



## SERIAL PORT (RS-232) TECHNICAL INTERFACE GUIDE ORBITAL SHAKERS

### RS-232

SERIAL PORT SETTINGS: BAUD RATE - 1200 DATA BITS - 8 NO PARITY STOP BIT - 1 FLOW CONTROL - NONE

STARTUP: When the shaker is new the command 'I=\*' may be needed to take it out of index mode.

COMMAND LIST	FORMAT	NOTES:
1. Input Speed Set Point and start motor	'S' + 4 DIGITS	4 DIGITS ARE ASCII SPEED IN RPM
2. Stop motor	'O'	SINGLE LETTER COMMAND
3. Set timed mode and load time, starting timer	'N' + 4 DIGITS + 2 DIGITS	4 DIGITS ARE ASCII MINUTES, 2 DIGITS ARE ASCII SECONDS
4. Set continuous mode, loading 0 for time, start timer	'C'	
5. Stop timer & reset to set point value	'A'	
6. Input Temperature Set point and start heater	'K' + 4 DIGITS	4 DIGITS ARE ASCII TEMPERATURE IN DEGREES C
7. Stop Heater Operation	'Z'	
8. Dump all parameters	'U'	Response is NM followed by 4 digits for minutes and 2 digits for seconds showing current time on display, followed by SM followed by 4 digits for measured speed, followed by KM followed by 4 digits for measured temperature, followed by N followed by 6 digits for setpoint time, followed by S followed by 4 digits for setpoint speed, followed by K followed by 4 digits for setpoint temperature, followed by the letter R or S depending on whether the motor is running, or stopped, followed by the letter H or S depending on whether the heater is heating or stopped.
9. Report (parameter output frequency)	'R' + 3 DIGITS	3 DIGITS ARE ASCII REPORT COMMAND IN SECONDS
10. Set Index number	'I=' + 2 DIGITS	2 digits set unit # at 0 to 99
11. Clear Index number	'I=*'	* says indexing is turned off