

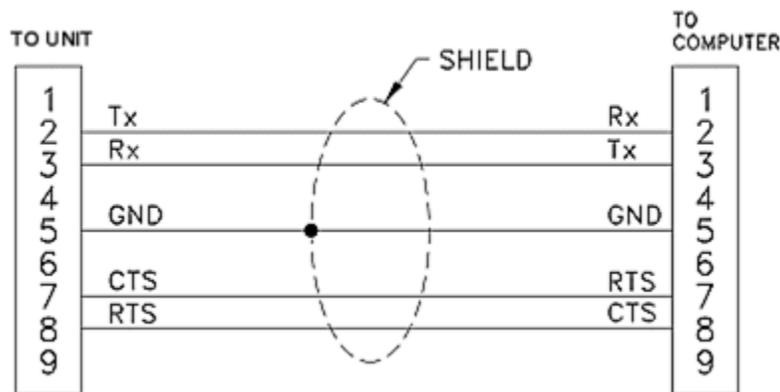


Technical Note: 10000056

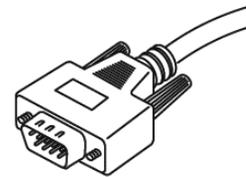
RS-232 Communications Checklist

Cable

Under normal circumstances you will use the cable supplied by INFICON. However you may find yourself in a situation where you need to either purchase or fabricate a cable for communicating via RS-232. That cable should match the pin out shown below.



A digital ohmmeter is normally used to confirm these connections.



System Connections

One of the most common problems in an RS-232 interface has nothing to do with software. It's usually the result of a loose connection at the computer, Maxtek instrument or BOTH! So it's important to make sure that connector is fully seated when you plug it in. Sometimes a little force is required, but be careful not to break the connector on the Maxtek instrument or on your computer!

Once the cable is fully seated, secure it in position with the screw-on type fasteners. Usually they should be no tighter than "finger tight" so they can be removed if need be.

Interface Address

(Not used by the PM-700 Series Plating Monitors)

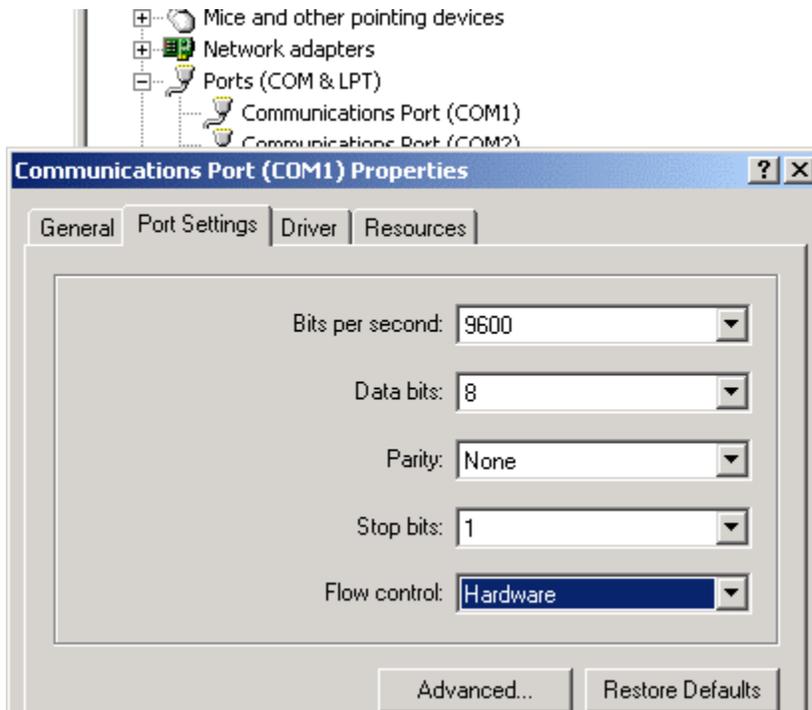
When using a standard like RS-485, each device has a unique identifier, called the Interface Address, so the computer can tell which device it's talking or listening to. Though the RS-232 standard does not support connections to or communications with multiple devices, the Interface Address is still a mandatory component in the instrument's communications protocol. So its accuracy is important nevertheless. Refer to the instrument's service manual or the software's Help for details on determining and/or setting the Interface Address.

NOTE: All of the INFICON Maxtek products are set to the default Interface Address 1 prior to shipping.

Windows Configuration

In some rare cases where the communications works but proves to be unreliable, the problem can be solved with the Flow control setting. First open the Device Manager (see your Administrator or Windows documentation for details). Next find the Ports section and the Communications Port you're using. Double-click its icon and click the Port Setting tab in the resultant dialog box. Find the Flow control pulldown box and change it to "Hardware". Click OK to save it and close the Device Manager.

At this point you should be prompted by Windows to restart your computer, but even if you're not prompted you should still restart your computer to force the new changes to take effect.



Program to Test Communications

The final step is to actually test the communications. In most cases those who want to communicate with INFICON Maxtek products already have the necessary program, i.e. the RQCM Data Logging software or the DCM-250, or they've already written their own.

In many cases we may have a diagnostic program that you may find useful so feel free to contact us.

Document Title:	RS-232 Communications Checklist
Document ID:	10000056
Creation Date:	
Modified Date:	7/17/2007
Related Products:	DCM-250 , MDC-360C , MDC-361C , RQCM , TM-400
Product Line:	Thin Film / Vacuum
Notes:	This tech note applies to any products that support the RS-232 interface. Originally released as THIN FILM TECHNICAL NOTE V-156