

## Drone Racing



**2023 FAI World Drone Racing Championships Stadium of the Namwon Sports Town complex, Jeollabuk-do, Korea.**

### **Preliminary remark**

Young people are enthusiastic about the immense range of virtual games on offer. Games that, as mentioned, do not function in the real world, but in the processors of smartphones, tablets or PCs. These games can be played anytime and anywhere. Many young people spend hours and days playing games in a quiet room and are often isolated.

### **Out of the house to the drone race**

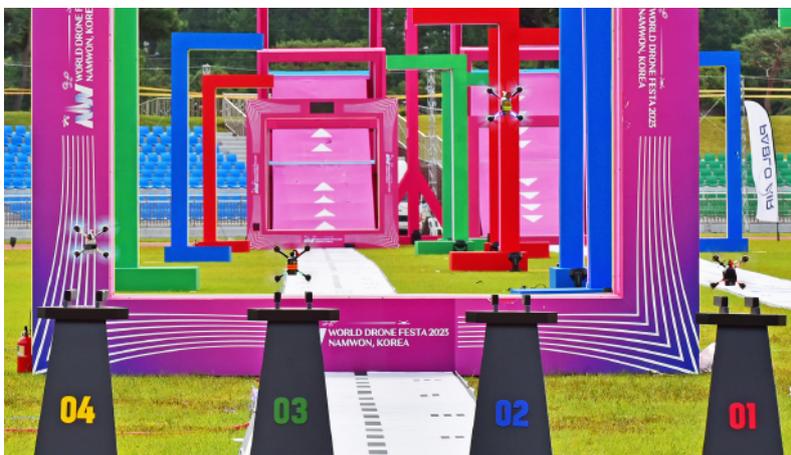
Drone racing is a wonderful alternative to the well-known game. Drone racing takes place on sports fields, stadiums and halls. The

International Air Sports Federation (FAI) establishes the formal rules and supports the organizations of various countries around the world in organizing and holding international races such as World Cups and World Championships. There are also many national races. Drone races are great youth festivals. An exciting and peaceful competitive sport with modern technology and excellent piloting skills.





**Graphic of the race track**



**View through the first gates. In the foreground the launch ramps**



**Clearance for take-off by the pilots. Up to eight drones take off at the same time**

## How do the races work?

The competition area consists of a race track characterized by various obstacles such as gates, rings and tunnels. The competitors try to fly their drones through this track in the shortest possible time. As up to four pilots take off at the same time, this creates a highly exciting racing atmosphere.

## Like in the cockpit of an airplane

Controlling the very fast and maneuverable aircraft over the entire race track is only possible because the pilot is equipped with video goggles, which are connected to the drone's video camera via radio. With his video goggles, he has the impression of sitting in the aircraft himself and steering it through the course. The technical term for this technology is "First Person View (FPV)". This is why these races are also called FPV races. Spectators can follow the race on large screens at major events



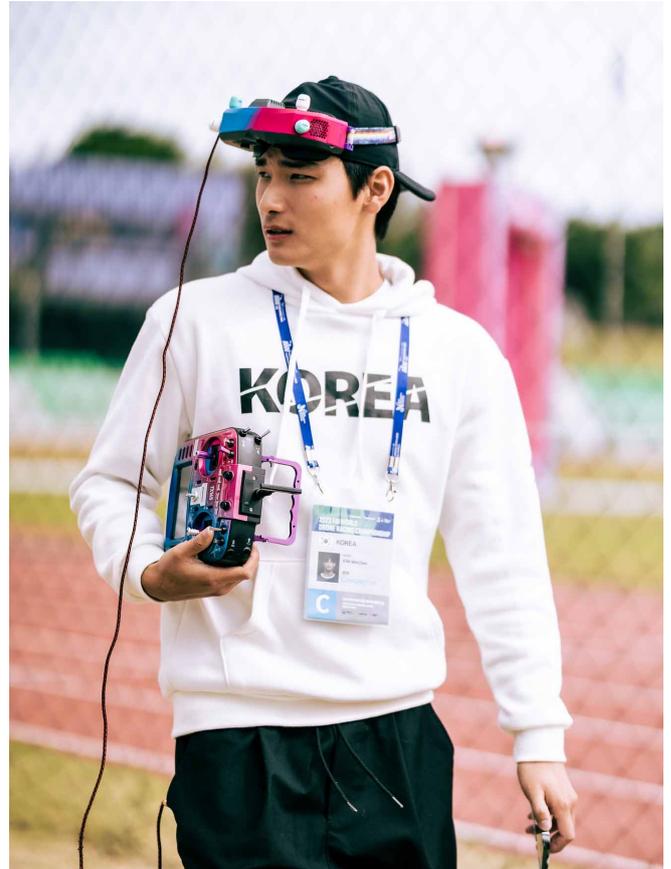
## About the drones

Racing drones are also known as racing multicopters or racing FPV machines. They are equipped with four propellers and weigh a maximum of 1 kg. The entire device must not be larger than a circle of more than 330 mm. They are controlled by the propellers, whose electric motors are in turn controlled by controllers. These controllers are like the brain of the drone. Stabilization and precise

steering depend on them. The organizer may request LED lights to improve the visibility of the drones. Racing drones are available from specialist dealers ready to fly. Many cracks do not miss the opportunity to assemble and optimize the aircraft themselves from individual components. Speeds of up to 150 km/h can be achieved.



***Drone assembled by Cracks from various components***



**2023 FAI F9U Drone Racing World Champion Kim MinChan, Korea.**

**The FAI 2024 Drone Racing World Championships: Hangzhou, China, October 30 to November 4.**



***The current world champion Wanraya Wannapong comes from Thailand. At just 12 years old, she is world champion in the F9U Drone Racing class for the third time.***

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