MoonStalker messages

Introduction

< start message delimiter

> end message delimiter

Control messages

Move

Out message

<MV a, b>

a...horizontal steps

b...vertical steps

Move the telescope in horizontal and vertical direction. While RDY message is not returned from Arduino, all move actions made by MoonStalker are blocked.

Move start

Out message

<MVS d>

d...direction (1 = UP, 2 = down, 3 = left 4 = right)

Start moving the telsescope in the specific direction. It keeps moving until MVE message is received or ERROR happens.

Move end

Out message

<MVE>

Stop moving the telescope after started when MVS was received.

Status messages

Status

Out message

`<ST?>`

Get status of the telescope, if it is busy or ready. `<RDY>` or `<NOT_RDY>` messages are returned from Arduino.

Ready

In message

`<RDY>`

Ready message is returned from Arduino when telescope is ready for new command.

Not ready

In message

`<NOT_RDY>`

Not ready message is returned from Arduino when telescope is busy. All further requests from Moonstalker are blocked until `<RDY>` message is returned.

Battery

Out message

`<BTRY?>`

Request to Arduino to return the battery voltage.

Battery result

In message

`<BTRY voltage>`

voltage...value of the current voltage of Telescope battery

Reply from Arduino give information of current voltage of telescope battery.

Low battery

In message

`<LOW_BTRY>`

When battery voltage fall below LOW THRESHOLD, this message is returned from Arduino. All further requests from Moonstalker are blocked. Charge the battery and reinitialize the telescope.

Fatal error

In message

`<FATAL_ERROR reason>`

reason = String which includes the reason for the fatal error.

When something not expected happens on telescope, the reason for fatal error is returned from Arduino. All further requests from Moonstalker are blocked.

Altitude negative

In message

`<ALT_NEGATIVE>`

Define threshold for altitude. When is below the defined value, ALT_NEGATIVE is reported. Lower ALTITUDE requests are ignored.