Introduction

This Quick Start guide will guide you through installing OpenPnP, seeing the major components of the interface and running a sample job in the OpenPnP simulator. This will allow you to quickly understand how OpenPnP works and give you a foundation to begin hooking it up to your own machine.

A Quick Tour

User Interface

This image shows the major components of the user interface. We'll reference the names of these components throughout the rest of the guide, so take a moment to get familiar with them.

Moving Around

OpenPnP is set up out of the box so that you can use it right away; you don't even a need to connect a machine!

When you start OpenPnP for the first time you will see a simulated pick and place table in the camera view. Try following along with the items below to get a feel for how OpenPnP works:

1. Press the green power button   to start the virtual "machine".

2. Use the jog buttons   in the jog controls to move the camera around. You can change the distance each click moves by changing the value of the Distance slider.

3. Visit each of the tabs along the bottom of the window to see how Jobs, Parts, Packages, Feeders and the Machine is configured. Right now it's best not to change anything.

Your First Job

Now that you've seen the user interface a bit, it's time to try running a pick and place job. Follow along with the instructions below:

1. Select the Job tab at the bottom of the main OpenPnP window.
2. From the File menu, select Open Job.
3. Using your computer's file dialog, find the samples directory that came with OpenPnP. It should be in the same directory you installed OpenPnP into.
4. In the samples directory, find the pnp-test directory and open the pnp-test.job.xml file inside it.
5. You'll see the job has loaded and there are now boards and placements listed. You can browse the boards and placements to see what the job will be doing.
6. If you haven't already, press the green power button   to start the machine.

7. Press the green play button   to start the job and the camera will start moving.

OpenPnP will now simulate a full pick and place job. It will use computer vision to align the boards using fiducials, find parts in virtual feeders, and then place the parts on virtual boards. You can follow along by watching the camera view.

When the job is complete, congratulations! You've run a job in OpenPnP! The next step is to dive into the User Manual and start learning how to hook OpenPnP up to a real machine.

What's Next

Next you should start reading the User Manual to get a better feel for the more advanced features of OpenPnP, and to learn how start integrating the software with your machine.