VEX IQ Competition Full Volume



VEX IQ Competition Full Volume is played on a 6' x 8' rectangular field, set up like the image above. Two robots join as an alliance in 60-second-long teamwork matches, working together to score points.

Scoring

- Each block scored in a goal (black arrows) is 1 point <SC3>
- Each big red block removed from its peg is **5 points**
- If a goal has 2+ blocks in it, and ALL blocks are the same color, it gets a 10-point bonus <SC4>
- If the supply (slashed) zone is empty, it's **20 points** (blocks "on the line" aren't "in the zone")
- If a robot is partially over the supply (slashed) zone, it is **5 points**. <SC7>
 - Fully inside (nothing hanging out) is **10 points**. Both robots fully inside is **30 points** total.
- If all 3 goals have at least 1 block, you get one 10-point bonus. <SC6>
 - o If the highest block in all 3 goals is above the white line, it's **10 more points** (total 20)
 - If the highest block in all 3 goals is above the top, it's **10** *more* **points** (total 30)

Game

- **Robots work on alliances of two robots to score points**. Both robots are on the same team and get the same score at the end of the match <T12>
- Matches are 60 seconds long, and there must be two drivers. The 1st driver must drive for 25-35 seconds, and then hand the controller to the 2nd driver. After 60 seconds, stop driving. <G11>
- If your robot is "in trouble," you can set down your controller, take the blocks out of the robot, but it back at the start, and begin driving again. The blocks can be put in the supply zone. <G10>
- To be scored, blocks must touch the floor or other scored blocks & not touch a robot <SC3>
- 8 purple & 23 green blocks are randomly put in the supply zone before the match <SG4>
- There are 54 green 2" cubes, 16 purple 3" cubes, and 3 red 5.8" rounded cubes. (All are plastic)

Robot

- Robots must start the match smaller than 11" x 20" x 15" tall <G5>
 - After the match starts, must stay in the 11" x 20", but can be as tall as they want <SG2>
- The robot must be made only out of VEX IQ pieces <R5-7> <R13>
 - If you want to add non-VEX IQ decorations, that is okay <R7>
- Robots must have 1 brain, 1 battery, and up to 6 motors (include ones not hooked up)<R11-13>

By Ben Lipper Tournament

Matches

- At a tournament, there will be a lot of teams (20-40 usually, up to 60 at a big one)
- You will be randomly selected to play matches on alliances with other teams <T15-16>
 - You will get a match schedule on the day of the tournament
 - Expect about 6-8 matches per tournament
- The scores from all of your matches will be added together to find your "ranking" <T17>
- The teams with the highest "ranking" will move onto the finals <T18>
- The teams thar score the most points in finals will win the tournament! <T18>

No-show and DQ (Disqualification)

- If you don't show up for one of your matches, or if you break one of the rules in a way that increases your score, you will get a DQ and a score of zero for that match <T5, T8>
 - You get zero, even if points are scored. The other robot still gets points for the match.
 - However, if you come to the match without robot and don't play, you still get points

Other options

There are three kinds of matches available at most tournaments. All matches are 60 seconds.

- Teamwork/regular (required) Teams work in alliances of two to score points <T12>
- **Robot Skills** (optional) Teams score as many points as they can on their own <RSC1>
 - The rules are the same as teamwork matches, but there is only one robot on the field
 - Programming skills (optional) Teams score points without drivers, only code <RSC5, 6>
 - \circ $\;$ Robots must be controlled only by code
 - Sensors can be used to start the code (as buttons) or to sense things (like blocks)
 - Teams can "restart" their robots as often as they want in programming matches by picking it up, removing its blocks, and placing it back in a starting position.

Starting Positions

For all matches, you must start your robot touching the side wall <SG1>

