# Pegasus Astro <br> Prodigy Microfocuser Serial Command Language 

Firmware >= v.1.4 (Nov 2021)

## Abbreviations used:

nnnn.. = one or more digits b = boolean (0 or 1)

Serial Connection Settings: 19200, 8N1
(All commands should be terminated by new line: $\backslash \mathrm{n}$ ) (All responses are terminated by new line: $\backslash \mathrm{n}$ )

| Command | Description | Response |
| :---: | :---: | :---: |
| \# | Status (Controller is operational) | OK_PRDG |
| A | Consolidates printed values <br> status: <br> version: <br> motor_mode: <br> temperature: <br> position: <br> moving_status: <br> led_status: (for this product always 0) <br> reverse: (for this product always 0 ) <br> disabled encoder: (for this product always 0 ) <br> backlash value: | Example: <br> OK_PRDG:2.6:1:22.4:50:0:1:1:0:100 |
| B | Returns motor max speed (steps per sec) | B:nnnn |
| C | Backlash compensation <br> C:0 (Disables compensation) <br> C:nnnn (Enables compensation and sets nnn steps) <br> Setting is stored in EEPROM | C:nnnn |
| D | Status of Power and Data (USB) ports. <br> (Power Port 1: Power Port 2: USB 1: USB 2) $(0=O F F, 1=O N)$ | $\begin{gathered} \text { D:b:b:b:b } \\ \text { E.g: D:1:1:0:1 } \end{gathered}$ |
| V | Firmware version | n.n |
| T | Temperature in Celsius degrees | nn.nn |
| P | Returns current position | nnnn |
| H | Halt Focuser (emergency stop) | 0 |
| 1 | Stepper motor moving status ( $0=\mathrm{idle}, 1$ = is moving) | $0 \mid 1$ |
| U | Disable / Enable USB Port 1 $(0=O F F, 1=O N)$ | U:b |
| J | Disable / Enable USB Port 2 $(0=O F F, 1=O N)$ | J:b |
| M | Move motor to new absolute position E.g M:1100 | M:nnnn |
| G | Move motor +-steps from current position E.g G:-100 or G:100 | G:nnnn |
| S | Set motor max speed (unsigned int) E.g. S:400 <br> Setting is stored in EEPROM | S:nnnn |
| X | Disable / Enable Power Port 1 $\text { ( } 0=0 \text { OFF, } 1=0 \mathrm{~N} \text { ) }$ | x:b |
| Y | Disable / Enable Power Port 2 $(0=O F F, 1=O N)$ | Y:b |
| N | Reverse motor direction <br> Report always normal (0) / cannot change value | $\mathrm{N}: 0$ |
| W | Change existing motor position E.g W:1000 will set controller's position to 1000 without moving the motor | W:nnnn |
| Q | Device reboot/reset | - |
| Z | Park Focuser to zero position (until it reached zero encoder) | Z:1 |

