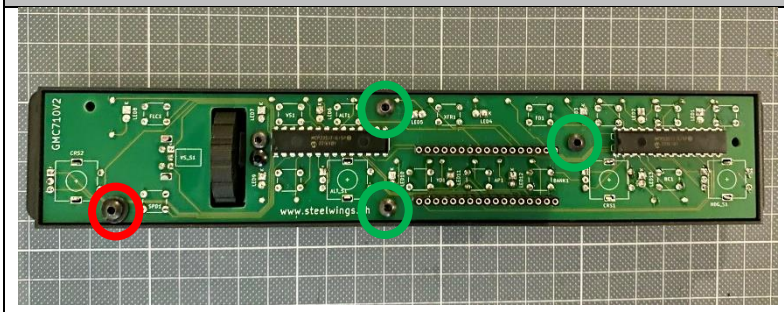
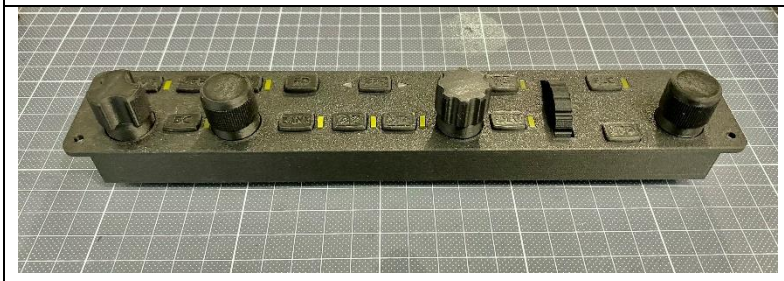
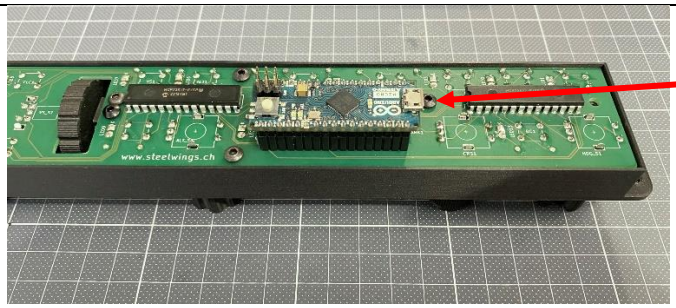
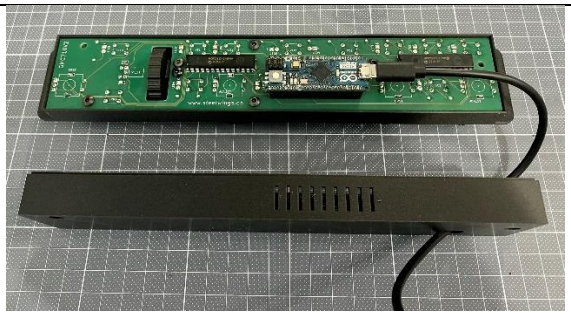
Step 1

3D Printing of all parts		Tools
	**Tips & Tricks** Use a cheap hairspray to getting the better stuck on the print bet. The big parts like front panel and bridge don't need any skirt. Better result and less cleaning after the print has been finished.	 
Preparing front panel		
 	Prepare the front panel with a M3 screw tap. Prepare with M3 screw tap **!** Be careful do not break through the front panel	M3 screw tap 
 	To fit the arrow glas in to the front-panel use very little glue.	
Preparing PCB		
		MCP20S17

	• Put the microchips gently in to the PCB • Solder carefully from the upper site	
	• Check the direction of the chip, the indentation has to correlate with the print on the PCB as shown on the image.	
	• Put the micros switches gently on PCB • Solder them from the frontsite	 
	• Put the rotary encoder in to the PCB • Solder them from the frontside	
	• Prepare all LED's with the spacer • The longer pin on the LED = + • Check the correct direction and polarity as shown in the image	

 	• Put the LED with spacer gently on PCB • The direction has to corralate with the print on the PCB as shown in the image • **Do not solder them just bend the pin on the front site so they won't slide out!**	
	• Put the PCB in the front case you can do this after all LED's are in position, or you do this as example after you the first two LED's are in position.	
	• **Use one or two screws to be sure the PCB is in the correct position.**	
	• Bevor you start solder the pins from the LED check if the LED are aligned with the front of the PCB • Repeat these steps until all LED's are aligned and soldered	
Assemble VS Whell		
 	• Prepare the VS Wheel to solder on the PCB • Slide the Wheel on to the Rotary Encoder until the end of the groove • Slide the Wheelblock on the Rotary Encoder as well	

	• Put the prepared VS Wheel on to the PCB • Mount the Wheelblock with 2x M3 x5 • Solder the Pins	M3 x5 
 	• Put every Push-Button in position • The correct order you take from the front view presentation	
Assemble the button		
	• Use 4 screws to assemble the PCB in the case. • The one with the red circly need to be removed after next step	M3 x8 
	• Bring all the turn Knobs in the correct position	
	• Gently put the Arduino Micro in position, please check the correct direction of the USB output plug	

	• Finally plug the USB cable in to the Arduino Plug a close an assemble the back cover with 2 screws.	
Step 2 Install the Client on your Windows System		
https://github.com/Steelwings-Production/GMC710V2_WindowsClient/releases/tag/v1.0		