

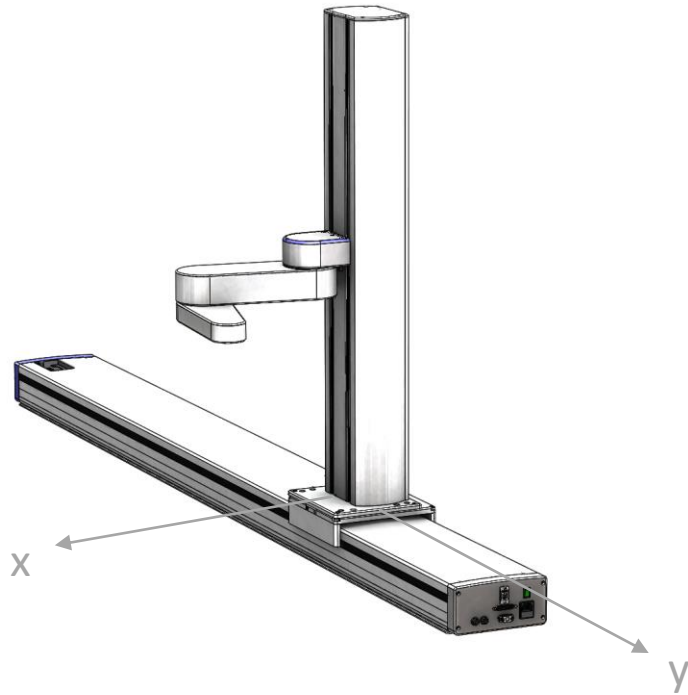
Installing a Robot onto a Rail

Overview

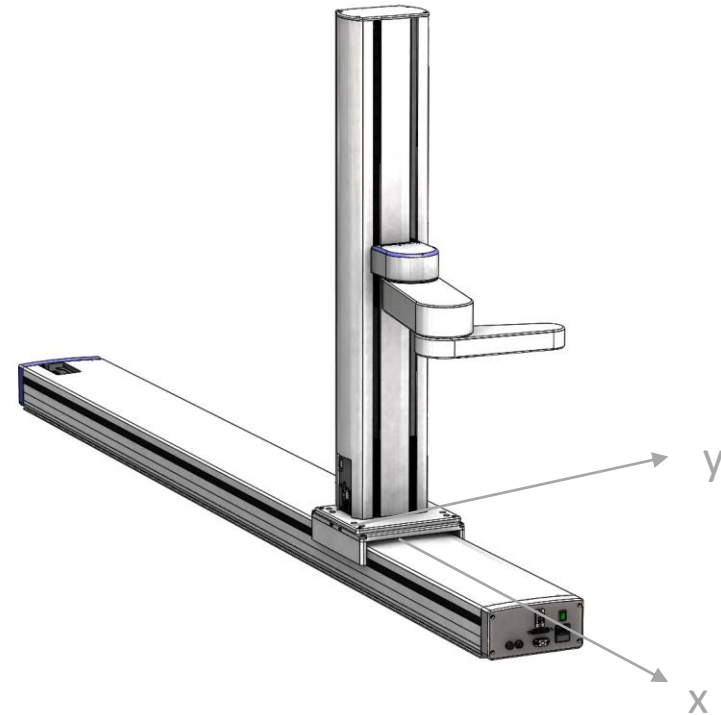
1. Choose your configuration
2. Route cables
3. Attach robot and cables
4. Install new PAC files to include linear rail
5. Calibrate robot
6. Set chosen configuration in PAC files

1. Choose your configuration

0 degrees: Robot's Y axis aligns with rail travel

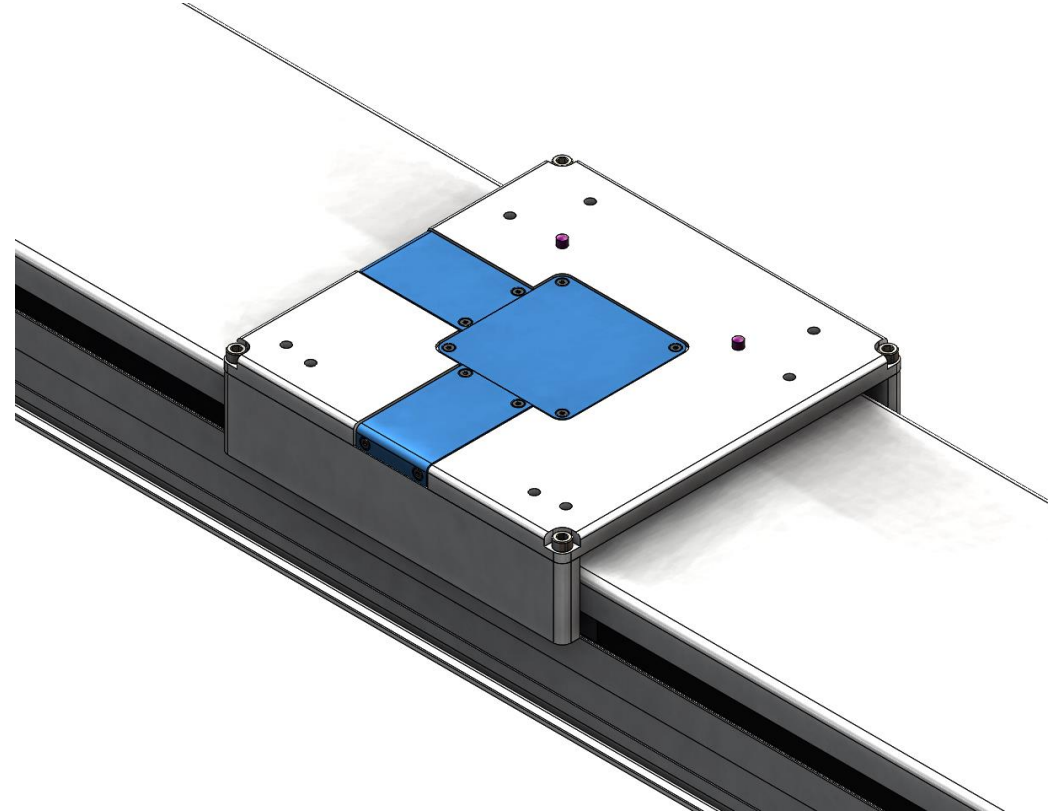


-90 degrees: Robot's X axis aligns with rail travel



2. Route Cables

- If necessary, remove the covers on the top of the linear axis carriage and re-route the cabling so that the connectors can reach the facilities panel at the base of the z-axis column.



3. Attach robot and cables

1. Align outer holes of robot with rail
2. Attach cables
 1. Power
 2. Ethernet
 3. Communication (DB9)



0 deg: base aligned with edge

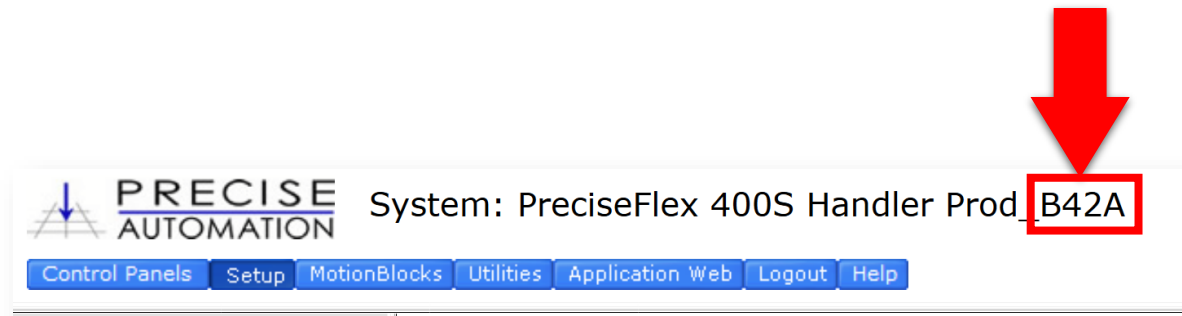


-90 deg: base centered

4. Install new PAC files

1. Follow standard procedure

- 1. Make sure to match the version number of the new files to the files currently installed on the robot!**



2. Reboot robot after new PAC files are installed
3. Check Virtual Pendant to see if the rail now shows position

5. Calibrate the robot

1. Follow standard procedure
2. Rail calibration position is described in the Cal_pp dialogue

6. Set configuration in PAC files

1. Set the 5th value of parameter 16050 to the chosen configuration (0 or -90)
2. Click “Set new values”
3. Click “Save All to Flash”
4. **Wait 20 seconds**
5. Reboot the robot

The rail is now ready to use

PRECISE AUTOMATION System: PreciseFlex 400S Handler Prod_B42A

Control Panels Setup MotionBlocks Utilities Application Web Logout Help

Select Robot: Robot 1

System Setup

- Wizards and Setup Tools
- Hardware Tuning and Diagnostics
- Parameter Database
 - Controller
 - Robot: PreciseFlex 400S
 - Joint/Cartesian control
 - Servo parameters
 - Servo variables
 - Calibration parameters
 - Misc
 - Stop limits
 - Latch settings
 - Servo settings
 - Custom
 - DIO Motions

Click 'Set new values'

ID	Parameter name	Parameter value
16000	Robot serial number	PF04-20000
16050	Kinematic dimensional constants	0, 225, 210, 0, 90, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0
16051	Tool set at restart	0, 0, 162, 0, 0, 0
16052	Base set at restart	0, 0, 0, 0, 0, 0
16060	Conveyor robot nominal transform	0, 0, 0, 0, 0, 0
16061	Conveyor robot limit1 transform	0, 0, 0, 0, 0, 0
16062	Conveyor robot limit2 transform	0, 0, 0, 0, 0, 0
16063	Conveyor propagation delay in TG ticks	3
16066	Dynamic feedforward enable	<input checked="" type="radio"/> On <input type="radio"/> Off
16067	Dynamic feedforward mass, kg	2.2, 2.72, 1.25, 0.68, 0.5, 0, 0, 0, 0, 0, 0, 0, 0
16068	Dynamic feedforward COM I1, mm	0, 82.55, 76.2, 50.8, 162, 0, 0, 0, 0, 0, 0, 0, 0
16069	Dynamic feedforward COM I2, mm	0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0
16070	Dynamic feedforward rated torque, N-m	88.2, 1.705, 1.283, 0.335, 0
16071	Dynamic feedforward default %payload	25
16072	Dynamic feedforward motor/gear inertia, kg-mm^2	0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0
16073	Dynamic feedforward special parameters	0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0
16074	Dynamic feedforward special parameters #2	0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0

Cancel changes Set new values Save All to Flash