1. Kinect

* On the robot connects to an onboard laptop
* Kinect finds the target by sending infrared beams out and then the camera captures the image
* The laptop runs Roborealm, vision processing software.
* The software then searches for rectangular target inside the captured image.
* We then get the coordinates to calculate our shooter speeds and ball screw position
* We then output the data through serial communication to the cRio.

The Kinect, mounted on our robot, connects to an onboard laptop. The Kinect finds the target by sending infrared beams out and then the camera captures the image. The laptop runs Roborealm, a vision processing software. The software then searches for rectangular targets, or the pyramid goal inside the captured image. We then get the coordinates to calculate our shooter speeds and ball screw position. We then output the data calculated through serial communication to the cRio.