icCL-II

CURRENT LOOP INTERFACE CONVERTER

The icCL-II is a compact, self-contained interface converter for conversion between the V.24/RS-232 communication standards and four wire current loop. The icCL-II is capable of transmission rates up to 128K bps over distances up to 1000 meters using shielded twisted pair (STP) cable.

The icCL-II features a 25 pin D-SUB connector for attachment to V.24/RS-232, four terminal posts for connection to current loop lines, a connector for the external AC power converter, a power indicator LED, and transmit (TD) and receive (RD) LEDs.

The icCL-II also features four slide switches which provide the following functions:

60 / 20; This two position slide switch enables the user to select between 60mA and 20mA current loop settings.

DCE/DTE; This two position slide switch enables the user to switch the RS-232 interface between data communication (DCE) and data terminal (DTE) modes.

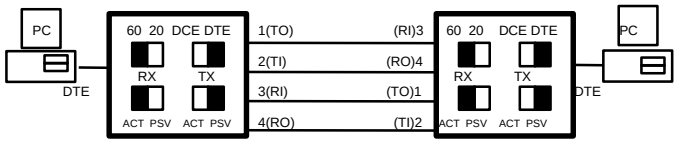
RX ACT / PSV; This two position slide switch selects between active (current source) and passive (current loop) modes for the receive lines.

TX ACT / PSV; This two position slide switch selects between active (current source) and passive (current loop) modes for the transmit lines.

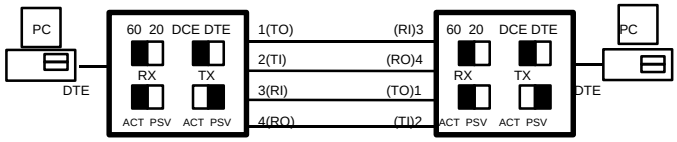
- RS-232 data rate up to 128kbps
- Tx, Rx Active/Passive selectable
- 20 OR 60 mA selectable
- DTE/DCE device setting selectable
- TD/RD LED indicators
- Power LED indicator

APPLICATION EXAMPLES

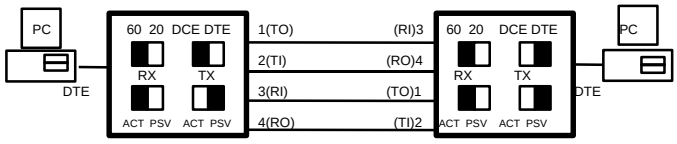
DTE to DTE



DCE to DCE



DCE to DTE



icCL-II Interface pinouts

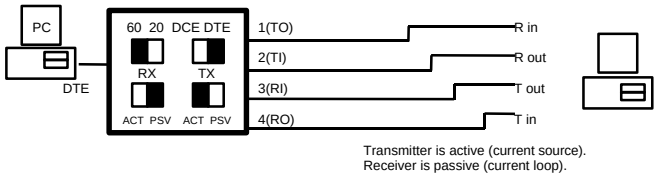
RS-232 pin configuration

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

Current loop pin configuration

Pin No.	Active/Passive
1	T out
2	T in
3	R in
4	R out

APPLICATION EXAMPLES

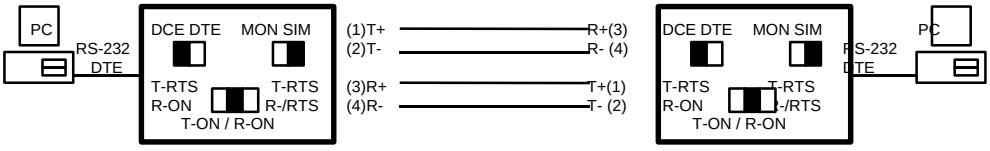


Transmitter is active (current source).
Receiver is passive (current loop).

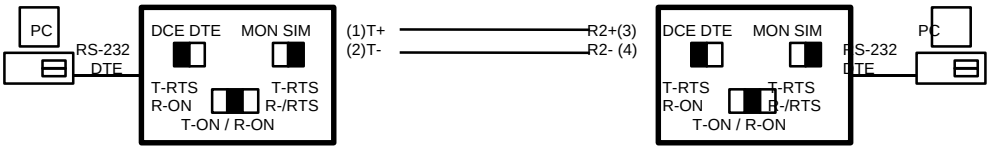
Transmitter is passive (current loop).
Receiver is active (current source).

