Text, logo

Description automatically generated

**Control System for Multiple Stepper Motors**

**Setup and System Checkout**

|  |  |
| --- | --- |
| System For |  |
| Checked by |  |
| Date |  |

| Step | Activity | | | ✓ |
| --- | --- | --- | --- | --- |
| **1** | **System Load** | | |  |
| 1.1 | Load Teensy program   |  |  |  |  | | --- | --- | --- | --- | | Teensy Model |  | Software Version Loaded |  | | | |  |
| 1.2 | Load Nextion configuration   |  |  |  |  | | --- | --- | --- | --- | | Nextion Model |  | Software Version Loaded |  | | | |  |
| 1.3 | Load Teensy INI file   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Setup |  |  | Move | |  | Limits |  |  | Program | |  | Returns |  |  | Sync | |  | Main |  |  | Recip | |  | One |  |  | GreekKey | |  | Index |  |  | Rose | | | |  |
| **2** | **Main Function** | | |  |
| 2.1 | Spindle move | | |  |
| 2.2 | Z axis move | | |  |
| 2.3 | X axis move | | |  |
| 2.4 | B axis move | | |  |
| **3** | **One Function** | | |  |
| 3.1 | Spindle move | | |  |
| 3.2 | Z axis move | | |  |
| 3.3 | X axis move | | |  |
| 3.4 | B axis move | | |  |
| **4** | **Index Function** | | |  |
| 4.1 | Index by Divisions – 4 | | |  |
| 4.2 | Index by Divisions – 8 | | |  |
| **5** | **Move Function** | | |  |
| 5.1 | Z axis move | | |  |
| 5.2 | X axis move | | |  |
| 5.3 | B axis move | | |  |
| **6** | **Sync Function** | | |  |
| 6.1 | Z axis | Helix type Left | CCW | | |  |
| 6.2 | Z axis | Helix type Right | CCW | | |  |
| 6.3 | Z axis | Helix type Left | CW | | |  |
| 6.4 | X axis | Helix type Left | CCW | | |  |
| 6.5 | X axis | Helix type Right | CCW | | |  |
| 6.6 | B axis | Helix type Left | CCW | | |  |
| 6.7 | B axis | Helix type Right | CCW | | |  |
| **7** | **Recip Function** | | |  |
| 7.1 | Z axis | Radial | Pattern 1 | CCW | | |  |
| 7.2 | Z axis | Radial | Pattern 2 | CCW | | |  |
| 7.3 | Z axis | Radial | Pattern 3 | CCW | | |  |
| 7.4 | Z axis | Radial | Pattern 1 | CW | | |  |
| 7.5 | Z axis | Axial | Pattern 1 | CCW | | |  |
| 7.6 | Z axis | Axial | Pattern 2 | CCW | | |  |
| 7.7 | Z axis | Axial | Pattern 3 | CCW | | |  |
| 7.8 | X axis | Radial | Pattern 1 | CCW | | |  |
| **8** | **Greek Key Function** | | |  |
| 8.1 | Radial axis runs – 2a pattern | | |  |
| 8.2 | Radial axis runs – 2b pattern | | |  |
| 8.3 | Axial axis runs – 2a pattern | | |  |
| **9** | **Limit & Estop Switches** | | |  |
| 9.1 | Limit Switch | Pin # |  |  |
| 9.2 | Limit Switch | Pin # |  |  |
| 9.3 | Limit Switch | Pin # |  |  |
| 9.4 | Limit Switch | Pin # |  |  |
| 9.5 | E-Stop Switch | Pin # |  |  |

Comments: