Manualmatic MPG/Pendant



Description

Teensy based pendant using the user space Python LinuxCNC interface.

Theoretically will require copying just two files to config directory (or globally?) and adding a single line to custom.hal.

Will one day optionally use an ini file for config and read options from machine config ini file.

Operation

Machine State

Most controls are inactive unless machine is on and homed.

Mode: Manual

1. On/Off Button

Click to turn machine on.

Long press to turn machine off.

When machine is on, click will send Abort command (eg to stop a slow jog)

2. Axis Selectors

Toggle selection of axis X, Y, Z & A.

3. 'A' Button (Coordinate System)

Click to toggle selection of A axis if available Double click to toggle between Abs and G5x coordinate system Triple click for DTG Long press to toggle visibility of 4th axis

4. Spindle Encoder

Turn to set spindle speed directly (ie not override %) Double click to arm spindle Click button 5 to start spindle Click to stop or cancel arming Long press to reset to default spindle speed (if not running)

5. Mode Button

~Switch mode to MDI or Auto

6. Configurable Buttons

1. ~Zero selected axis

2. ~Half selected axis

7. Feed Encoder

Rotate to change jog velocity Press+rotate to change jog increments Click to toggle between high and low range jog velocity Long press to reset to default jog velocity

8. MPG Encoder

Jog selected axis

Mode: MDI

1. On/Off Button

Click to turn machine on.

Long press to turn machine off.

When machine is on, click will send Abort command (eg to stop a slow jog)

2. Axis Selectors

~Not enabled?

3. 'A' Button (Coordinate System)

Double click to toggle between Abs and G5x coordinate system

Triple click for DTG

Long press to toggle visibility of 4^{th} axis

4. Spindle Speed/Override

~Turn to adjust spindle override

~Long press to reset to default

5. Mode Button

~Switch mode to Manual or Auto

6. Configurable Buttons

7. Feed Encoder

~Rotate to adjust feed override ~Press+Rotate to adjust rapid override ~Long press to reset to default feed/rapid velocity

8. MPG Encoder

~Not enabled (possibly to start/accelerate power feed?)

Mode: Auto

1. On/Off Button

Click to turn machine on.

Long press to turn machine off.

When machine is on, click will send Abort command (eg to stop a slow jog)

2. Axis Selectors

~Not enabled?

3. 'A' Button (Coordinate System)

Double click to toggle between Abs and G5x coordinate system

Triple click for DTG

Long press to toggle visibility of 4^{th} axis

4. Spindle Speed/Override

~Turn to adjust spindle override

~Long press to reset to default

5. Mode Button

~Switch mode to Manual or MDI

6. Configurable Buttons

- 1. ~Start
- 2. ~Pause
- 3. ~Single step

7. Feed Encoder

~Rotate to adjust feed override

- ~Press+Rotate to adjust rapid override
- ~Long press to reset to default feed/rapid velocity