

5. PC SOFTWARE CONTROL OPTION

5.3.2. MasterSonic Generator Commands.

NOTE: Each command is terminated with carriage return (CR) ASCII code HEX ="0D " or decimal = 13

Inquiry Commands:	
%05f(CR)	inquire for Current Frequency of the generator
%05s(CR)	inquire for Current Fast Sweeping of the generator
%05d(CR)	inquire for Current Sweeping of the generator
%05w(CR)	inquire for Current PWM Period of the generator
%05m(CR)	inquire for Current PWM coefficient of the generator
%05t(CR)	inquire for Current potentiometer value
%05c(CR)	inquire for Current Electricity value of the generator
%05p(CR)	inquire for Current Power of the generator
%05SR(CR)	inquire for Firmware Version
%05u(CR)	inquire for Set Ultrasonic Power
%05?(CR)	inquire for Phase, Current and Tracking information

Inquiry Reply Formats:	
#02fxxxxx(CR)	Current Frequency reply. (xxx is frequency in kHz) o (0-255kHz)
#02sxxxxx(CR)	Current Fast Sweeping reply. o (0-255stp)
#02dxxxxx(CR)	Current Sweeping reply. o (0-7)
#02wxxxxx(CR)	Current PWM Period reply. o (1-100) - (10ms-1000ms)
#02mxxxxx(CR)	Current PWM coefficient reply. o (0 - 100%)
#02txxxxx(CR)	Current position of power potentiometer. o (0-100%)
#02cxxxxx(CR)	Current Electricity value reply. o (0-400) (0-4A)
#02pxxxxx(CR)	Current Power reply. o (0-100%)
#02SRxxx	Firmware Version Reply
#02uxxxxx(CR)	Set Ultrasonic Power (0-4095)
#02?pppcccttaaavvvs(CR)	ppp - Phase (0-999 relative units) s - Generator Status: ccc - Current (0-500) (0-5A) 0 - OFF ttt - Tracking (0-60 relative units) 1 - ON aaa - AC Current (0-500) (0-5A) 2 - stopped form external protection vvv - OOutput Voltage (0-999V) 3 - stopped from Output overvoltage

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Start/Stop Generator Ultrasonic Power Commands:	
@05start(CR)	Start command
@05stop(CR)	Stop command
@05wr(CR)	Write command

Set New Parameter Value Commands:	
#05fxxxx(CR)	Sets a new Operating Frequency for the generator (0-255)
#05sxxxx(CR)	Sets a new Fast Sweeping Frequency (0-255)
#05dxxxx(CR)	Sets a new Sweeping Frequency (0-7)
#05wxxxx(CR)	Sets a new PWM Period 1-100 (10-1000ms)
#05mxxxx(CR)	Sets a new PWM Coefficient (0-100%)
#05pxxxx(CR)	Sets new Power (0-100%)
#05uxxxxx(CR)	Sets new Ultrasonic Power (0-4095 steps)

NOTE: The generator replies with a character ">(CR)" after receiving the setting parameters. The reply is not controlled.

Data transfer: According to RS232 / RS485 Protocol.

Note: The manufacturer recommends that only original MasterSonic MSA2339 Adapter is used with the MasterSonic generator.

Comments:

MODE: Asynchronous

DATA: 8 data bits

Stop: 1

Baud rate: 19200

Parity: No

Txd - 1 = Send

Rxd - 0 = Receive

NOTE: When the optoisolated interface MSI-2339-16/46 option is installed, the devices are connected in RS485 network by adding their addresses to the commands.