Small OLED Module I2c Display for Arduino

13 September 2017

Parts and faceplate will be available from QRVTronics as a Kit.

0x3C address

> GND: Ground
> VCC: Power (2.8V-5.5V)
> SCL: Clock –
> SDA: Data –

Specifications:
Power Supply: 3.3V to 5V
Power consumption: maximum 20mA when all dots light on
Communication mode: IIC
Work with all micro-controller and microprocessor
Communication signal can work on 3.3V and 5.0V
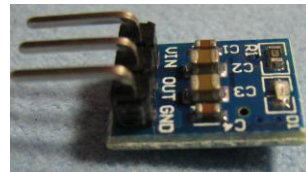High bright self-light emitting

Simple command sets, easy to remember

OLED Kit includes the following:

1 – Faceplate

1 – Small OLED Display Module

1 – Cable Assembly

1 – 5-volt regulator

1 – Set of mounting brackets or use self-adhesive double sided tape.

5-volt regulator specifications:
      Input voltage: 6.5V-12V
   Output voltage: 5V
      Maximum current: 800mA

Process for adding the OLED to an existing KN-Q7A or CS Series Radio

- ☐ Open Radio and set top aside
- ☐ Remove existing faceplate
- ☐ Remove all components mounted on original faceplate
- ☐ Set faceplate aside, it will no longer be used
- ☐ Update the Sandwich Software – available at QRVTronics.com by emailing: larry@qrvtronics.com

- ☐ Mount OLED Display to new faceplate using:

    - o Mounting brackets using super glue, not supplied
    - o Or Using Self Adhesive double sided tape

- ☐ Re-Mount the Microphone connector to the new faceplate
- ☐ Re-Mount the 10K Gain control to the new faceplate.
- ☐ If using the Dual Band Option, mount the dual band switch.

☐ Remove the LED from the Sandwich – this can be unsoldered or clipped, it will no longer be used.

☐ Attach the OLED Display cable assembly

- o The 4 pin connector goes to the OLED Display as shown
- o The 2 pin connector goes to the I2C bus with the yellow wire to the right.
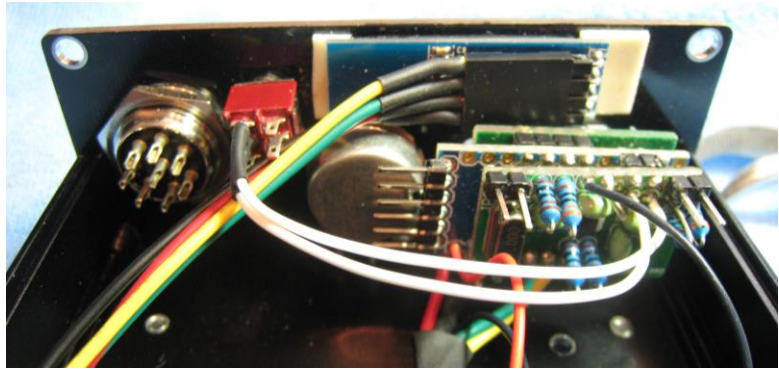
Note: If no header pin was placed on the Sandwich, you may clip off the 2 pin connector and solder the wires on the Sandwich I2C buss.

- o The Black wire from the cable connects to ground.
- o The Red wire from the cable connects to +8V (can be connected to the 8V on the Gain control.
- o Note: There is a 5-volt regulator attached to the cable assembly with a 3 pin connector.

☐ Mount the new faceplate to the bottom case while placing the Sandwich through its new hole

☐ Secure the Sandwich to its new position.

☐ Secure the new faceplate.
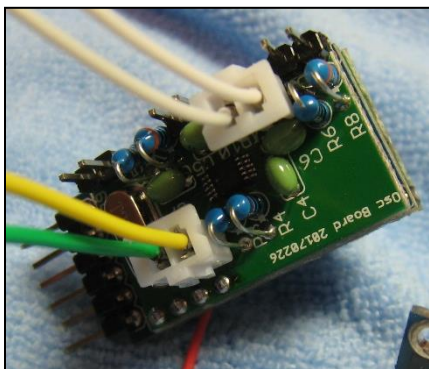
Note: the two white wires go to the Dual Band Switch. While the Green and Yellow connect to the I2C Buss.

Yellow Wire is: SDA

Green Wire is: SCL

Turn on Power to test the display.

Re-Assemble the radio case.

Original Faceplate:

New Faceplate: