

Smart Orbiter v3.0 to Biqu B1 mounting plate and fun duct



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Summary

Mounting plate adapter from BIQU B1 to SmartOrbiter v3.0 with fun duct similar to original one.

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Tags: [biqu](#) [biqub1](#) [orbiter](#) [orbiter3](#) [orbiterv3](#)

The intention is to use as much pieces from original extruder as possible. I have ditched the USB-C board and use Smart Orbiter long cables and plugged them directly to main board (BTT SKR v1.4). Screws can be reused from old extruder. You will need a new X endstop, you can desolder one from the USB-C board and wire it up yourself. You can also use one switch available if you just disassemble the old filament runout sensor and cable is already provided. Just replug it from TFT screen to X endstop on the main board.

I may provide the diagram later on. I have used Neopixel connection on the board for +5V, GND and RGB LED, another free +5V on the board for the white LED (so it is always on), pin 1.26 for filament runout sensor and 1.25 for filament unload button. As I was at it I also upgraded firmware for TFT screen as well as disable filament runout in the config of the screen.

[Board pinout](#)

This guide for original Orbiter Filament runout sensor was very helpful for setting up Marlin. You will need a newer version of Marlin than the one provided on Bigtreetech github page. I have provided My Configuration.h and Configuration_adv.h as text files so just change the extension and place them in appropriate marlin folder. I used version 2.1.2.1.

Sorry for crap pictures :)

Model files



smart-orbiter-biqu-b1-adaptor.stl



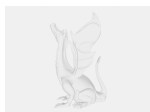
smart-orbiter-2x-4010-fan-duct.stl

Other files

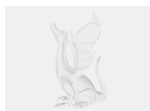


Marlin

2 files



configuration_adv.txt



configuration.txt

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