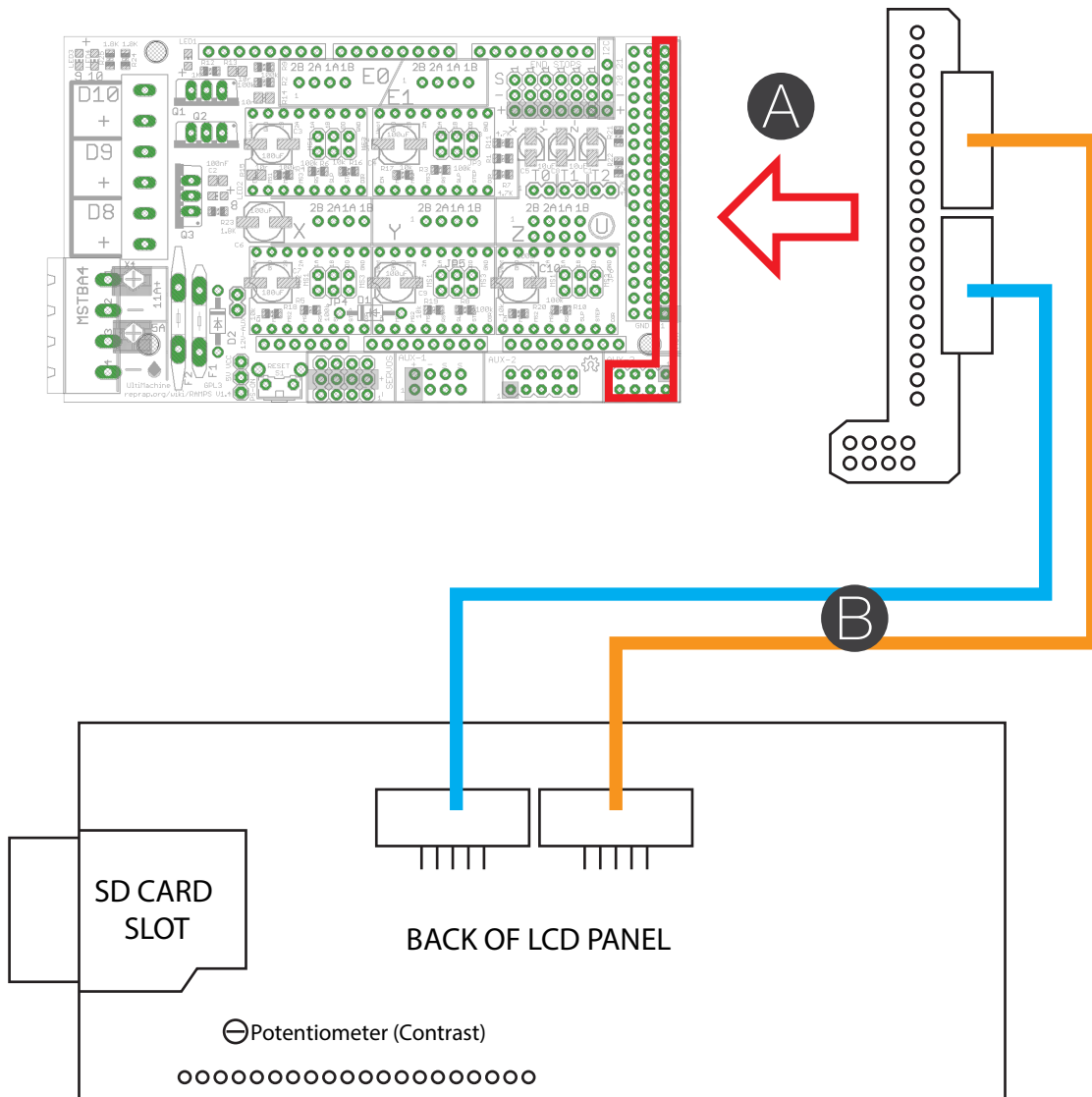


TIM Tinkerine Interaction Module
OPERATION
MANUAL



Plugging in T.I.M



A -> Connect the Smart Adapter onto the Arduino board

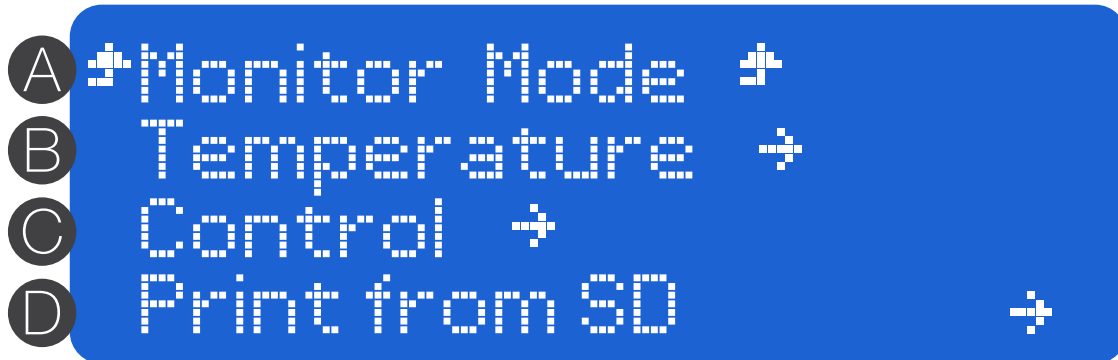
B -> Connect the ribbon cables from the Smart Adapter to the back of the LCD control unit as shown in the picture.

Home Screen



- A Hotend Temperature
- B Hours elapsed on print job
- C Print Speed - Defaults at 100%
- D Printer Status
- E Bed Temperature
- F Z-Axis Height
- G Print Progress %

Main Menu Screen



- A Returns you to the Home Screen.
- B Temperature - Contains options to start the preheating for PLA and ABS, cooling, and exact temperature adjustment.
- C Control Menu - Contains options to home axis, disable motors, controlling the axis, fan speed, print speed.
- D Card Menu - Contains access to loaded SD card files.

Control Screen



- A Returns to Main Menu
- B Homes the X, Y, Z axis (in that order)
- C Disable Steppers - Disengages all motor and allows manual control of axis
- D Move Axis - Adjust the position of each axis through numerical input
- E Fan Speed - Adjust the fan speed of the print bed fan. Max:255

Temperature Screen



- A Returns to Main Menu
- B Preheat PLA - Sets the heater cartridge to PLA idle temperature
- C Preheat ABS - Sets the heater cartridge to ABS idle temperature
- D Cooldown - Turns off the heater cartridge
- E Nozzel Temperature - Precise control of the hotend temperature
- F Bed Temperaure - Precise control of the bed temperature (Required heated-bed add-on)

Print from SD Screen



- A** Returns to Main Menu
- B** Refreshes loaded files
- C** GCode file - GCode files that you load onto the SD card will appear in the list here. Selecting a file will automatically begin the print sequence

Commonly Used Commands

- 1** STARTING PRINT FROM SD CARD

 - > (HOME SCREEN)
 - > Press Once
 - > (MAIN MENU)
 - > scroll to Print from SD and Press Once
 - > Scroll to desired GCode file and Press once

- 2** STOPING A PRINT IN PROGRESS

 - > (HOME SCREEN)
 - > Press Once
 - > (MAIN MENU)
 - > scroll to Stop Print and Press Once

- 3** PURGING FILAMENT + INSERTING FILAMENT

 - > (HOME SCREEN)
 - > Press Once
 - > (MAIN MENU)
 - > scroll to Temperature and Press Once
 - > Select Preheat PLA
 - > (wait till hotend reaches extrusion temperature level)
 - > (MAIN MENU)
 - > scroll to Control and Press Once, select Move Axis
 - > (MOVE AXIS MENU)
 - > scroll to Extrude and Press Once to feed extruder
 - > (With the stepper motor disabled, you can also choose to manually feed the filament by pushing it through.

- 4** RETRACTING FILAMENT

 - > (HOME SCREEN)
 - > Press Once
 - > (MAIN MENU)
 - > scroll to Temperature and Press Once
 - > Select Preheat PLA
 - > (wait till hotend reaches extrusion temperature level (80°C))
 - > (MAIN MENU)
 - > scroll to Control and Press Once, select Move Axis
 - > (MOVE AXIS MENU)
 - > scroll to Retract and Press Once to retract extruder
 - > (With the stepper motor disabled, you can also choose to manually retract the filament by pulling it out.

- 4** MOTOR OFF

 - > (HOME SCREEN)
 - > Press Once
 - > (MAIN MENU)
 - > scroll to Control and Press Once
 - > (CONTROL MENU)
 - > scroll to Disable Motors and Press Once