

## SparkFun RS232 Shifter SMD (No DB9)

PRT-08780 ROHS

★★★★☆ 8

DESCRIPTION

FEATURES

DOCUMENTS

- 1.2x1.1"



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## SparkFun RS232 Shifter SMD (No DB9) Product Help and Resources

SUPPORT TIPS

SKILLS NEEDED

### RS232 vs TTL Serial Communication

last updated about 10 months ago

For more information about RS232 and TTL serial, try looking at our tutorial here => [ <https://www.sparkfun.com/tutorials/215> ].

### Lower Voltage

last updated about 10 months ago

We tried converting RS232 voltage down to 1.8V but it was not able to work. The lowest seemed to be around 2.1V with the RS232 Shifter. We recommend using the RS232 Shifter running at 5V (or anything higher than 2.8V) for the TTL side and further convert the signal down to 1.8V with the TXB0104 [ <https://www.sparkfun.com/products/11771> ]. The TXB0104 can translate down to 1.2V. Make sure that you have 5V and 1.8V to set the logic levels with each respective TTL side.

COMMENTS 15

REVIEWS ★★★★★ 8

## Customer Reviews

★★★★☆ 3.5 out of 5

Based on 8 ratings:

4 star	<div><div></div><div></div><div></div><div></div><div></div></div>	3
3 star	<div><div></div><div></div><div></div><div></div><div></div></div>	1
2 star	<div><div></div><div></div><div></div><div></div><div></div></div>	1
1 star	<div><div></div><div></div><div></div><div></div><div></div></div>	1

Currently viewing all customer reviews.

1 of 1 found this helpful:

#### ★★★★☆ Works great, once you figure out how to hook it up!

about 2 years ago by **Member #640561** ✓ verified purchaser

I was powering this with VCC=5v and wondering why the TX-O wasn't producing a signal on the RS232 side.. while my MCU can accept 5V signals, it only produces 3.3v logic level outputs.

Switched the VCC to 3v3 and everything is working perfectly!

1 of 1 found this helpful:

#### ★★★★★ Worked fine for both RX & TX for me

about 2 years ago by **Member #85027** ✓ verified purchaser

I have this device installed in a Motorola Micom Mobat 2ET radio, along with the Bluetooth Mate Silver WRL-12576, and the wireless serial connection is fantastic. Bidirectional data transfer is fully functional.

What may not be clear to someone who cannot read a schematic, and understand the circuit, is that the TX-0 on this board connects to the RXD on the serial device while the RX-1 on this board connects to the TXD on the serial device. When properly connected, this functions perfectly.

2 of 2 found this helpful:

#### ★★★☆☆ Shifter didn't work for transmitting (for me)

about 3 years ago by **Member #490216** ✓ verified purchaser

I could receive using this board (after realizing I needed a null modem), but couldn't send signals properly. I ended up getting a MAX232 which is working perfectly – should have gone that route all along for my project.

#### ★★★★☆ Lights respond but no RS232 signal

about a year ago by **Member #699505** ✓ verified purchaser

I'm using one of the bi-directional logic converters (BOB-12009) - the lights come on for both RX & TX but no signal on the RS232 transmit when my processor sends a signal. All I can figure is the logic converter doesn't have enough power. I spent about on 5 of 'em - can't get any to work. Used brand new converter and separate new power supply. Must be a bad batch.

#### ★★★★☆ No documentation!!!

about 9 months ago by **Member #1033676** ✓ verified purchaser

NO DOCUMENTATION ANYWHERE. A very simplified circuit schematic is not what I would consider documentation.

I did eventually get it to work, but with far more difficulty than necessary. Hint: try switching the Rx and Tx lines on both the RS 232 and TTL sides, and try all combinations. Also, try assuming the pins 1-5 are swapped (5-1), as it is hard to tell which side of the board is up. But it works!!

#### ★★★★☆ Worthless

about 8 months ago by **Member #1075253** ✓ verified purchaser

Look at the schematic before you buy this. The circuit doesn't do proper voltage conversion, it's just unreliable hack built with a couple transistors. I would strongly recommend buying the MAX3232 instead.

#### ★★☆☆☆ Doesn't work for me

about a year ago by **TroyF** ✓ verified purchaser

I'm hooking this up to a RPi3 in order to communicate with an RS232 device. On the RPi, I connected the 3.3V to Vcc, GND, UART0 TXD to TX-0 and UART0 RXD to RX-1. When sending from the RPi, the TX LED blinks,

but the signal coming out on the TXD pin is only the leading edge of each bit and is only about 100mV in

amplitude.

I tried to connect the DB9 RXD to TXD and read off the RX-I pin, but nothing comes across. Sadly, it appears this device does not work as advertised.

🔥 Kansukee/f replied on March 20, 2017:

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You can reach out to our technical support department here:

[https://www.sparkfun.com/technical\\_assistance](https://www.sparkfun.com/technical_assistance) I am sure they would be happy to assist you to the best of their abilities.





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