

Advantage-Devices

TTL to RS232 Adapter User Guide



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Date	Rev.	Author	Comments
01/09/06	A	GR	Preliminary Release
02/23/07	B	GR	Change C6, C7 to 35V. Input range now 5-24VDC.
04/16/07	C	GR	Remove note. Add cable drawing.
03/28/2011	D	GR	Updates

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Advantage-Devices warrants each product to be free from defects in material and workmanship for a period of **ONE YEAR** after the date of shipment. During this period, if a customer is unable to resolve a product problem with Advantage-Devices Technical Support, a Return Material Authorization (RMA) will be issued. Following receipt of a RMA number, the customer shall return the product to Advantage-Devices, freight prepaid. Upon verification of warranty, Advantage-Devices will -- at its option -- repair or replace the product and return it to the customer freight prepaid. If the product is not under warranty, the customer may have Advantage-Devices repair the unit on a fee basis or return it. No services are handled at the customer's site under this warranty. This warranty is voided if the customer uses the product in an unauthorized or improper way, or in an environment for which it was not designed.

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1. Introduction

The TTL-RS232 Adapter is used to connect TTL level signals to an RS-232 interface. The TTL side is a 9-pin female connector and the RS-232 side is a 9-pin male connector. The unit can be powered through one of the connector pins or through the side mounted power jack.

The TTL side has a voltage suppression network designed to protect against ESD and EFT.

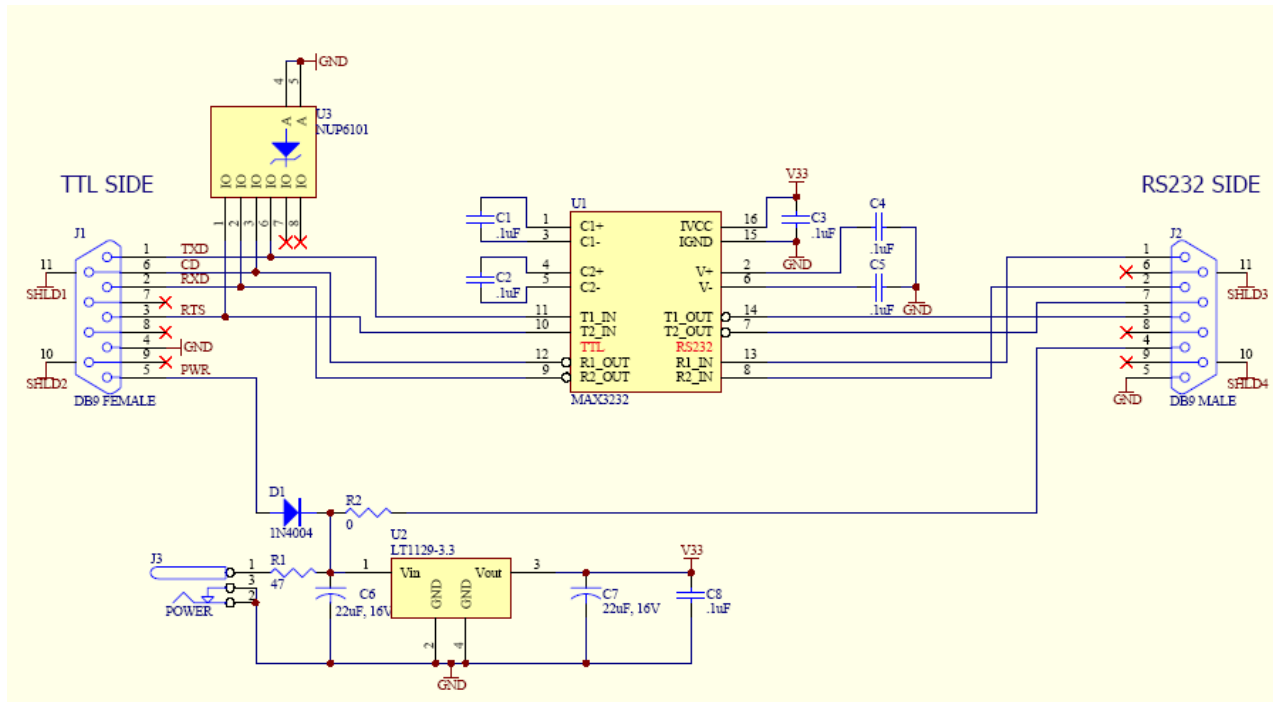
The unit can be powered by supplying **5-24VDC** on pin 5 of the TTL connector or through the side mounted power jack.

WARNING: When powering the unit from the side mounted power jack, the power is passed through to pin 4 of the RS232 connector. The pass through option can be disabled by removing R2.

2. Connections

TTL Signal Pin	Signal Name	RS232 Signal Pin
1 (Input)	TXD	3 (Output)
2 (Output)	RXD	2 (Input)
3 (Input)	RTS	7 (Output)
4	Ground	5
5 (5-24VDC)	PWR	4 (See Warning)
6 (Output)	CD	1 (Input)
7, 8, 9	No Connection	
		6, 8,9

3. Schematic



Note: C6 and C7 are 35VDC.

Advantage-Devices has a TTL to Ethernet product that has a TTL interface. This TTL-RS232 Adapter can be connected to the TTL-Ethernet Adapter so that an RS232 source can be used to setup and configure the TTL-ETH Adapter. The following cable diagram shows how to make a cable to connect a TTL-RS232 Adapter to a TTL-Ethernet Adapter.

Cable between TTL-232 and TTL-ETH

	DB9 Male		DB9 Female	
TO Female DB-9 on TTL-232 Adapter	TXD -1	—————	TXD -4	TO Male DB-9 on TTL-ETH Adapter
	RXD-2	—————	RXD-5	
	RTS-3	—————	RTS-9	
	GND-4	—————	GND-2	
	DCD-6	—————	DCD-3	

4. Technical Support

If you are experiencing a problem that is not described in this manual, please contact Advantage-Devices at (630) 245-1445.

Our phone lines are open from 8:00AM - 4:30 PM Central Time Monday through Friday excluding holidays.