

02/23/2024

Federal Communications Commissions
Authorization and Evaluation Division
7435 Oakland Mills Road
Columbia, MD 21046

RE: Part 15 Supporting Information (FIRST Robotics Competition Usage Guidance)

To whom it may concern:

We, Vivid-Hosting, LLC., would like to provide usage guidance for device under FCC ID: **2BBOU10923**.

The noted FCC ID above is otherwise known as the VH-109 device.

The VH-109 device was a device designed for exclusive use within a high school robotics competition called FIRST Robotics Competition. More information about the competition can be found at <https://firstinspires.org>.

The robotics competition operates under the premise of a 3 versus 3 on field competition using student designed robotics chassis that are often around 24 inches by 24 inches by 48 inches, weighing in at approximately 145 lbs. These robots operate within a closed indoor “field” environment where humans are controlling the robots from a safe distance, behind field structures that contain the robots.

The wireless environment currently utilizes a 5 GHz WiFi access point on the “field” side and a WiFi STA on the robot side. We’re intending to use the VH-109 devices at the FIRST Championship in April of 2024.

We’ve performed 6ID testing for our field side configuration along with the 6XD testing for the robot side. As stated in our other letter, “RE: Part 2, Subpart J, Radiofrequency Radiation Exposure”, we believe that this device cannot be used outside of our robotics application as there is hardware and software requirements to enable its use within the robotics field. There will be no usage of these devices outside of their intended application within the FIRST Robotics Competition.

We’re intending to provide the VH-109 device to be used as a next generation wireless communications device for both the field access point and STA on the robot. By introducing the latest wireless technologies, especially in the 6 GHz environment, we will empower students to learn and innovate.

Sincerely,



Kiet Chau
Chief Executive Officer
Vivid-Hosting, LLC.
02/23/2024