



Shanpu

Rotary encoder with LCD Switches **SLB2**

General Description

Display
Size : 1.28inch Circle TFT
Driver IC : GC9A01
Interface Type : SPI (Serial Peripheral Interface)
Power Supply : 3.3V
Resolution : 240RGB(H) x 240(V)
Display Color : Full Color, 262K(max.)
Luminance(cd/m2) : 400(cd/m2)
Backlight Type : White LED

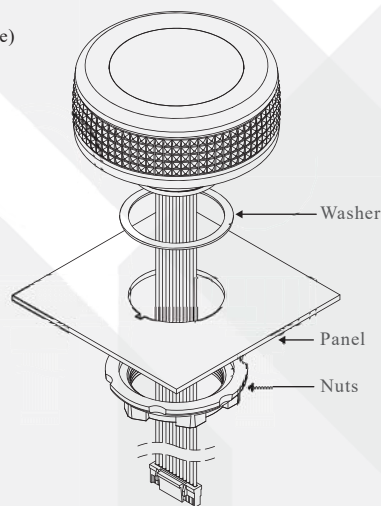
Encoder
Transmissive Optical Sensor
Power Supply : 3.3V
Output Signal : HIGH & LOW
Resolution : 36 step per revolution
Operating Life : C.W. 100,000 cycles min.
& C.C.W 100,000 cycles min.
Operating Force : 1.5Kgf·cm (Max.)

Switch
Contact Rating : 50mA, 12V DC
Resolution : 0.5±0.3mm
Operating Life : 100,000 cycles min.
Operating Force : 800gf±300gf

Operation Temperature : -20°C~70°C
IP Code : IP65

Materials
Knob : Polyamide(PA), Polycarbonate (PC)
, Aluminum
Lens : Polycarbonate (PC)
Base : Polycarbonate (PC)
Washer : NBR
Nuts : Polyamide(PA)

Installation Notes

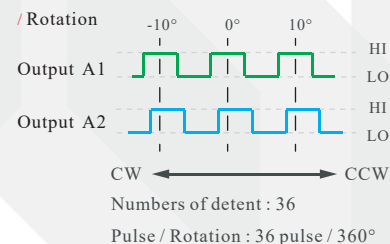


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PAT. D199473
PAT. ZL201822200452.0
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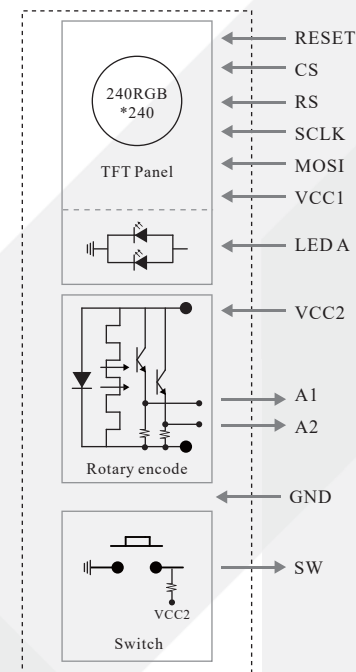
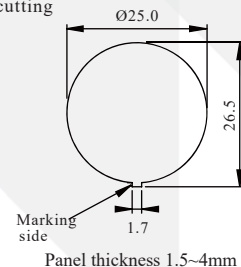
Block Diagram

Pin function

Pin	Name	Function
1	LED A	LCD Backlight VCC
2	SW N.O.	Switch N.O.
3	VCC2	Rotary Encode Optical Sensor Power
4	A1	Rotary Encode Signal, Output
5	A2	Rotary Encode Signal, Output
6	MOSI	LCD Data Signal, Input
7	SCLK	LCD Clock Signal, Input
8	RS	LCD Register Select Signal
9	CS	LCD Chip Select Signal, Input
10	RESET	LCD Reset Signal, Input
11	GND	Ground
12	VCC1	Switch COM.



