SERIAL ADAPTER Mod. *658*

The adapter Mod. 658 converts the serial RS232 transmission protocol into RS422 or RS485.
The Mod. 658 does not need any external power supply because It gets It directly from the computer serial port.
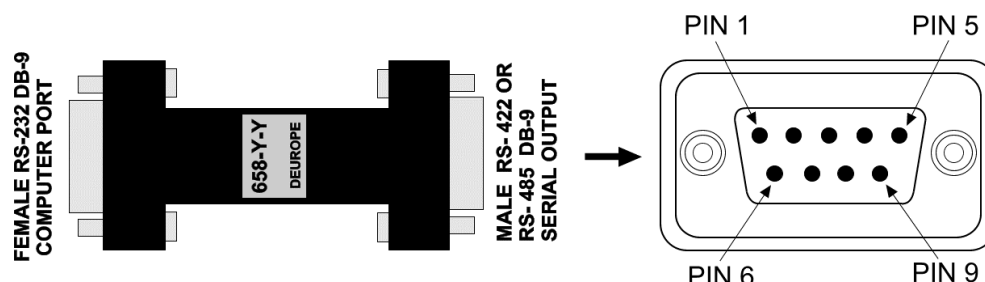The Mod 658 has a suffix "-5" for RS485 and "2" for RS422.

Fig. 1: View of adapter and computer DB9 male connector.

Both versions of adapters are able to bear a 250 Ohm load and to be paralleled (32 paralleled adapters maximum).

The maximum cable lenght between the source of the signal and the adapter (connected to the computer port) is 400m.

- *INSTALLATION*:
  Insert the female DB9 connector side of the adapter into the male DB9 connector of the computer and then screw the fixing screws.

- *POWER SUPPLY*:
  In order to feed power supply to mod. 658 adapter, activate (by using Windows® operating system commands) the signals **DTR** on **PIN4** and **RTS** on **PIN7** (all software made by DS Europe automatically activate these signals).

DB-9 PIN (MALE)	658-5-Y (RS-485)	658-2 (RS-422)
PIN 1	GND	GND
PIN 4	DATA -	TXD -
PIN 5	DATA +	TXD +
PIN 8	-	RXD -
PIN 9	-	RXD +

Table 1: Male DB-9 connection.

- *MALE DB9 OUTPUT CONNECTION*:
  In *Table 1* are described the electrical connections of the mod. 658, for both versions, with the device that generates the signals.

- *MODEL. 658 – 2 – Y (RS – 422)*:
  In *Fig.2* there are the electrical connection of RS-422 version with the device that generates the signals.
  It is to be taken care to cross the TXD with RXD and to connect the positive leads with positive ones and the negative leads with the negative ones.
  It is to be referred to the instruction manuals of the devices generating the signals to identify their connection codes.
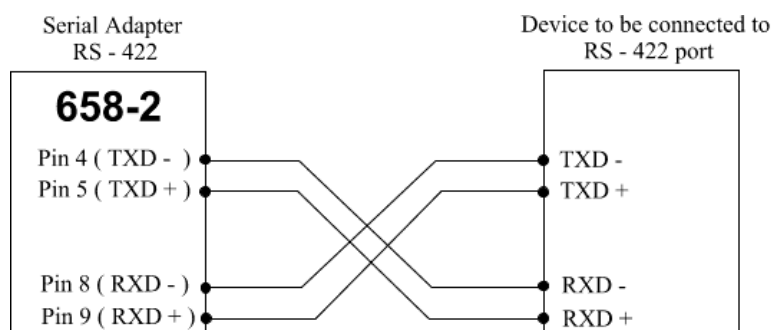

Fig. 2: Male DB-9 serial connection for RS - 422.

- *MODEL. 658 - 5 - Y (RS – 485)*:
  In *Fig.3* there are the electrical connection of RS-485 version with the device that generates the signals. It is to be taken care to connect DATA+ with the corresponding DATA+ and DATA- with the corresponding DATA-.
  For a "multi-drop" parallel connection It is to be taken care to parallel connect the devices generating the signals by connecting all DATA+ (of the devices) together and all DATA- (of the devices) together.
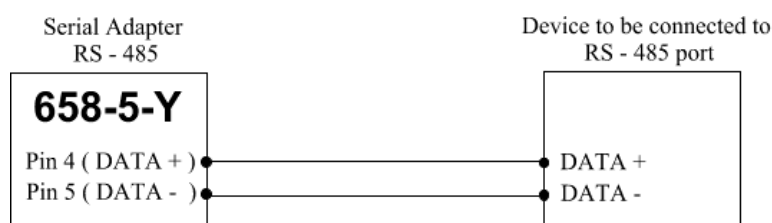

Fig. 3: Male DS9 serial connection for RS – 485

Connect the end resistance (necessary in multi-drop connections) only on the last device farer from the 658.
In case of not successful communication with the connected device, check the cabling and the polarity of DATA+ and DATA-.
Verify that the computer and the device generating the signal have been set at the same baud rate of the mod. 658 by checking Its version with the suffix "-Y" (example: 658-5-57600 can communicate only with devices at a 57600 baud rate).