RS232 Pinout

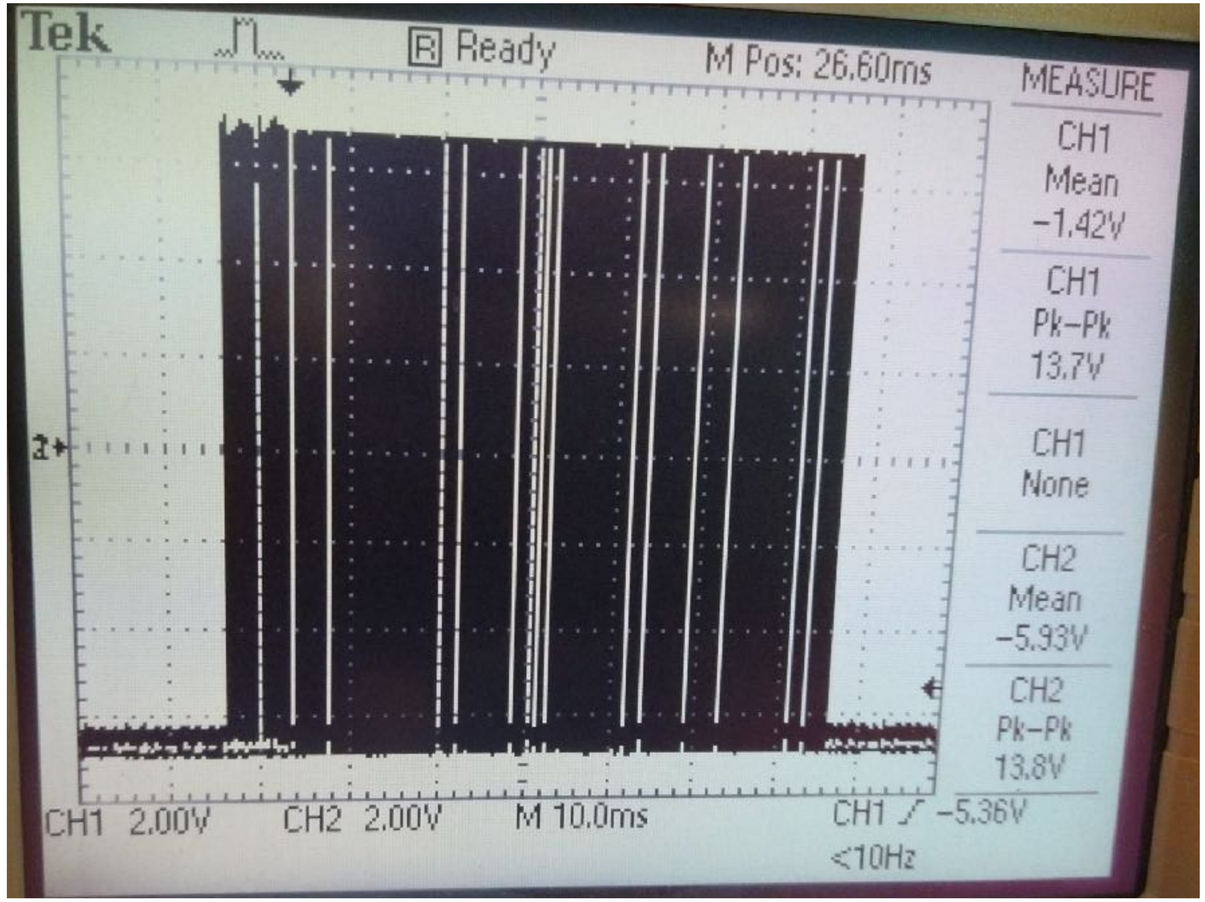
Pin #	Signal name	Scope channel #	Signal Description
2	RXD	CH1	Receive Data; The data sent from the Data Set (XGS600) and received by the Data Terminal (c1vac/laptop)
3	TXD	CH2	Transmit Data; The data sent from the Data Terminal (c1vac/laptop) and received by the Data Set (XGS600).
5	GND	GND	Ground; The common return for all signals on the interface.

http://www.interfacebus.com/RS232_Pinout.html

Laptop to XGS600 (successful communication)

Read request command sent from laptop to XGS600 on pin#3 (TXD/CH2)

Pressure reading data sent from XGS600 to laptop on pin#2 (RXD/CH1)



