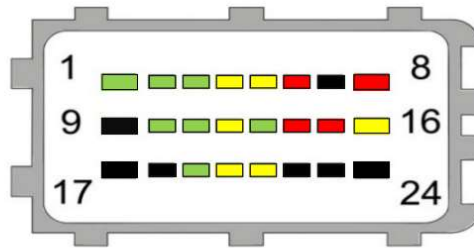


Basic information's:

SMD V1.0 is a product that read CAN Data from Ecumaster EMU Black and show them on OLED 2.44" screen. Small size of screen give us possibility to integrate it in standard dash or on 3D printed cover delivered with device. Device is equipped with rotary knob that can be located near driver seat.

Wiring:



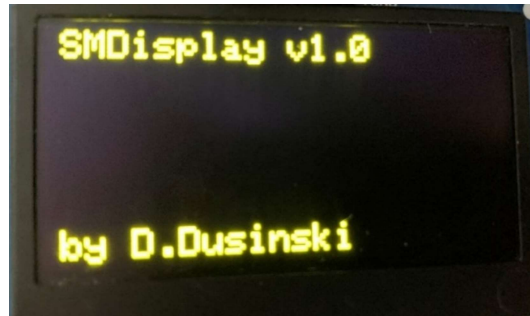
PIN: Control Panel	
4:	CP1 (CLK)
5:	CP3 (+5V)
12:	CP2 (DT)
16:	CP4 (GND)
21:	CP6 (SW)
20:	CP5 (RES)

PIN: DISPLAY	
1:	D2 (+5V)
2:	D4 (SDA)
3:	D3 (SCL/SCK)
10:	D5 (RES)
13:	D1 (GND)
11:	D7 (LED1)
19:	D6 (LED2)

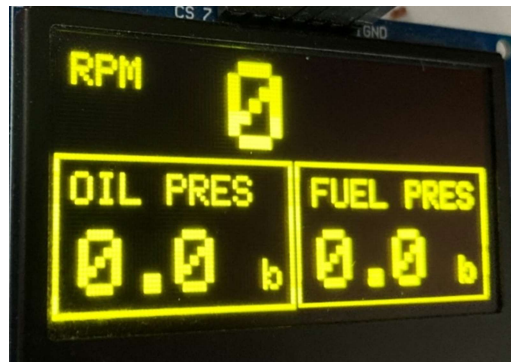
PIN: EMU	
8:	E1 (+12V) — Batt +12V
15:	E2 (GND) — GND
6:	E3 (L) — EMU Can L
14:	E4 (H) — EMU Can H

Screen decription:

Screen 1: welcome screen (disappear after 2 sec).



Screen 2: RPM, Oil pressure (bar), Fuel pressure (bar)



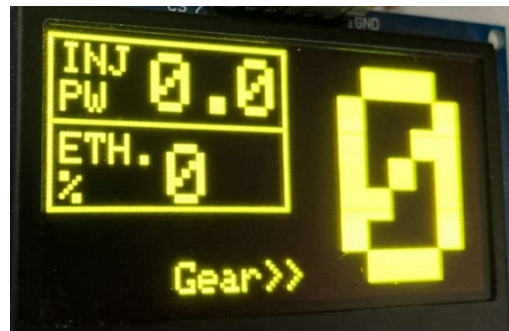
Screen 3: Oil pressure (bar), Oil temp (C), Water temperature (C)



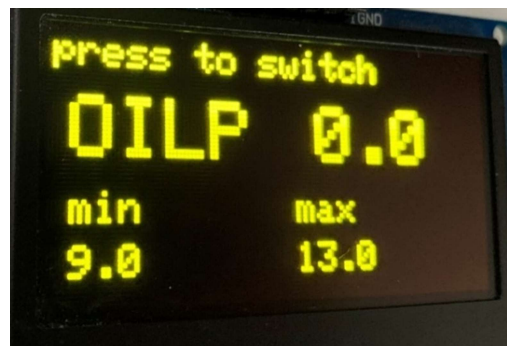
Screen 4: MAP pressure (bar), Intake Air Temperature, Battery, Throttle position sensor (%), Exhaust gas temperature 1 and 2. Lambda, Air fuel ratio.



Screen 5: Injector Pulse Width, Ethanol content, Gear Position.



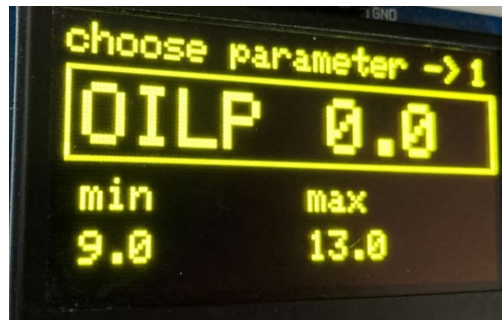
Screen 6: **Parameter screen**: by **SHORT** pressing rotary knob activate selection of the parameters.



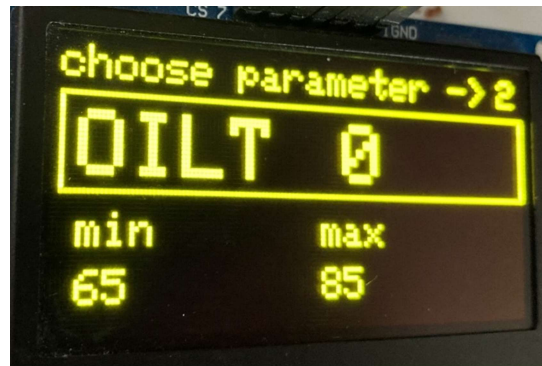
SETTINGS

Screen 6 allows you to change 7 different parameter limits. Below you can find description of all of them. As soon as you are on screen 6 -> short pressing rotary knob moves you to possibility to change parameters limit.

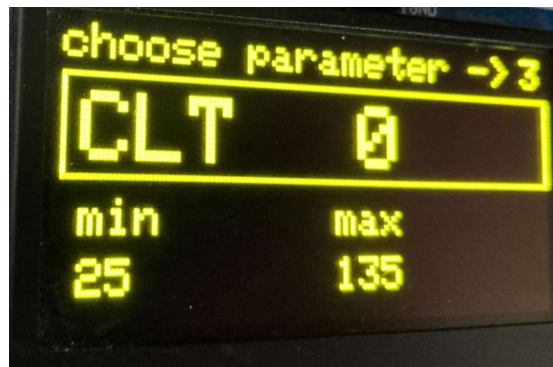
Parameter 1: Oil Pressure (bar).



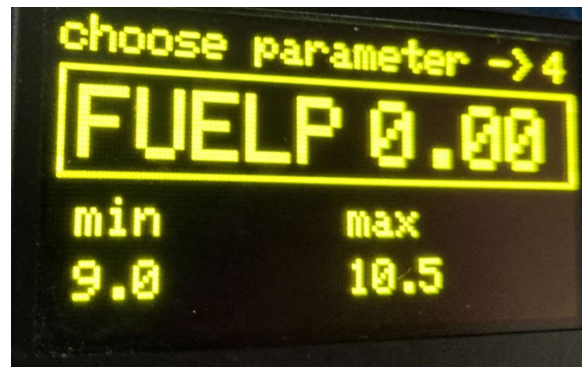
Parameter 2: Oil temperature (Celsius)



Parameter 3: Coolant temperature (Celsius)



Parameter 4: Fuel pressure (bar)



Parameter 5: Battery Voltage (V)

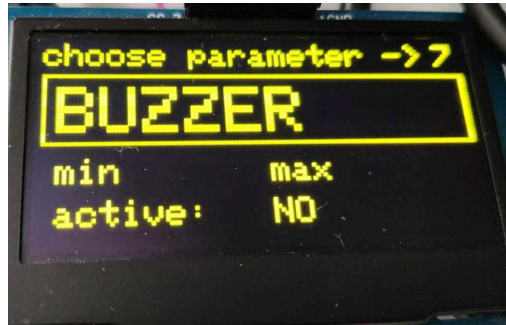


Parameter 6: MAP (bar)



Parameter 7: Buzzer activation

BUZZER and LED : Buzzer and LED output is activated when any of parameter is out of its limit set on Screen 6 and option of parameter 7 is set to YES. There is possibility to connect LED or BUZZER to output D6 or D7 (see wiring diagram).



By **SHORT** pressing rotary knob on any of selected parameter we entering possibility to change limits. When position is selected by **TURNING** rotary knob we adjusting **VALUES** of **minimum** and **maximum**.



SAVING Parameters: by next **SHORT** press you entering possibility to **SAVE** parameters in memory. In this point you need to press Rotary knob **longer than 2 sec!** . After that time parameters are written to memory. :

