# Parasound 200 Pre & Integrated RS-232 Protocol and Instructions

| **Protocol Specs** | | **Pin Connections** | |
|---|---|---|---|
| Baud Rate: | 9600 bps | TxD: | Pin 2 |
| Data Bit: | 8 bits | RxD: | Pin 3 |
| Stop Bit: | 1 bit | Gnd: | Pin 5 |
| Parity: | None | | |
| Flow Control: | No | | |

## Command Protocol

ASCII (not decimal) and hexadecimal examples are shown below. All strings must have a space between each number or letter (except two digit numbers). In the Hex examples the space is already represented with code "20." The end of each string must have a carriage return after the last number with no space in-between, this is represented by "<CR>" in the ASCII examples and "0D" in the Hex examples.

> **Please Note:** "<CR>" stands for Carriage Return and the Hex Code is "0D". A space in Hex is "20", a space in ASCII is just a blank space (as shown below).

## Feedback Information Protocol

Unsolicited feedback is sent anytime that the unit is controlled by IR remote, Front Panel or RS232. Full unsolicited feedback will be automatic and in the following format. Please note that there is a space (0D in Hex) between each piece of information (as shown).

***G1 S3 V55 M1 B08 T08 L16 W16<CR>**

* = Start of transmission
<CR> = End of transmission

**G0** = Power Off, G1 = Power On
**S1** = Input 1, S2 = Input 2, S3 = Input 3, S4 = Input 4/Aux, S5 = Bypass Input
**V55** = Volume set to 55 (Vxx, xx is any number 0 to 100)
**M0** = Mute Off, M1 = Mute On (note that mute will always be shown as ON when unit is off)
**B08** = Bass level (08 = flat, 09 = Bass set to +1, 16 = Bass set to +8, 07 = Bass set to -1, etc.)
**T10** = Treble level (08 = flat, 09 = Treble set to +1, 16 = Treble set to +8, 07 = Treble set to -1, etc.)
**L16** = Balance setting (16 = Even, 17 = Left +1, 15 = Right +1, 14 = Right +2, 13 =Right +3, etc.)
**W16** = Subwoofer level setting (16 = flat 0 dB, 17 = Sub +1, 15 = Sub -1, 14 = Sub -2, 13 = Sub -3, etc.)

# CONTROL COMMANDS

| Command | String ASCII | String Hexadecimal |
|---|---|---|
| Power On | W 1 1 2<CR> | 57,20,31,20,31,20,32,0D |
| Power Off | W 1 1 1<CR> | 57,20,31,20,31,20,31,0D |
| Power Toggle | W 1 1 3<CR> | 57,20,31,20,31,20,33,0D |
| Volume Up 1 step | W 1 9 1<CR> | 57,20,31,20,39,20,31,0D |
| Volume Down 1 step | W 1 9 2<CR> | 57,20,31,20,39,20,32,0D |
| Mute On | W 1 10 2<CR> | 57,20,31,20,31,30,20,32,0D |
| Mute Off | W 1 10 1<CR> | 57,20,31,20,31,30,20,31,0D |
| Mute Toggle | W 1 10 3<CR> | 57,20,31,20,31,30,20,33,0D |
| Input USB | W 1 2 9<CR> | 57,20,31,20,32,20,39,0D |
| Input OPT 1 | W 1 2 10<CR> | 57,20,31,20,32,20,31,30,0D |
| Input COAX | W 1 2 11<CR> | 57,20,31,20,32,20,31,31,0D |
| Input 1 | W 1 2 6<CR> | 57,20,31,20,32,20,36,0D |
| Input 2 | W 1 2 7<CR> | 57,20,31,20,32,20,37,0D |
| Input 3 | W 1 2 8<CR> | 57,20,31,20,32,20,38,0D |
| Bypass Input | W 1 2 3<CR> | 57,20,31,20,32,20,33,0D |
| Next Input | W 1 2 4<CR> | 57,20,31,20,32,20,34,0D |
| Previous Input | W 1 2 5<CR> | 57,20,31,20,32,20,35,0D |
| Bass + | W 1 3 1<CR> | 57,20,31,20, 33,20,31,0D |
| Bass - | W 1 3 2<CR> | 57,20,31,20, 33,20,32,0D |
| Treble + | W 1 3 3<CR> | 57,20,31,20, 33,20,33,0D |
| Treble - | W 1 3 4<CR> | 57,20,31,20, 33,20,34,0D |
| Set Bass to Flat (0 dB) | W 1 3 5<CR> | 57,20,31,20, 33,20,35,0D |
| Set Treble to Flat (0 dB) | W 1 3 6<CR> | 57,20,31,20, 33,20,36,0D |
| Balance Left +1 dB | W 1 3 7<CR> | 57,20,31,20, 33,20,37,0D |
| Balance Right +1 dB | W 1 3 8<CR> | 57,20,31,20, 33,20,38,0D |
| Reset Balance to Even | W 1 3 9<CR> | 57,20,31,20, 33,20,39,0D |
| Sub Level +1 dB | W 1 4 1<CR> | 57,20,31,20, 34,20,31,0D |
| Sub Level -1 dB | W 1 4 2<CR> | 57,20,31,20, 34,20,32,0D |
| Reset Sub Level to Flat (0 dB) | W 1 4 3<CR> | 57,20,31,20, 34,20,33,0D |
| Sub On | W 1 4 4<CR> | 57,20,31,20, 34,20,34,0D |
| Sub Off | W 1 4 5<CR> | 57,20,31,20, 34,20,35,0D |
| | | |
| Jump to Volume XX | W 2 XX<CR> | 57,20,32,20,XX,0D |

XX = a number 00 to 100 (same as front panel volume display)

# FEEDBACK COMMANDS

**You may request the status and feedback of individual information by issuing the following "read" commands.**

| Request | String ASCII | String Hexadecimal | Response From 200 Pre | |
|---|---|---|---|---|
| Current Input | R 1 2<CR | 52,20,31,20,32,0D | *S1<CR> | Input 1 selected |
| | | | *S2<CR> | Input 2 selected |
| | | | *S3<CR> | Input 3 selected |
| | | | | |
| | | | *S5<CR> | Bypass Input selected |
| | | | *S6<CR> | Input USB selected |
| | | | *S7<CR> | Input OPT 1 selected |
| | | | *S8<CR> | Input COAX selected |
| | | | | |
| | | | | |
| Power Status | R 1 1<CR> | 52,20,31,20,31,0D | *G0<CR> | Power is Off |
| | | | *G1<CR> | Power is On |
| | | | | |
| Mute Status | R 1 10<CR> | 52,20,31,20,31,30,0D | *M0<CR> | Mute is Off |
| | | | *M1<CR> | Mute is On (or unit is off) |
| | | | | |
| Bass Status | R 1 4<CR> | 52,20,31,20,34,0D | *Bxx<CR> | xx = a number 00 to 16 (B08 = bass set 0) |
| | | | | B09=bass +1, B10=bass +2, B07=bass -1, B06=bass -2,....) |
| | | | | |
| Treble Status | R 1 5<CR> | 52,20,31,20,35,0D | *Txx<CR> | xx = a number 00 to 16 (T08 = treble set 0) |
| | | | | T09=treble +1, T10=treble +2, T07=treble -1, T06=treble -2,....) |
| | | | | |
| Balance Status | R 1 6<CR> | 52,20,31,20,36,0D | *Lxx<CR> | xx = a number 00 to 32 (L16 = Balance set even) |
| | | | | L17=Right +1, L18=Right +2, L15=Left +1, L14=Left +2,....) |
| | | | | |
| Volume Status | R 1 7<CR> | 52,20,31,20,37,0D | *Vxx<CR> | xx = a number 00 to 100 (same as front panel volume display) |
| | | | | |
| Sub Level Status | R 1 8<CR> | 52,20,31,20,38,0D | *Wxx<CR> | xx = a number 00 to 32 (W16 = Sub Level set to flat, 0 dB) |
| | | | | L17=Sub +1, L18=Sub +2, L15=Sub -1, L14=Sub -2,....) |
| | | | | |
| Full Status Request | R 1 13<CR> | 52,20,31,20,31,33,0D | *G1 S3 V55 M1 B10 T10 L10 W16<CR> | See page 1 for breakdown |

--- End of Instructions ---