Arduino or Serial Turntable Customization

Can I customize my own turntable to work with the Shutter Stream 360 software

Step-by-step guide

Shutter Stream has an Arduino controller turntable plugin that you can use to control a serial communication based turntable, with certain limitations.

The Arduino turntable controller communicates with the Iconasys Arduino turntable using the following commands:

<table>
<tr><th>ASCII Command</th><th>Responsibility</th><th>Notes</th></tr>
<tr><td>c</td><td>Stop - Cancel shot sequence or preview and return to start position</td><td></td></tr>
<tr><td>p</td><td>Preview rotation. One single full rotation.</td><td></td></tr>
<tr><td>v</td><td>Echos back turntable type and it's used for auto detection and to determine the number of steps per rotation.</td><td>Response from "v" determines the number of steps per revolution, which together with the number of steps to rotate ("x####") determines the angle of the rotation. You must end the response with "\r\n" characters. Your application must respond with one of the following ASCII strings when the "v" command is received:
<table><tr><th>Response</th><th>Number of Steps Per Rotation</th></tr><tr><td><code>"\r\nZcapture Mini 2.0 - Build V1.001H\r\n"</code></td><td><code>2048 steps per rotation</code></td></tr><tr><td><code>"\r\nZcapture Mid - Build V1.001H\r\n"</code></td><td><code>200 steps per rotation</code></td></tr><tr><td><code>"\r\nZcapture Pro - Build V1.001H\r\n"</code></td><td><code>400 steps per rotation</code></td></tr><tr><td>"\r\nNextLeap - ver1.0.123\r\n</td><td>32000 steps per rotation</td></tr></table>Note that Build version can be anything. It's only used to display version number.</td></tr>
<tr><td>o</td><td>Set Starting position as current location</td><td></td></tr>
<tr><td>r</td><td>Return the turntable to the starting position</td><td></td></tr>
<tr><td>x####</td><td>Step a specific number of steps (1-1024)</td><td>Stepping angle is determined from the number of steps you take and the total number of steps per rotation.
The total number of steps per rotation depends on the response from "v". See notes on "v".
If you want to take 123 steps the command is: "x0123"
If you want to take 3 steps send the command: "x0003"
You must issue the ASCII command: "Steps for Shot - Completed" when the rotation is complete.</td></tr>
<tr><td>l</td><td>Lock turntable</td><td>For highest precision of the turntable turn, the table should be locked while turning. Unlocking should only happen after the turntable completed its turn.</td></tr>
<tr><td>u</td><td>Unlock turntable</td><td>When a turntable is unlocked, a stepper motor will usually introduce rotational errors. For highest precision, never turn a stepper motor while unlocked.</td></tr>
</table>

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