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https://github.com/makerbase-mks/MKS-Power-Control/wiki/MKS-P…

Why does this service exist?

Last Modified: Wed, 14 Apr 2021 01:41:45 GMT

MKS PWC V3.0 user Manual - makerbase-mks/MKS-Power-Control GitHub Wiki

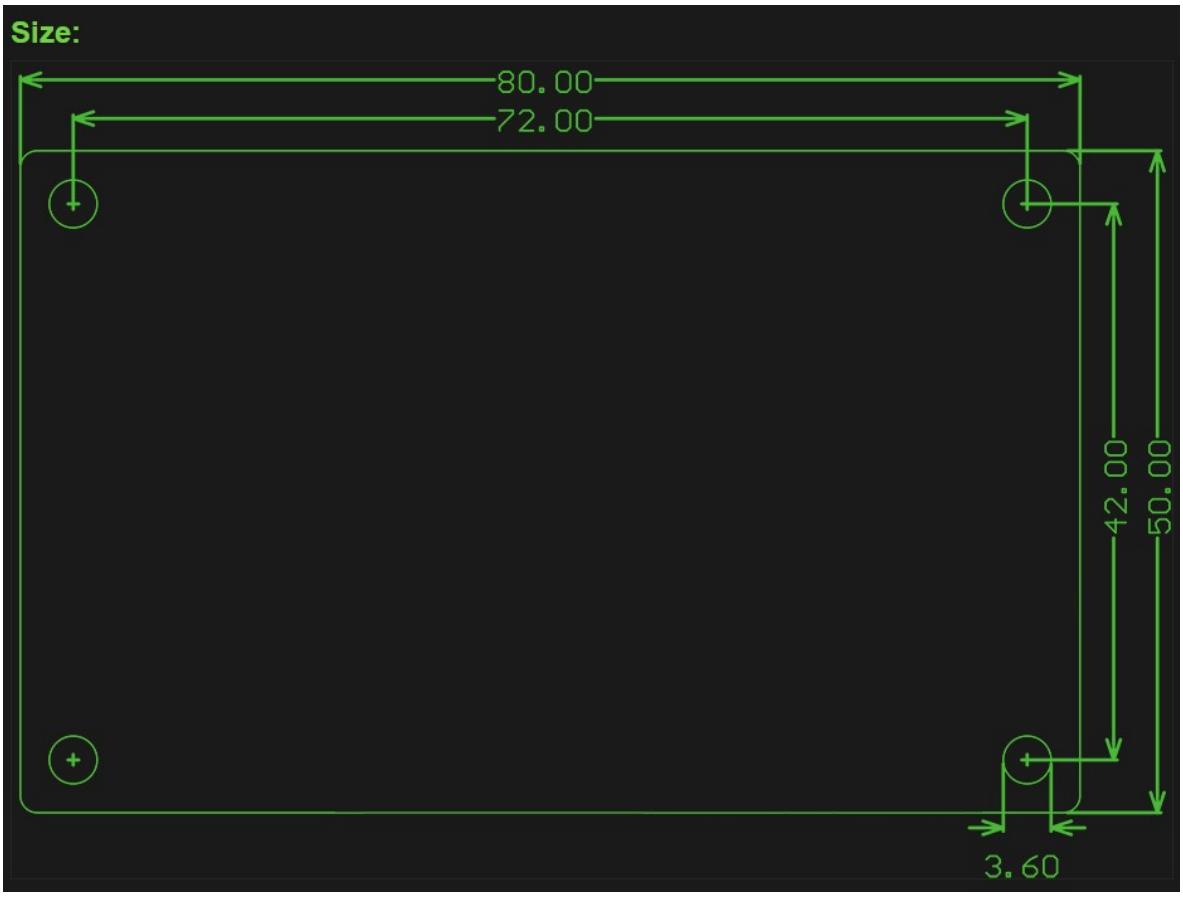
Product introduction

MKS PWC can achieve power continued to play, automatically turning off after the printing finished, the software control the power off, monitor the power status and other functions. It can help to achieve interactive printing, and to help in the cases like the unexpected power off or you have to leave during the printing, and other similar issues, considered to be one of the most useful features in 3D printers.

Board display



Dimensions



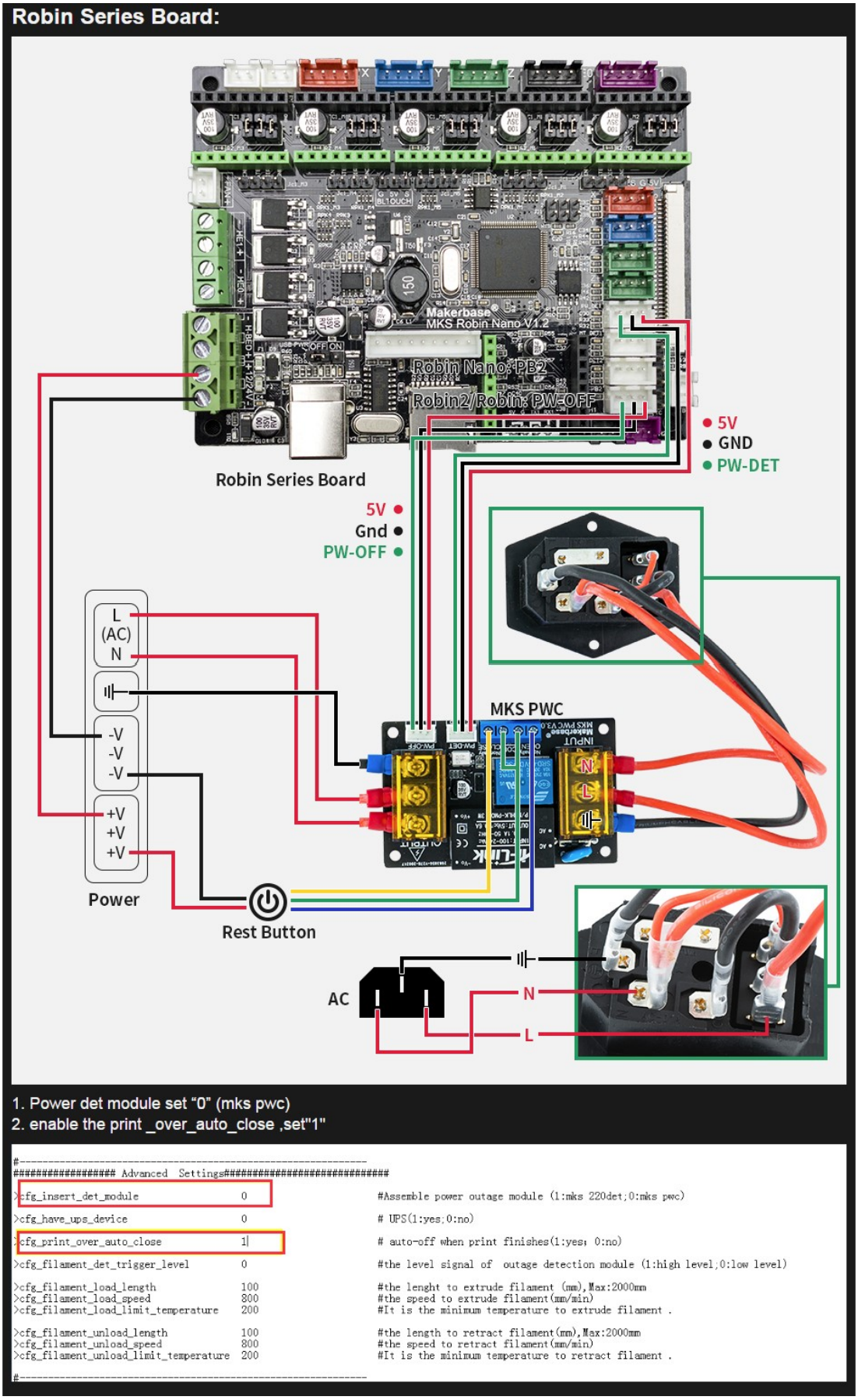
Parameter

- Ac input voltage:110v/ac-240v/ac
- Logic input voltage:3.3v-5v
- Support auto power off
- Support power outage detection,achieve power continued to play
- Work with:motherboard+mks tft series,or only mks robin nano/robin2

Board wiring diagram

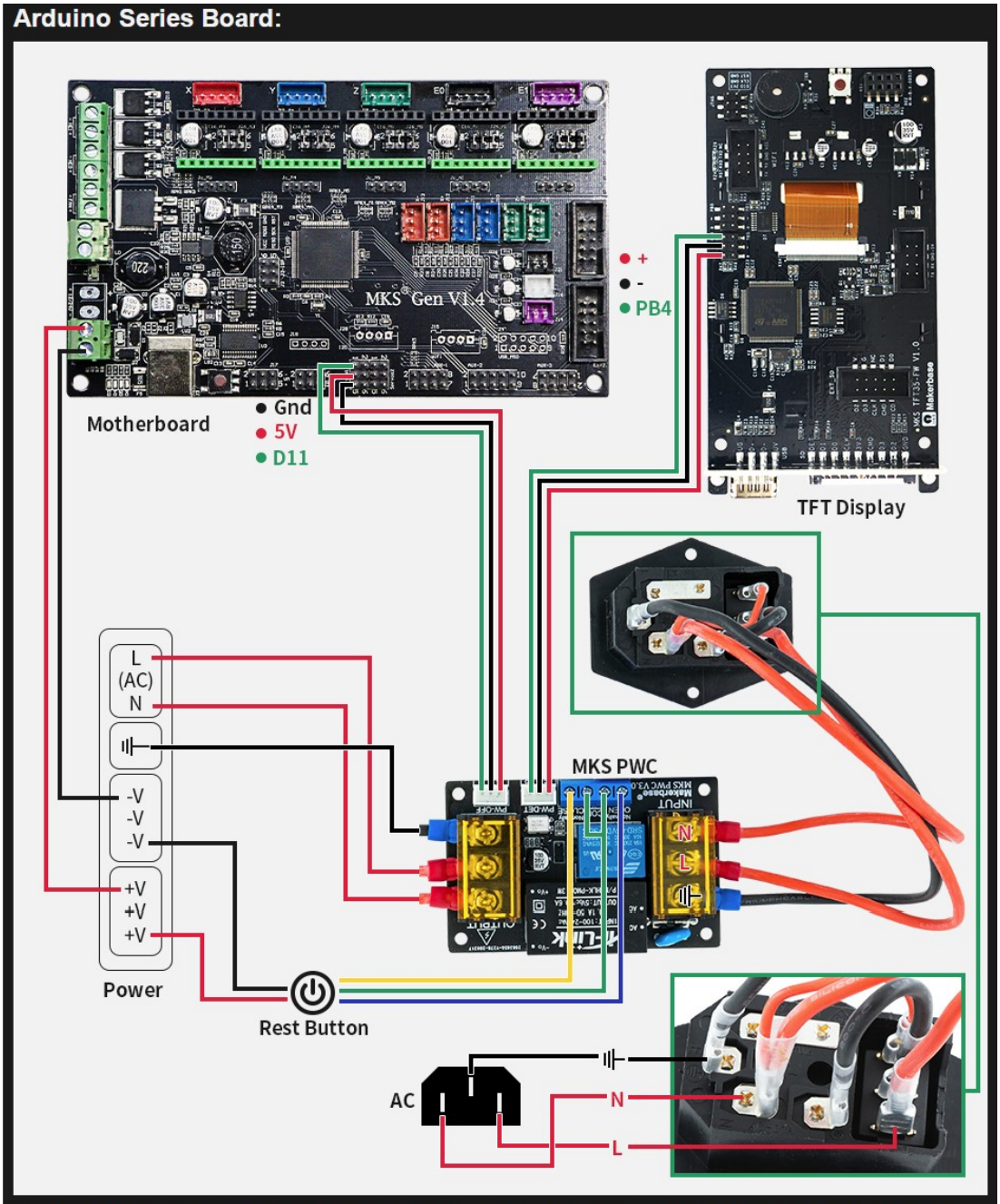
Robin series board

- Robin Nano and PWC wiring diagram and config setting



Arduino saeries board

- Gen board and PWC wiring diagram and Marlin configuration.h setting



To achieve the function that it will shutoff when finishing printing, in addition to the essential MKS PWC hardware, we also need to modify the mainboard and touch screen firmware.

1. On the pin__Ramps.h, define the pin via "#define PS_ON_PIN". I define 11 as the pin.



```
//
// Misc. Functions
//
#define SDSS               53
#define LED_PIN            13

#ifndef FILWIDTH_PIN
  #define FILWIDTH_PIN      5   // Analog Input on AUX2
#endif

// define digital pin 4 for the filament runout sensor. Use the RAMPS 1.4 digital input 4 on the servos connector
#define FIL_RUNOUT_PIN      4

#ifndef PS_ON_PIN
  #define PS_ON_PIN         11
#endif

#if ENABLED(CASE_LIGHT_ENABLE) && !PIN_EXISTS(CASE_LIGHT) && !defined(SPINDLE_LASER_ENABLE_PIN)
  #if !defined(NUM_SERVOS) || NUM_SERVOS == 0 // try to use servo connector first
    #define CASE_LIGHT_PIN   6      // MUST BE HARDWARE PWM
  #elif !(ENABLED(ULTRA_LCD) && ENABLED(NEWPANEL) \
      && (ENABLED(PANEL_ONE) || ENABLED(VIKI2) || ENABLED(miniVIKI) || ENABLED(MINIPANEL) || ENABLED(REPRAPWORLD_KEYPAD)))  // try to use AUX 2
    #define CASE_LIGHT_PIN   44     // MUST BE HARDWARE PWM
  #endif
#endif
```

2. Enable the auto off function on the TFT configuration.

```
