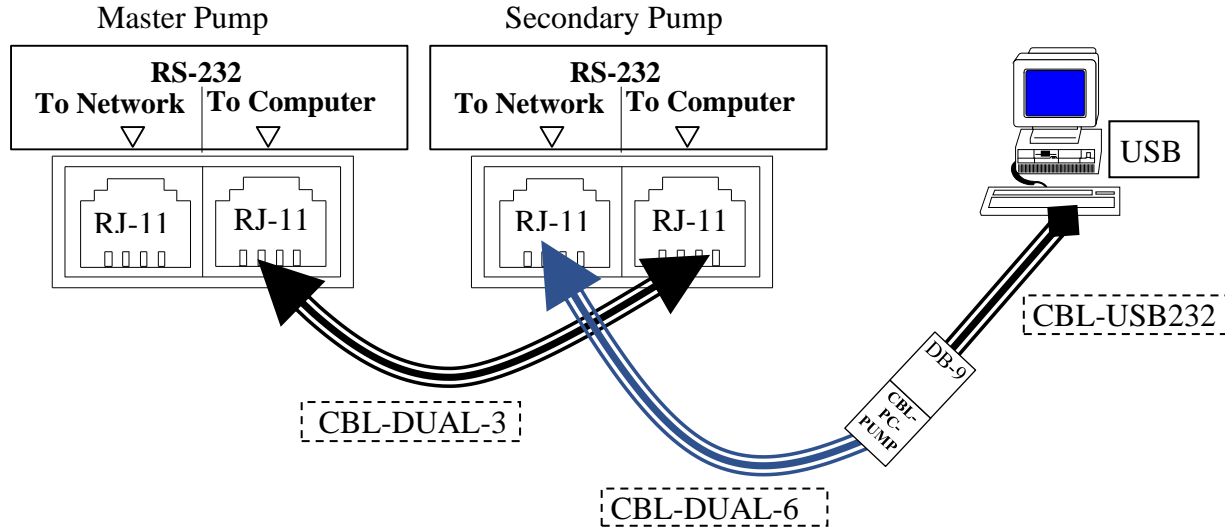


PC Communication with a Dual Pump System



CBL-DUAL-3 is identified with a RED band on the cable.
 CBL-DUAL-6 is identified with a BLACK band on the cable.

Requirement: Minimum Firmware Versions:

Syringe Pumps:	Standard: 3.930	'X Firmware: 4.665	'X2 Firmware: 5.665
Peristaltic Pumps:	Standard: 0.171		'X2 Firmware: 5.171

Dual pump systems, using synchronization cable CBL-DUAL-3, cannot connect to a computer using the standard RS-232 Primary Network Cable, CBL-PC-PUMP-7. Cable CBL-DUAL-6, connected as shown, makes communications possible.

Note: Communications will only be possible with the Master Pump. When configured in a special communications mode, commands to the Master Pump are addressed using the system address “*”. For example, to query the Master Pump's firmware version, send the command:
 *VER

Control commands sent to the Secondary Pump from the Master Pump will also be received by the PC. These commands will all be formatted as standard commands, terminated by a "Carriage Return" <cr> character. Response packets to PC commands will be terminated by a <ETX> character.

Part #CBL-DUAL-KIT PC Communication with a Dual Pump System Cable Package

Kit Parts List:

CBL-USB232	USB to RS-232 serial converter cable	Attaches to USB on PC
CBL-PC-PUMP	DB9 to RJ-11 converter	Attaches to DB9 on CBL-USB232
CBL-DUAL-6	PC RS-232 to Dual Pump system cable	Connects CBL-PC-PUMP to "To Network" on Secondary Pump
CBL-DUAL-3	Dual Pump synchronization cable	Connects "To Computer" on Master Pump to "To Computer" on Secondary Pump
CBL-NET-7	2 cables. Extra cables to convert setup to standard pump RS-232 network	