APPLICATION EXAMPLES

- point to point with 4 wires, full duplex

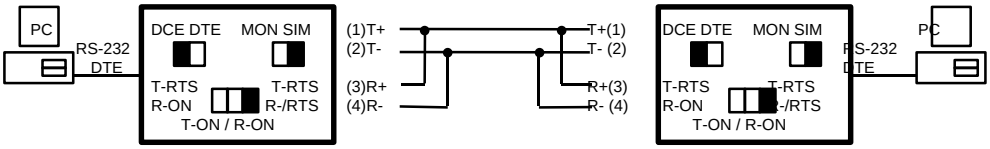


- point to point with 2 wires, simplex

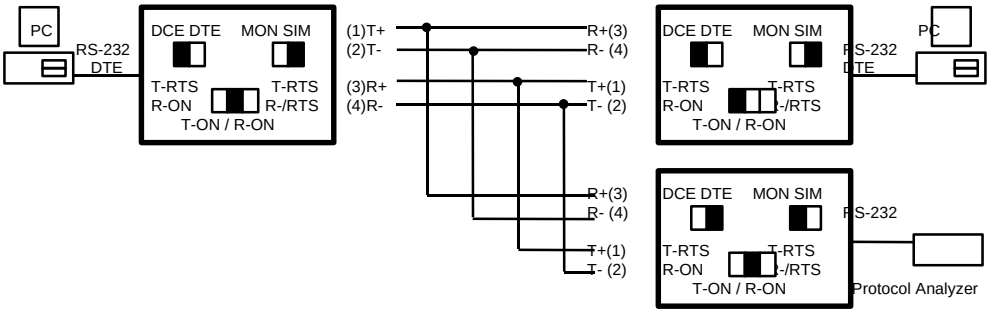


APPLICATION EXAMPLES

- point to point with 2 wires, half duplex

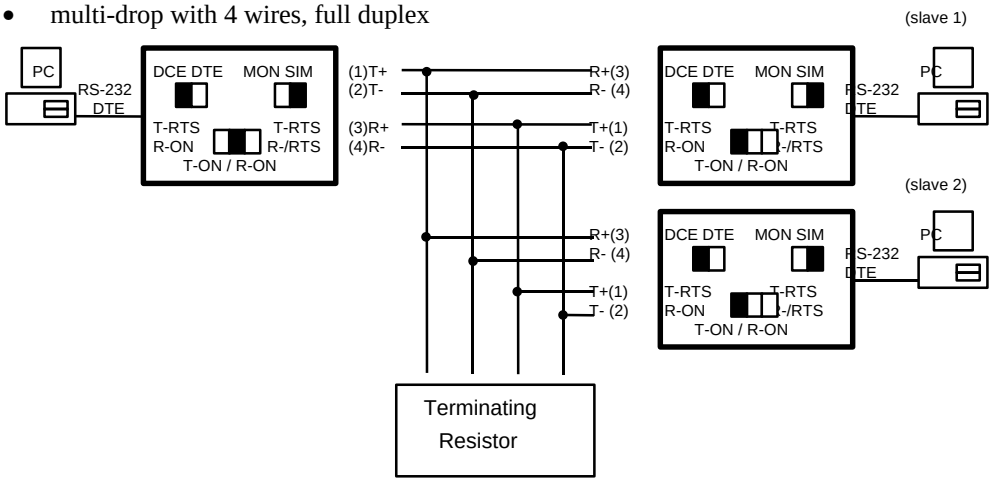


- monitoring



APPLICATION EXAMPLE

- multi-drop with 4 wires, full duplex



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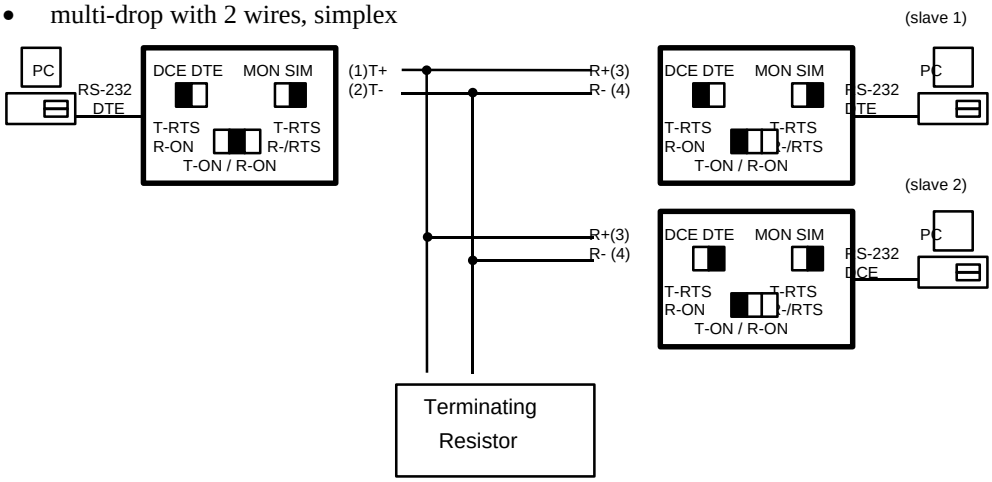
- multi-drop with 2 wires, simplex