#------------------------------------------------------------------
########function settings###################################

#pause position (-1 is invalid; Z-axis is relative position)
>cfg_XPOS:-1
>cfg_YPOS:-1
>cfg_ZADD:10

#whether set machine auto-off after print finishes(auto-off:1; NO:0)
>cfg_print_finish_close_Machine:0

#the max target Temp of sprayer and heated bed
>cfg_max_sprayer_temperature:270
>cfg_max_hotbed_temperature:150

#the level signal of outage detection module PB1(low level:0; high level:1)
>cfg_PB0_PB1_Level:1

#the speed of filament replacing(mm/min)
>cfg_filament_change_speed:1200

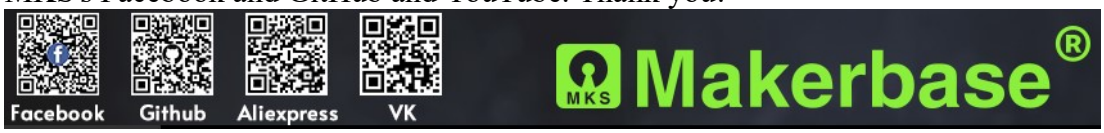
#the length of filament replacing(mm)
>cfg_filament_change_step:5

#the min temperature of filament replacing
>cfg_filament_limit_temperature:175

#The command of auto leveling (G29 is available for Marlin.While G32 is for  Repetier ar
>cfg_auto_leveling_cmd:G28;G29;
```

Note

- Board power support AC85V-265V input, usually is AC110V/AC220V, Do not get an electric shock. please make sure that the positive and negative poles of the power supply are correct before powering on. otherwise, the motherboard may be damaged easily.
- Thank you for using MKS products. If you have any questions during use, please contact us in time and we will work with you to solve it.
- For more product dynamic information and tutorial materials, you can always follow MKS's Facebook and GitHub and YouTube. Thank you!



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