

SPARTATRONIKS

TEAM 3512 - ORPHEUS



INTAKE/SHOOTER

- Intake and shooter integrated into one subsystem
- Able to score into amp, speaker, and trap
- Uses beambreak for note detection
- Polycarbonate deadaxle rollers with grip tape; connected with infinity belt for intake system
- Intake geared 3.54:1, driven with 1x NEO
- Shooter overgeared 2:1, driven with 2x NEOs

REACTION BARS

- Braces robot against stage at perfect angle to score trap
- Pivots on 10/32 shoulder holt
- Large angled gusset insures no issues with stage chain
- Bolted to both corner 1x1 and Frame Rails
- Actuated servos turn 90 degrees to release reaction bars









- Pivoting arm designed to mount shooter/intake at a specific angle
- Pivot allows for 105 degrees of motion, allowing:
 - Intaking/shooting
 - Trap scoring
 - Amp scoring
- Pivot rotates around dead axle shaft
- Arm geared MAXPlanetary 25:1 with final 40T:12T #35 chain reduction, driven with 2x NEOs



- Chain climbers mounted on 2 separate bases
- · Allows robot to climb onto stage
 - Positioned on bellypan for ideal trap scoring position
- Pivots geared 1:1 #35 chain reduction, driven with 2x NEOs, with 1:1 #35 chain, driven with same 2x NEOs





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