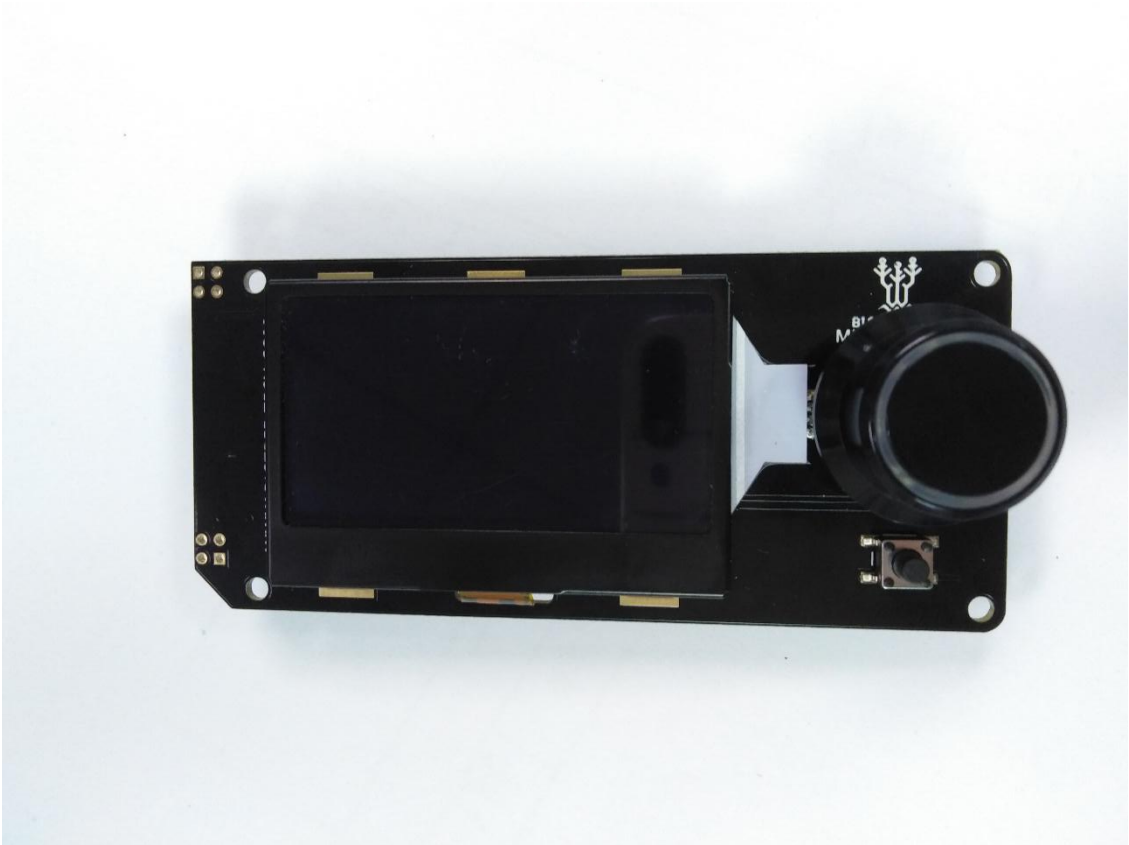
Shenzhen BIGTREE technology co., LTD.
BIG TREE TECH

BIGTREETECH MINI12864

User Guide



1 Product introduction

BIGTREETECH Mini12864 V1.0 is a medium-sized 3D printing display with RGB backlight which is launched by Shenzhen BIGTREETECH Technology Co., Ltd. 3D printing Team.

1. Features：

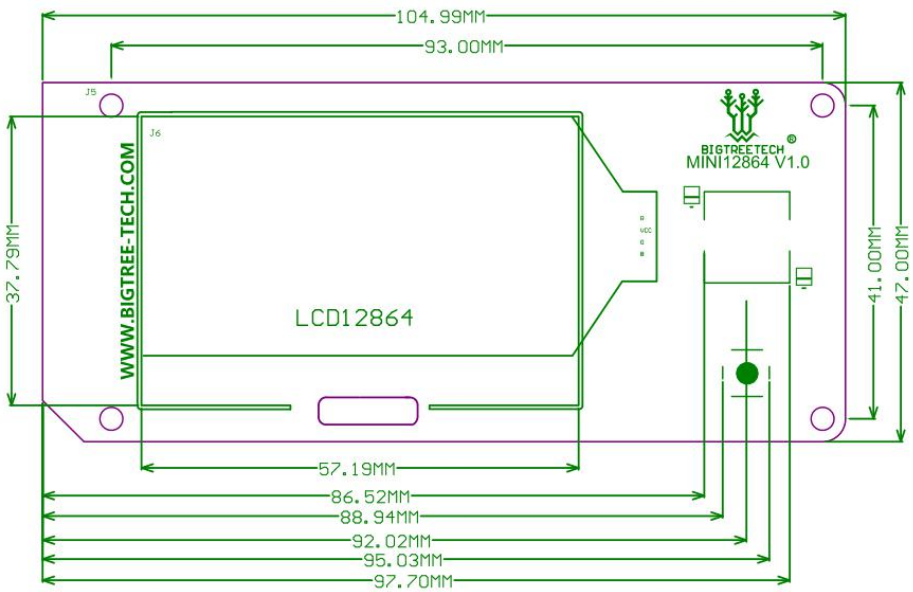
1) Mini12864 includes EXP1, EXP2, where EXP1 and EXP2 are LCD screen interfaces for ordinary motherboards.
2) It features multicolored RGB backlight, making it look cooler.

2. Specification：

Appearance size: 104.99mm * 47mm
Mounting size: More details see mini 12864 size
Power input: DC 5V
SD card logic voltage: 3.3V and 5V (e.g. Higher compatibility for the motherboard with MEGA2560 main control chip)

2 Interfaces on the screen

1. Dimensions



Notes:

1. Same as LCD 12864, it connects with EXP1 and EXP 2 of the motherboard.

2. The backlight can be set with its interface.

3 Firmware Instructions

The screen will be shipped with a test firmware,which can be used directly, or upgraded according to the firmware updates at our Github website.

1. How to obtain firmware

Ask our service person or technicians to get it;

Log in to our Github website to download:https://github.com/bigtreetech

2. How to update the Firmware

①In Configuration.h
Uncomment FYSETC_MINI_1286421 and NEOPIXEL LED

```
2061  //
2062  //#define FYSETC_MINI_12864_X_X    // Type C/D/E/F. No tunable RG
2063  // #define FYSETC_MINI_12864_1_2    // Type C/D/E/F. Simple RGB B
2064  //#define FYSETC_MINI_12864_2_0    // Type A/B. Discreet RGB Back
2065  #define FYSETC_MINI_12864_2_1    // Type A/B. NeoPixel RGB Backli
2066  //#define FYSETC_GENERIC_12864_1_1 // Larger display with basic O
```

```
2358  // Support for Adafruit NeoPixel LED driver
2359  #define NEOPIXEL_LED
2360  #if ENABLED(NEOPIXEL_LED)
2361    #define NEOPIXEL_TYPE   NEO_GRB // NEO_GRBW / NEO_GRB - f
2362    // #define NEOPIXEL_PIN     4       // LED driving pin
2363    //#define NEOPIXEL2_TYPE NEOPIXEL_TYPE
2364    //#define NEOPIXEL2_PIN    5
2365    #define NEOPIXEL_PIXELS 3       // Number of LEDs in the
2366    #define NEOPIXEL_IS_SEQUENTIAL   // Sequential display fo
2367    #define NEOPIXEL_BRIGHTNESS 255  // Initial brightness (0
2368    //#define NEOPIXEL_STARTUP_TEST  // Cycle through colors
```

②Search for u8g.setContrast at ultralcd_DOGM.cpp
Then u8g.setContrast(contrast) change to u8g.setContrast(255);

```
85
86  void MarlinUI::set_contrast(const int16_t value) {
87    contrast = constrain(value, LCD_CONTRAST_MIN, LCD_CONTRAST_MAX);
88    u8g.setContrast(255);
89  }
```

3、How to use

Power on, and then press rotary encoder

Then click Lights

Click into Lights, then click on the new Lights: “on or off”, select RGB “on and off”

RGB display can be set with Light Presets

4 Notes:

1. The wiring process must be carried out under the premise of power loss, after checking that the line is properly connected and the drive is inserted correctly before powering up, to prevent the fault wire from causing the board and screen to burn, resulting in unnecessary damage;

If you also encounter other problems in use, you are welcome to contact us, we will be patient to answer for you, if you have any good comments or suggestions on our products, you are also welcome to give back to us, we will carefully consider your comments or suggestions, thank you for choosing BIGTREETECH products, thank you!