Text, logo

Description automatically generated

**Control System for Multiple Stepper Motors**

**Setup and System Checkout**

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

| 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   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Preferences |  |  | Shared | |  | Limits |  |  | Sync | |  | Returns |  |  | Recip | |  | Main |  |  | GreekKey | |  | Multi |  |  | Program | |  | Index |  |  | Rose | |  | Move |  |  |  | |  |

| 2 | Main Function | ✓ |
| --- | --- | --- |
|  | **Spindle** |  |
| 2.1 | Rotation |  |
|  | **Z Axis** |  |
| 2.2 | Move |  |
|  | **X Axis** |  |
| 2.3 | X axis - move |  |
|  | **M3 Axis** |  |
| 2.4 | Linear movement |  |
| 2.5 | Rotation |  |
|  | **M4 Axis** |  |
| 2.6 | Linear movement |  |
| 2.7 | Rotation |  |

| 3 | One Function | ✓ |
| --- | --- | --- |
|  | **Spindle** |  |
| 3.1 | Rotation |  |
|  | **Z Axis** |  |
| 3.2 | Move |  |
|  | **X Axis** |  |
| 3.3 | X axis - move |  |
|  | **M3 Axis** |  |
| 3.4 | Linear movement |  |
| 3.5 | Rotation |  |
|  | **M4 Axis** |  |
| 3.6 | Linear movement |  |
| 3.7 | Rotation |  |

| 4 | Index Function | ✓ |
| --- | --- | --- |
|  | **Spindle** |  |
| 4.1 | Index by Divisions – 4 |  |
| 4.2 | Index by Divisions – 8 |  |
|  | **M3 Axis** |  |
| 4.3 | Index by Divisions – 4 |  |
| 4.4 | Index by Divisions – 8 |  |
|  | **M4 Axis** |  |
| 4.5 | Index by Divisions – 4 |  |
| 4.6 | Index by Divisions – 8 |  |

| 5 | Move Function | ✓ |
| --- | --- | --- |
|  | **Z Axis** |  |
| 5.1 | Linear movement |  |
|  | **X Axis** |  |
| 5.2 | Linear movement |  |
|  | **M3 Axis** |  |
| 5.3 | Linear movement |  |
| 5.4 | Rotation |  |
|  | **M4 Axis** |  |
| 5.5 | Linear movement |  |
| 5.6 | Rotation |  |

| 6 | Sync Function | ✓ |
| --- | --- | --- |
|  | **Z Axis** |  |
| 6.1 | Helix type Left | CCW |  |
| 6.2 | Helix type Right | CCW |  |
| 6.3 | Helix type Left | CW |  |
|  | **X Axis** |  |
| 6.4 | Helix type Left | CCW |  |
| 6.5 | Helix type Right | CCW |  |
|  | **M3 Axis** |  |
| 6.6 | Helix type Left | CCW |  |
| 6.7 | Helix type Right | CCW |  |
|  | **M4 Axis** |  |
| 6.8 | Helix type Left | CCW |  |
| 6.9 | Helix type Right | CCW |  |

| 7 | Recip Function | ✓ |
| --- | --- | --- |
|  | **Z Axis / Radial** |  |
| 7.1 | Pattern 1 | CCW |  |
| 7.2 | Pattern 2 | CCW |  |
| 7.3 | Pattern 3 | CCW |  |
| 7.4 | Pattern 1 | CW |  |
|  | **Z Axis / Axial** |  |
| 7.5 | Pattern 1 | CCW |  |
| 7.6 | Axial | Pattern 2 | CCW |  |
| 7.7 | Axial | Pattern 3 | CCW |  |
|  | **X Axis / Radial** |  |
| 7.8 | X axis | Radial | Pattern 1 | CCW |  |

| 8 | Greek Key Function | ✓ |
| --- | --- | --- |
|  | **Radial** |  |
| 8.1 | 2a pattern |  |
| 8.2 | 2b pattern |  |
|  | **Axial** |  |
| 8.3 | 2a pattern |  |

| 9 | Limit & Stop Switches | | | ✓ |
| --- | --- | --- | --- | --- |
| 9.1 | Limit Switch | Pin # |  |  |
| 9.2 | Limit Switch | Pin # |  |  |
| 9.3 | Limit Switch | Pin # |  |  |
| 9.4 | Stop Switch | Pin # |  |  |

Comments: