

TFT_eSPI Cheat Sheet

Initialization & Setup:

```
tft.init();  
tft.setRotation(r);  
tft.fillScreen(color);  
tft.invertDisplay(true/false);  
tft.setSwapBytes(true/false);
```

Basic Drawing:

```
tft.drawPixel(x, y, color);  
tft.drawLine(x0, y0, x1, y1, color);  
tft.drawFastVLine(x, y, h, color);  
tft.drawFastHLine(x, y, w, color);  
tft.drawRect(x, y, w, h, color);  
tft.fillRect(x, y, w, h, color);  
tft.drawCircle(x, y, r, color);  
tft.fillCircle(x, y, r, color);  
tft.drawRoundRect(x, y, w, h, r, color);  
tft.fillRoundRect(x, y, w, h, r, color);  
tft.drawTriangle(x0,y0,x1,y1,x2,y2,color);  
tft.fillTriangle(x0,y0,x1,y1,x2,y2,color);
```

Text:

```
tft.setCursor(x, y, font);  
tft.setTextColor(color);  
tft.setTextColor(color, bg);  
tft.setTextSize(size);  
tft.setTextDatum(d);  
tft.drawString("Text", x, y);  
tft.drawCentreString("Text", x, y, font);  
tft.drawRightString("Text", x, y, font);  
tft.println("Hello");
```

Fonts:

```
tft.loadFont("NotoSansBold15");  
tft.unloadFont();
```

Colors:

Use built-in 16-bit colors:

```
TFT_BLACK, TFT_NAVY, TFT_DARKGREEN, TFT_DARKCYAN,  
TFT_MAROON, TFT_PURPLE, TFT_OLIVE, TFT_LIGHTGREY,  
TFT_DARKGREY, TFT_BLUE, TFT_GREEN, TFT_CYAN,  
TFT_RED, TFT_MAGENTA, TFT_YELLOW, TFT_WHITE,  
TFT_ORANGE, TFT_GREENYELLOW, TFT_PINK
```

Or custom color:

```
uint16_t myColor = tft.color565(r,g,b);
```

Images:

```
tft.pushImage(x, y, w, h, pixelArray);  
tft.pushSprite(x, y);  
tft.readRect(x, y, w, h, pixelArray);
```

Sprites:

```
TFT_eSprite spr = TFT_eSprite(&tft);  
spr.createSprite(width, height);  
spr.fillSprite(color);  
spr.drawPixel(x, y, color);  
spr.pushSprite(x, y);  
spr.deleteSprite();
```

Viewport & Scrolling:

```
tft.setViewport(x, y, w, h);  
tft.resetViewport();  
tft.scroll(dx, dy);
```

Performance Helpers:

```
tft.startWrite();  
tft.endWrite();  
tft.setSwapBytes(true);
```

Tips:

- Always run tft.init() before drawing.
- Use User_Setup.h to configure driver & pins.
- Use TJpg_Decoder for JPG images.
- Sprites help eliminate flicker.