

10.1 Data Format

The Data Transmission from the host to the Cobra L/S and from the Cobra L/S to the host use the same data format. Communications are RS 232 as follows: 19200 baud, no parity, 8 bits, 1 stop bit and no handshaking.

10.2 Command Summary from Host to Cobra L/S

All Commands require 3 bytes, followed by a CR. Shorter commands should be padded with a CR to make them 4 bytes long, total.

Q Get Cobra's attention (Cobra will stop running, and echo ok) and print "PC Host active" on line 4 of the LCD screen. When the PC host releases control, "PC link Idle", will appear on line 4 of the LCD, if the Cobra L/S was idle, otherwise, the run will continue from where it was interrupted, unless an Rn or Gn command had been issued by the host. Note that parameters updated with the MWn command will not take effect until the batch is started the next time.

Attempts to communicate with the Cobra L/S while it is performing a manually initiated rinse will be ignored.

After the Cobra L/S has responded to the Q command, the following commands are available:

Note...For commands with a method parameter, the examples use method 1. In the Mode After column, remote indicates the PC Host stays in control after the command is executed, and the Cobra keypad is disabled. Local means control has transferred back to the Cobra.

<u>Command</u>	<u>Example</u>	<u>Mode After</u>	<u>Description</u>
MWn	77 87 01 13	Remote	Program method parameters (requires parameter string to follow)
SW	83 87 13 13	Remote	Program system parameters (requires parameter string to follow)
Rn	82 01 13 13	Remote	Start running method n
V0	86 48 13 13	Local	Turn off Verbose mode, no status messages will be sent while the Cobra is running
V1	86 49 13 13	Local	Turn on Verbose mode, "PC Host active" LCD message changes to "Linked to host"
MRn	77 82 01 13	Remote	Request Method parameters for method n
SR	87 82 13 13	Remote	Request System parameters
ST	87 84 13 13	Local	Request Current status. One of the following series of two binary bytes, followed by CR will be sent: 1-10, 1-12 0-Running method, sample 0, 101 - Manual mode, 0, 102 - Idle
GO	71 79 13 13	Local	Resume running if a method was interrupted, or return to local control if Cobra was not running.