2.4GHz RF PS2 Wireless Controller Device Working Principle

- It is a 2.4G RF product. It works at the frequency of ISM Band (2.4GHZ). There
 are up to 80 channels, and the frequency interval between each channel is 1M Hz.
- 2. Evenly Randomized Frequency Hopping method is implemented in the RF technology.
- 3. It works in "Slave" Mode. We call it "Device."

The working procedures are:

- a) When power on, the Device will search all of the channels, to see whether there is a Host.
- b) If there is a Host, the Device will identity by the data received, to see whether it can be connected with the Host.
- c) If it can connect to the Host, then the Device will respond to the Host.
- d) The Host builds up the connection after receiving the response from the Device.
- e) The Host sends the command request to the Device for getting the Axes and Buttons value.
- f) The Device sends Axes and Button value to the Host.
- g) The Host identifies the data received and does the error detection and the error correction.
- h) The Host sends Motor commands to the Device.
- i) The Device will handle the Motor behaviors by the Motor data value that sent from the Host.
- j) Repeat from step e) to step i).