Panel cutting



The connector on the SLB2 module is similar JST GHR-12V-S
Applicable Connector:
Conductor pitch / 1.25mm
Conductor width / 0.2mm

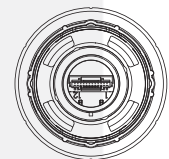
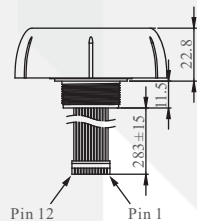
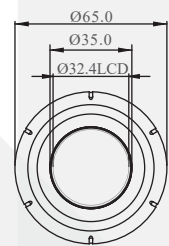


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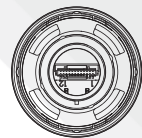
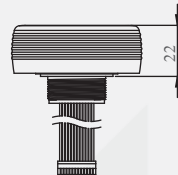
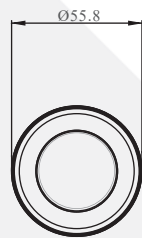
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Dimension

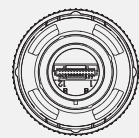
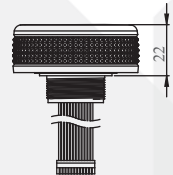
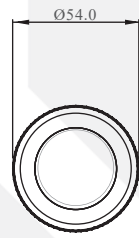
/ Knob type : P



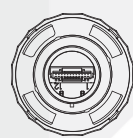
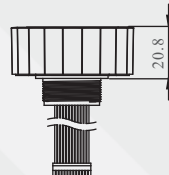
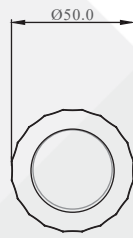
/ Knob type : 1



/ Knob type : 2



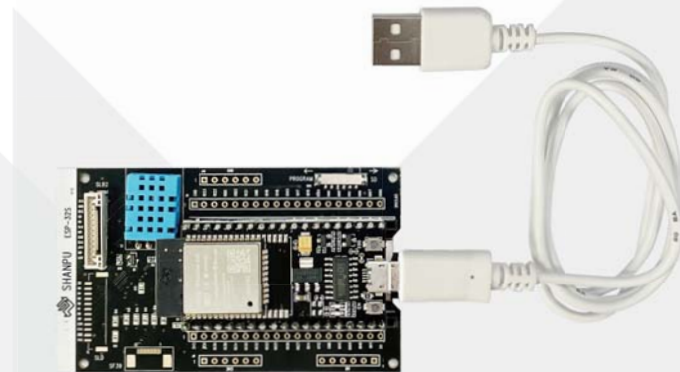
/ Knob type : 3



Option

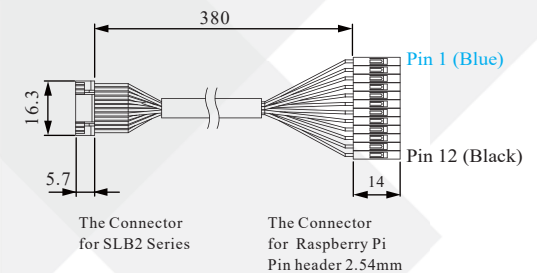
/ Development Kit P/N : K-SLB2-01

The SLB2 demo program develop by ESP32 system. ESP32 is an open-source electronic platform based on easy-to-use hardware and software. Use Arduion-ESP32 IDE, so user can very easy to use SLB2 through SLB2 development kit from ESP32.
Dimension(Without cable):85mm(W)*50mm(D)*18.5mm(H)



/ Cable P/N : K-SLB-03

The SLB2 series connect to Raspberry Pi. though cable wire





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How to order



SLB2-PL | Knob type P / Silver / Plastic



SLB2-10 | Knob type 1 / Silver / Aluminum



SLB2-2L | Knob type 2 / Silver / Plastic



SLB2-3T | Knob type 3 / Transparent / Plastic



SLB2-P5 | Knob type P / Black / Plastic



SLB2-15 | Knob type 1 / Black / Aluminum



SLB2-25 | Knob type 2 / Black / Plastic