

Tissot Interfacing Kit

www.Serialtools.tv

Working With Tissot Data

This kit contains all the necessary components/adapters to interface the Serialtools scoreboard data meter with the Tissot Scoreboard to simplify testing of each data port with predictable results.

The Tissot interface panel provides data in both RS232 and RS422 formats. It should be noted that Tissot sends the data at twelve times the baud rate of OES or Daktronics. This higher speed difference requires some degree of caution when choosing which port to use. The differences between RS232 and RS422 can be simplified by thinking of RS232 as “unbalanced” and RS422 as “balanced”. A much more detailed explanation of the two can be found on www.wikileaks.com

When using the RS232 port the high speed restricts the cable length to about ten feet. It is best used with a Hi-speed short haul modem. Be aware the RS232 port is configured as DTE with pin 3 as TX. This is identical to the way a RS232 computer port and the data meter are configured. To receive data via this port a NULL adapter is needed. Keep this in mind when interfacing to this port.

The RS422 format enables the use of much longer cable runs without the need for using components like short haul modems. The RS422 ports support RJ45 connectors for CAT5 cables or bare wire connections. Keep in mind that that since RS422 is a “Balanced” transmission configuration using twisted pair wire, like CAT5, is required.

Tissot sends data packets differently than OES or Daktronics. With OES/Dak scoreboards we are used to seeing clock data within every packet sent. Tissot sends individual packets that may contain; scores, period, game clock, shot clock, time outs, etc. These packets are sent only when needed. Be aware that you may see a data led flash, but not receive the information you’re looking for. Be patient, it will come in a different packet.

Contents of this Kit

The kit contains;

RJ45 to DB9F adapter

1Ft DB9M/F cable

DB9F/F NULL adapter

RS422 to RS232 converter w/terminal adapter

When testing the Tisot RS232 DB9 port you must use the NULL adapter to convert the port from DTE to DCE. Remember to restrict cable lengths to less than ten feet.

When testing the RS422 ports you will need to place the RS422 to RS232 converter in line between the panel and the meter. The meter will “port power” the converter.

Using the 1Ft. DB9 cable between the 422/232 converter and the meter simplifies the connection.

When testing the RS422 RJ45 port. Use the 422/232 converter and the RJ45 to DB9F adapter with a standard RJ45 CAT5 cable. (if you are using a different brand of 422/232 converter be aware there is no RS422 to DB9 pin out standard. This adapter is configured to work with the DB9 pin out of the converter included in your package. Your mileage may vary when using a different converter.)

When testing the RS422 bare wire ports. Use the screw terminal block that came with the converter. The terminal marked “RXD +” goes to the Red terminal on the panel while the terminal marked “RXD-“ goes to the black terminal.

