ASSAY DATA OUTPUT OF THE GENESYS GENII™

APPLICATIONS SUPPORT

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The output capabilities of the Genesys Genii™

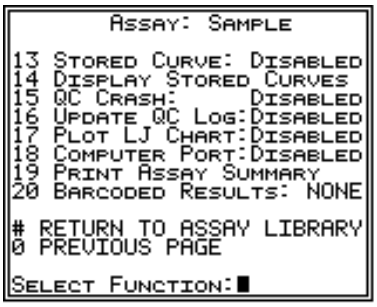
The Genesys Genii has two RS232 serial ports, using the compact 8 pin round DIN connector. The first port is the default printer port, which has a picture of a printer on it as seen here. The second port is for serial output to a terminal, such as a computer or LIS. This port has a picture of a computer on it as seen here. RS232 is a serial data protocol supported by all major computer operating systems, Apple Macintosh OSX, Windows, Unix and Linux. If the target computer does not have a serial port, USB to RS232 serial converters are widely available and effective. The Genii sends an ASCII data stream through the serial port to a target serial devise. In order for serial communication to work properly, the two devices (the Genii™ and the Computer) must be configured with the same settings.

8 Pin DIN

The Genesys Genii™ has configurable serial transmission baud rates of 600, 1200, 2400, 7200, 9600 and 38500 bps. The baud rate is set in the System Setup. The remaining serial transmission settings; data bits, stop bits, parity and flow control are fixed and will need to be set on the receiving computer. The target computer setting must be: 8 data bits, 1 stop bit, no parity, no flow control, no handshake (if available).

Assay Settings

In order to output your assay results, each assay that you want to send to the computer must be configured to output the data to the computer (serial) port. This setting is made in the Assay Library. Enter the Assay Library, edit the assay that you want to output to the computer. If all your Assay configuration information is correct, proceed to the second page of the assay summary and choose 18# the Computer Port; enable the port.



Page 2 of the Edit Assay Screen.

The Serial Output Data

When outputting the assay results to the computer port, the Genii™ sends all the data, with the exception of graphics (the curve). Everything else that is seen on the printout, including the header, comes through the port . This consists of the headers and results. It is up to the receiving computer program to parse the data. By outputting all the information, the user can pick and choose what data they wish to use and what to discard.

The data is captured on the Computer by using a Serial Terminal program. These programs are common for all operating systems, and many computers come preloaded with such programs. Some example programs are, PROCOMM, ZTERM, KOALA TERM, TERA TERM, PuTTY and HYPERTERMINAL . There are many options for serial data capture, you will need to find what works best for you. Since it is impossible for LTI to know the specifics of your computer, we can only offer suggestions to help you with your configuration. A local IT professional should be qualified to set up this connection for you.

Connecting the Genesys Genii™ and a computer

The Genesys Genii™ must be physically connected to the receiving computer using an RS232 compatible cable. Since the Genesys Genii™ uses an 8 Pin DIN for connection, a suitable cable must be purchased. For this purpose LTI stocks and sells an 8 pin to 25 pin modem cable for hookup to the most common RS232 computer port connector. If you need a 9 pin serial connector, 9 pin to 25 pin converters are readily available at computer supply stores. The pin configuration for this cable is shown to the left.

DIN 8	DB 25	
1	4	RTS
2	5	CTS
3	3	TxD
4	7	GND
5	3	RxD

Cable Pinout

8 Pin DIN to DB25 Serial (modem) Cable LTI PN CAS121

Some computers use serial ports (also called com ports) for the mouse and modem. Knowing the configuration of your computer is important. It is possible for your computer to have an open physical com port, but still have that port not available because of an internal modem using the COM address. You may wish to consult a local IT expert to help you determine your computer configuration. Another option is to purchase a USB to Serial Adapter, then you can dedicate its virtual serial port to your Genii™ communication without running into any COM Address conflicts.