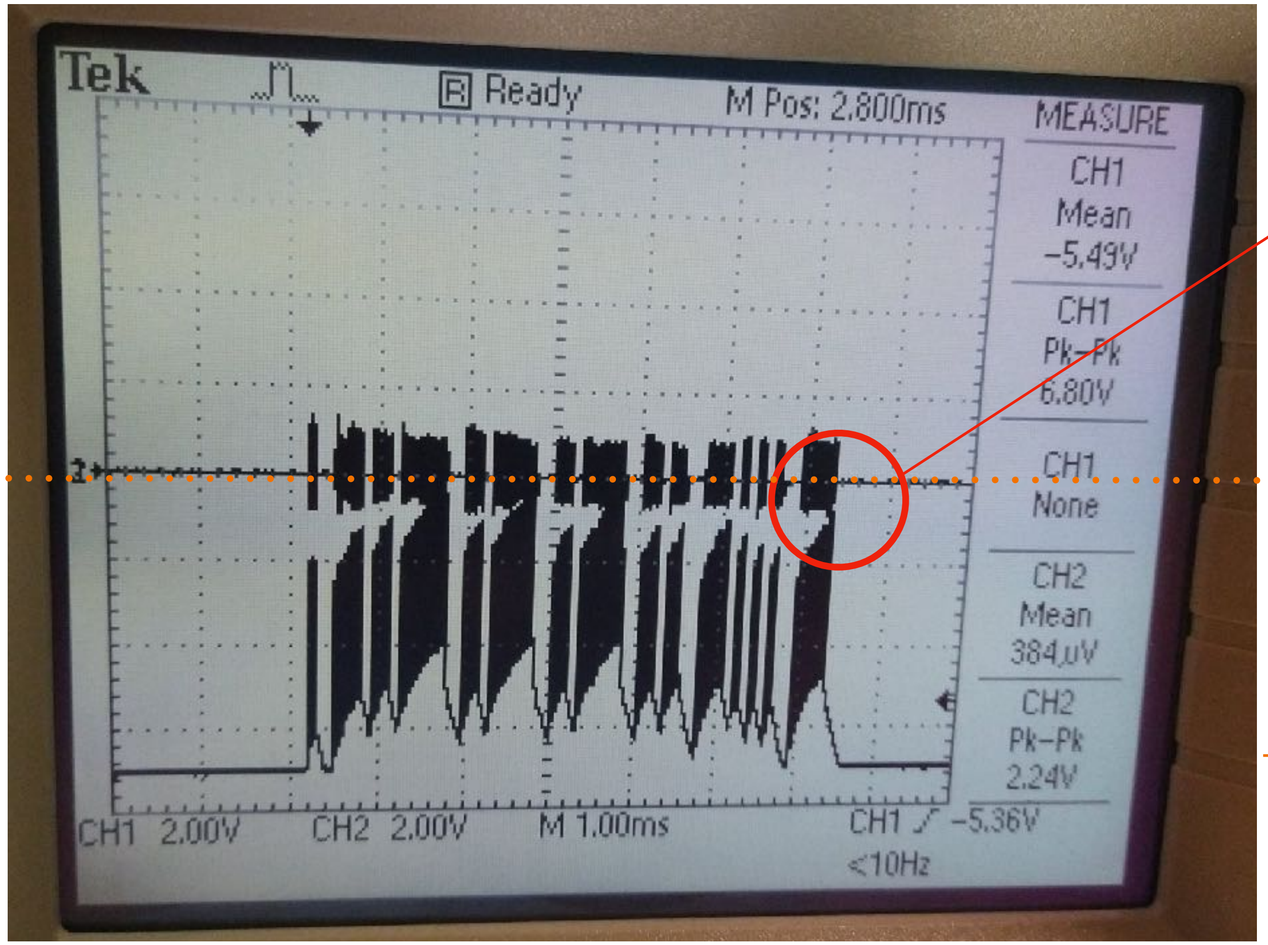
IOLAN to USBserial

Read request command sent from c1vac to laptop on pin#2 (RXD/CH1)

Successful communication : Note however that IOLAN is writing to the wrong pin#2, i.e it is behaving like a dataset instead of a data terminal, which is why we are able to communicate with both the XGS600 and the IOLAN from our laptop.

IOLAN to XGS600

Read request command sent from IOLAN to XGS600 on pin#2 (RXD/CH1)



Likely Issue : The mean value of pin#3 (TXD/CH2) should have dropped down to approx -5 V but both IOLAN and XGS600 conspire to drop RXD/CH1 instead, because IOLAN pin#2 and pin#3 have been cross-wired by the RS232 cable.

Remedy : Swap out the “cross-wired” RS232 9-Pin Null Modem cable (Male-to-Male) with a “normal” RS232 cable (Male-to-Female)

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