LCDS & DISPLAYS / EINK / EPAPER

## SHARP Memory Display Breakout – 1.3" 96x96 Silver Monochrome

PRODUCT ID: 1393



## DESCRIPTION

The 1.3" SHARP Memory LCD display is a cross between an elnk (e-paper) display and an LCD. It has the ultra-low power usage of elnk and the fast-refresh rates of an LCD. This model has a matt silver background, and pixels show up as little mirrors for a silver-reflective display, a really beautiful and unique look. It does not have a backlight, but it is daylight readable. For dark/night reading you may need to illuminate the LCD area with external LEDs.

The display is 3V powered and 3V logic, so we placed it on a fully assembled & tested breakout board with a 3V regulator and level shifting circuitry. The display slots into a ZIF socket on board and we use a piece of double-sided tape to adhere it onto one side. There are four mounting holes so you can easily attach it to a box.

The display is 'write only' which means that it only needs 3 pins to send data. However, the downside of a write-only display is that the entire 96x96 bits (1,152 bytes) must be buffered by the microcontroller driver. On an Arduino Uno/Leonardo that's half the RAM available and so it might not be possible to run this display with other RAM-heavy libraries like SD interfacing.

We don't have a detailed tutorial yet but its very easy to get started. Solder the included header to the display and connect Vin to 3–5V, GND to ground, and SCK, DI and CS to three Arduino pins. Then download and install our SHARP Memory Display library and the Adafruit GFX library. Run the example sharpmemtest sketch with the correct data pins to start drawing lines, circles, rectangles, text, etc!