

The AB6290 is a compact, self-contained interface converter for conversion between the V.24/RS-232 and RS-422/485 communication standards. The AB6290 consumes very little current and is therefore able to be powered from the V.24/RS-232 interface. If the application of the AB6290 does not have interface power support, the converter may also be powered via an external AC power adapter.

It features three slide switches that provide the following functions:

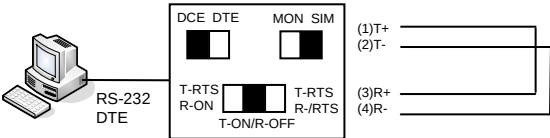
DCE/DTE; This two-position slide switch enables the user to switch the interface between data communication (DCE) and data terminal (DTE) modes.

MON/SIM; The normal setting for this two-position switch is in the “simulate” (SIM) mode. The “monitor” (MON) mode is a special mode whereby the interface converter can be attached non-obtrusively between an existing network and a protocol analyzer.

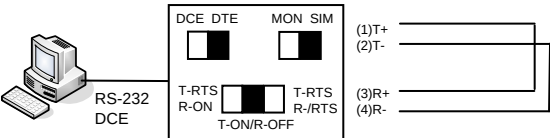
Three-position slide switch;
T-RTS,R-ON: In this position, the transmitter is enabled when RTS is active. The receiver is always enabled.
T-ON,R-ON: In this position, both the transmitter and receiver are enabled.
T-RTS,R-/RTS: In this position, the transmitter is enabled when RTS is active. The receiver is enabled when RTS is in-active.

APPLICATION EXAMPLES

Loop-back Test



Loop-back Test



AB6290 Multi-Drop Interface Converter



- MONITOR/SIMULATION** selectable
- DTE/DCE device setting** selectable
- FULL/HALF duplex mode** selectable
- Implements low priced LAN**
- Supports up to 32 users**
- Programmable control by RTS/CTS**
- TD/RD LED indicators**
- Power LED indicator**

AB6290 Interface pinouts RS-232 pin configuration

Pin 2	TD
Pin 3	RD
Pin 4	RTS
Pin 5	CTS
Pin 6	DSR
Pin 20	DTR
Pin 7	GND

RS-485 pin configuration		
Pin No.	Simulation	Monitor
1	T+	R1+
2	T-	R1-
3	R+	R2+
4	R-	R2-

Meaning of slide switches:

- ☒ **DCE DTE** : The converter is in DTE mode.
- ☐ **DCE DTE** : The converter is in DCE mode.
- ☒ **MON SIM** : The converter is in simulation mode.
- ☐ **MON SIM** : The converter is in monitor mode.

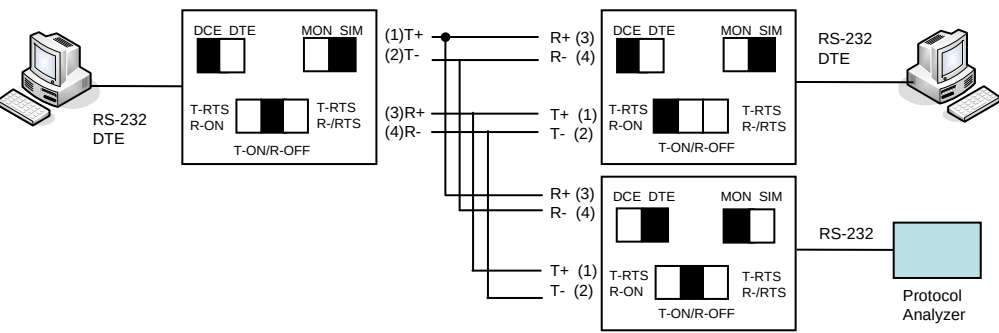
T-RTS R-ON ☒ T-RTS R-/RTS : The transmitter is enabled when RTS is active. The receiver is always enabled.
T-ON/R-ON

