

RS232 to RS232 Isolator

Installation Guide

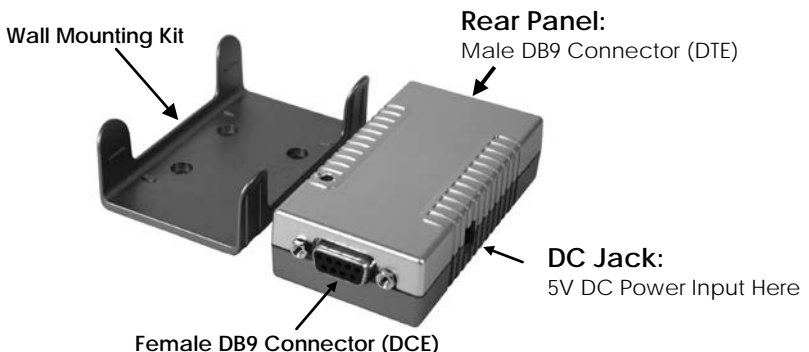
1. Introduction

Thank you for purchasing this RS232 (to RS232) Isolator and Surge Protector. It is designed for your PC, workstation, thin client, or server to provide an instant isolation solution for the RS232 serial devices. It provides a DB9 female connector (DCE, with standard RS232 signals, TXD, RXD, RTS, CTS, DTR, DSR, DCD and GND) that can be connected directly to your PC's RS232 port. An external 5V DC power source should be applied to its input DC jack. The power source can be supplied by either an AC power adapter or an USB-to-DC-Jack conversion cable.

Features:

- ✓ Provides one RS232 to RS232 Adaption
- ✓ Supports up to 2,500Vrms Isolation for all RS232 Signals
- ✓ Supports all RS232 Signals (TXD, RXD, RTS, CTS, DTR, DSR, DCD, and GND)
- ✓ Supports DB9 Female (DCE) to DB9 Male (DTE) Connector Conversion
- ✓ Supports Baud Rate up to 921.6 Kbps
- ✓ +5V DC External Power is Required, Powered by AC Adapter or USB Port with an USB-to-DC-Jack Cable
- ✓ Compact Size for Critical Applications
- ✓ No Driver Required for All Operating Systems

2. Layout: RS232 Isolator and Surge Protector



3. Installing the RS233 Isolator

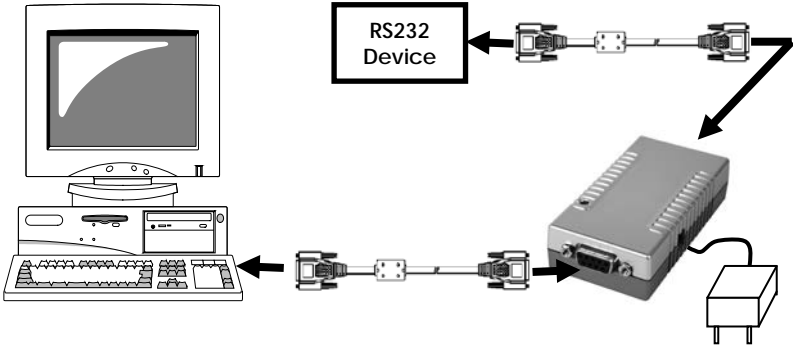


Since this isolator hardware unit should be powered by the external power source, please connect the 5V AC power adapter or the USB-to-Power-DC-Jack Conversion Cable to make sure the unit works properly. If you are using the USB-to-Power-DC-Jack Cable instead of the AC adapter, please make sure that the USB port is at Host side (the same side as the DB9 female connector), DO NOT connected to the USB port at the device side (the same side as the DB9 male connector), otherwise, the unit won't work and the DC power was passed though the isolation circuits so the isolator will not function properly.

1. Use static electricity discharge precautions.

Remove possible static discharge potential from any objects that the converter may come in contact with before installation. This can be accomplished by touching a bare metal chassis rail after you have turned off the power.

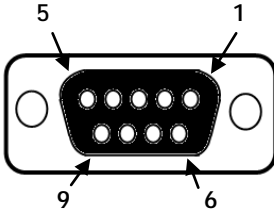
2. Locate an unused PC's RS232 port (with DB9 male connector, configured as DTE), connect it to the Isolator's DB9 female connector with a RS232 cable, find another cable to connect the RS232 Device to the Isolator's DB9 male connector.



3. Connect the 5V AC Adapter or USB-to-Power-DC-Jack Conversion Cable

4. Female DB9 Pin Assignments and Cable Wiring

DB9-Female Pin Assignment:



<u>9 Pins</u>	<u>Signal</u>
1	DCD
2	TXD
3	RXD
4	DTR
5	GND
6	DSR
7	CTS
8	RTS
9	NC

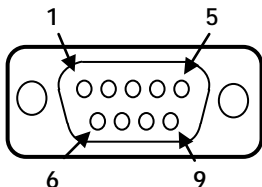
NC = No connection

DB9(Male, Host PC) to DB9(Female, Isolator) Wiring:

<u>DB9M(DTE, Host PC)</u>		<u>DB9F(DCE, Isolator)</u>
1 DCD	←	1 DCD
2 RXD	←	2 TXD
3 TXD	→	3 RXD
4 DTR	→	4 DTR
5 GND	—	5 GND
6 DSR	←	6 DSR
7 RTS	→	7 CTS
8 CTS	←	8 RTS

5. Male DB9 Pin Assignments and Cable Wiring

DB9-Male Pin Assignment:



<u>9 Pins</u>	<u>Signal</u>
1	DCD
2	RXD
3	TXD
4	DTR
5	GND
6	DSR
7	RTS
8	CTS
9	NC

NC = No connection

DB9(Male, Isolator) to DB9(Female, RS232 Device) Wiring:

<u>DB9M(DTE, Isolator)</u>		<u>DB9F(DCE, RS232 Device)</u>
1 DCD	←	1 DCD
2 RXD	←	2 TXD
3 TXD	→	3 RXD
4 DTR	→	4 DTR
5 GND	→	5 GND
6 DSR	←	6 DSR
7 RTS	→	7 CTS
8 CTS	←	8 RTS

6. Specifications

Type	Specifications
Connectors	DB9 Female (DCE), DB9 Male (DTE)
Number of Ports	1 RS232
RS232 Signals	TXD, RXD, RTS, CTS, DTR, DSR, DCD, GND
Baud Rate	Up to 921.6Kbps
Power Requirement	5V/100mA max.
Operating Temperature	0 to 60°C (32 to 140°F)
Operating Humidity	5 to 95% RH
Storage Temperature	-20 to 85°C (-4 to 185°F)