| Heading, Degrees | Hdg, Dir | Resistance | Voltage (Vcc=5V, r=10k) | Voltage (Vcc=3.3V, r=10K, 50mV droop) |
|---|---|---|---|---|
| 0.0 | N | 33.00E+03 | 3.84 | 2.494 |
| 22.5 | NNE | 6.57E+03 | 1.98 | 1.289 |
| 45.0 | NE | 8.20E+03 | 2.25 | 1.464 |
| 67.5 | ENE | 891.00E+00 | 0.41 | 0.266 |
| 90.0 | E | 1.00E+03 | 0.45 | 0.295 |
| 112.5 | ESE | 688.00E+00 | 0.32 | 0.209 |
| 135.0 | SE | 2.20E+03 | 0.90 | 0.586 |
| 157.5 | SSE | 1.41E+03 | 0.62 | 0.402 |
| 180.0 | S | 3.90E+03 | 1.40 | 0.912 |
| 202.5 | SSW | 3.14E+03 | 1.19 | 0.777 |
| 225.0 | SW | 16.00E+03 | 3.08 | 2.000 |
| 247.5 | WSW | 14.12E+03 | 2.93 | 1.903 |
| 270.0 | W | 120.00E+03 | 4.62 | 3.000 |
| 292.5 | WNW | 42.12E+03 | 4.04 | 2.626 |
| 315.0 | NW | 64.90E+03 | 4.33 | 2.816 |
| 337.5 | NNW | 21.88E+03 | 3.43 | 2.231 |

| ESP32 ADC value (calc.) | -2.00% | 2.00% |
|---|---|---|
| 3095 | 3033 | 3157 |
| 1599 | 1567 | 1631 |
| 1817 | 1781 | 1853 |
| 330 | 323 | 337 |
| 367 | 359 | 374 |
| 260 | 254 | 265 |
| 727 | 713 | 742 |
| 498 | 488 | 508 |
| 1132 | 1109 | 1154 |
| 964 | 944 | 983 |
| 2482 | 2432 | 2531 |
| 2361 | 2314 | 2408 |
| 3723 | 3648 | 3797 |
| 3259 | 3194 | 3324 |
| 3495 | 3425 | 3564 |
| 2768 | 2713 | 2823 |

Vout = Vcc*(R1/(R1+R2))

ADCnum = (Vout/3.3) * ((2^adc_bits) - 1)

check these out:
https://github.com/e-tinkers/esp32-adc-calibrate
https://docs.espressif.com/projects/esp-idf/en/stable/esp32/api-reference/peripherals/adc_calibration.html

font for LCD