T-RTS R-ON ☐ T-RTS R-/RTS : Both the transmitter and receiver are always enabled.
T-ON/R-ON

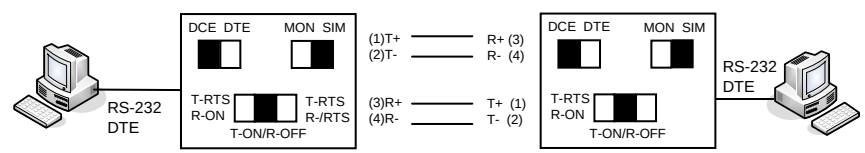
T-RTS R-ON ☐ T-RTS R-/RTS : The Trasmmitter is enabled when RTS is active. The receiver is enabled when RTS is not active.
T-ON/R-ON

Application Notes

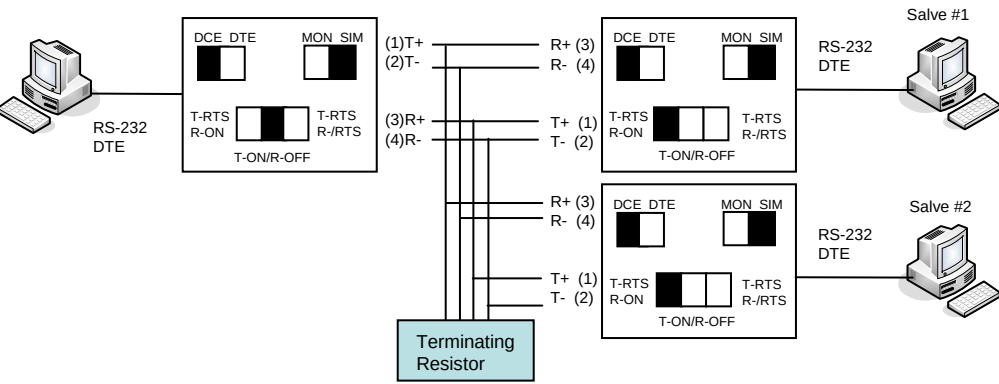
•monitoring



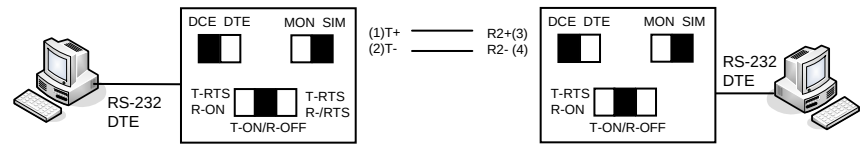
•point to point with 4 wires, full duplex



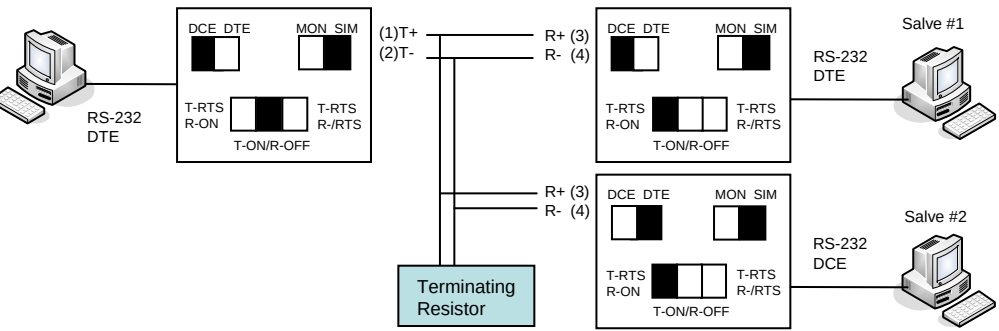
•Multi-drop with 4 wires, full duplex



•point to point with 2 wires, simplex



•Multi-drop with 2 wires, simplex



•point to point with 2 wires, half duplex

