

# Photonvision Robot Test 2023

## Materials needed

- Apriltags 36h11 (tag numbers #7, #8)
- 2x Apriltag stands
- Tape Measure
- masking or painters tape (something to temporarily put on the floor)

## Mounting to the robot

- USB battery bank
- USB A to C
- orangepi 5
- ethernet cable
- camera and camera mount
- 3M double sided tape, zip ties, duct tape

the camera mounting is the most important because we need to have an approximate measurement from the camera to the robot center. The orangepi and battery bank just need to be "secured" somewhere we wont be driving fast so doesn't need to be permanent.

Connect the USB A to C cable between battery bank and orangepi 5 power.

Connect Ethernet to robot switch and orangepi

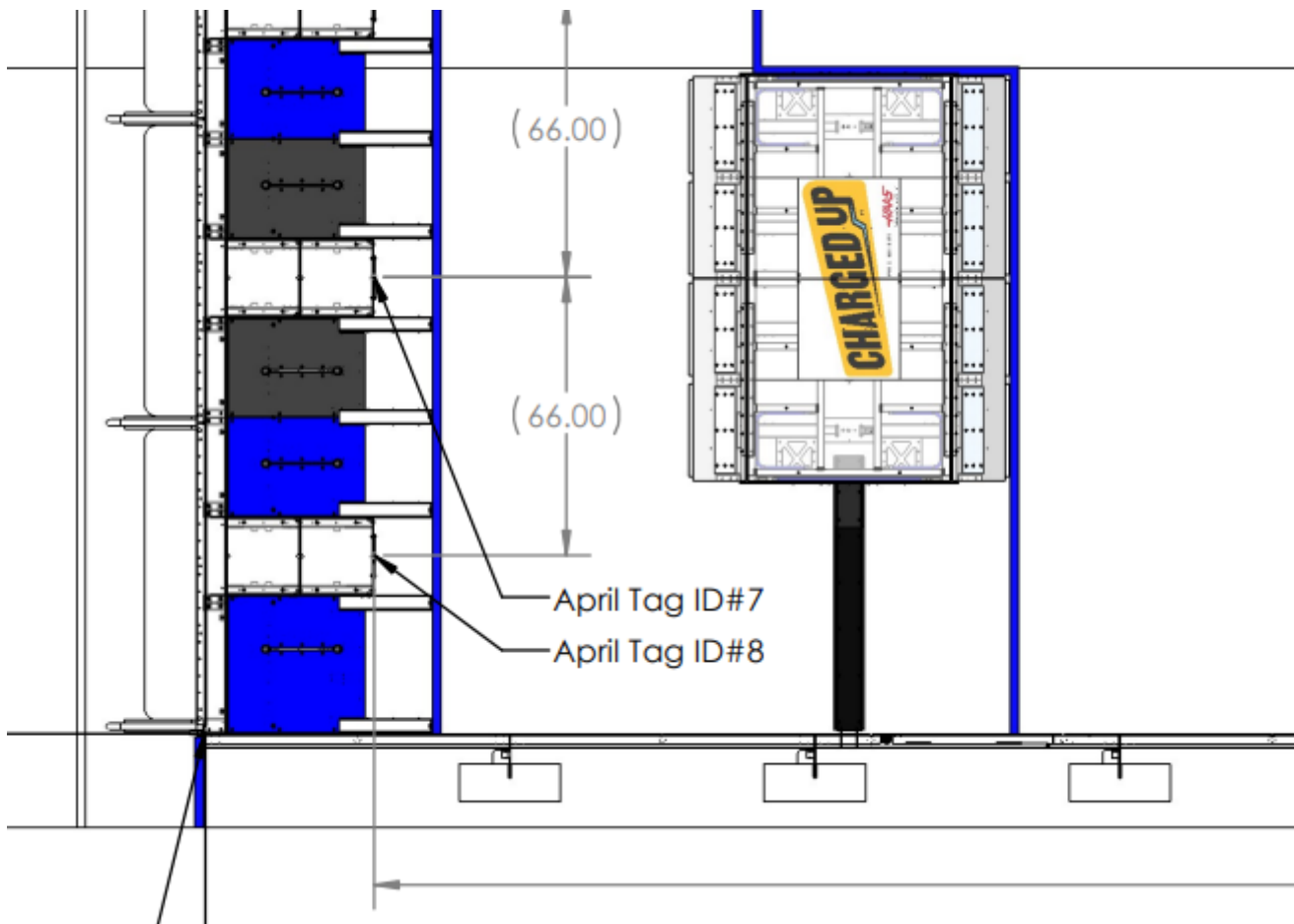
Connect camera to orangepi 5

Measure the approximate camera height z

measure the approximate distance from center of the robot to the camera along X (forward back) and along Y (left right)

## Setting up Apriltags

We are matching the blue side of the field



Here we need to find a place to put tag 8 and 7 such that they are 66 inches apart. An easy way to do this is to find a line in the carpet or floor and taping two locations 66 inches apart to put the tag holders on.

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Revision #3

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