



MKS LCD12864A Intelligent Display

How to change contrast value in Marlin Firmware Setup

MKS LCD12864A V1.0



MKS LCD12864A intelligent display





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```
43 static const uint8_t u8g_dev_uc1701_mini12864_init_seq[] PROGMEM = {
44     U8G_ESC_CS(0),           /* disable chip */
45     U8G_ESC_ADR(0),          /* instruction mode */
46     U8G_ESC_RST(1),          /* do reset low pulse with (1*16)+2 milliseconds */
47     U8G_ESC_CS(1),           /* enable chip */
48
49     0x0e2,                    /* soft reset */
50     0x040,                    /* set display start line to 0 */
51     0x0a0,                    /* ADC set to reverse */
52     0x0c8,                    /* common output mode */
53     0x0a6,                    /* display normal, bit val 0: LCD pixel off. */
54     0x0a2,                    /* LCD bias 1/9 */
55     0x02f,                    /* all power control circuits on */
56     0x0f8,                    /* set booster ratio to */
57     0x000,                    /* 4x */
58     0x023,                    /* set V0 voltage resistor ratio to large */
59     0x081,                    /* set contrast */
60     0x03d,                    /* contrast value */
61     0x0ac,                    /* indicator */
62     0x000,                    /* disable */
63     0x0af,                    /* display on */
64
65     U8G_ESC_DLY(100),         /* delay 100 ms */
66     0x0a5,                    /* display all points, ST7565 */
67     U8G_ESC_DLY(100),         /* delay 100 ms */
68     U8G_ESC_DLY(100),         /* delay 100 ms */
69     0x0a4,                    /* normal display */
70     U8G_ESC_CS(0),           /* disable chip */
71     U8G_ESC_END               /* end of sequence */
72 };
```



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2.Screen Enable

A screenshot of the Marlin Configuration.h file in a code editor. The tabs at the top are "Marlin \$", "Conditionals.h", "Conditionals_LCD.h", "Conditionals_post.h", "Configuration.h" (highlighted with a yellow box), and "Config". The code shows several commented-out lines for different display types. Line 618, "#define MKS_MINI_12864", is highlighted with a yellow box, and a yellow arrow points to it from the right.

```
502 //
503 //
504 // TinyBoy2 128x64 OLED / Encoder Panel
505 //
506 // #define OLED_PANEL_TINYBOY2
507 //
508 //
509 // Makeboard 3D Printer Parts 3D Printer Mini Display 1602 Mini Controller
510 // https://www.aliexpress.com/item/Micromake-Makeboard-3D-Printer-Parts-3D-Printer-Mini-Display-1602-Mini-Controller
511 //
512 // #define MAKEBOARD_MINI_2_LINE_DISPLAY_1602
513 //
514 //
515 // MKS MINI12864 with graphic controller and SD support
516 // http://reprap.org/wiki/MKS\_MINI\_12864
517 //
518 #define MKS_MINI_12864
519 //
520 //
```

The same as mini 12864, the enable item(yellow highlighted)

Note: The firmware can match one type of screen only. It may cause display error if setting up several types of screen.

If the firmware is enabled and refreshed, but the screen display is blurred or not displayed. The reason this may be caused is that there is no contrast setting or no saving. Simply set the contrast to 0x032, save it and re-use arduino to update the firmware.