

RE: Bitswave Inc.

FCC ID: P5G-368-397-YY-PI

After a review of the submitted information, I have a few comments on the above referenced Application.

1) The block diagram should show the frequencies of all oscillators in the TX portion of the device (CFR 2.1033(a)(5)). Please provide an updated version that includes this information.

[I have uploaded a block diagram with the oscillator frequencies shown.](#)

2) Although these both parts of the system may have been tested together, please note that the FCC requires a separate FCC ID for each part of this system. This device will require 2 separate ID numbers, one for the joystick, and one for the PS2-Plugin. The only exception to this rule is cordless phones (defined that attached to the public switched network directly). Please clarify which part of the system should be uploaded under this ID number given in this application. Unfortunately, a new submittal will be required for the other part of the system that includes updated exhibits for documents referencing the other FCC ID (such as labeling, cover letters, etc.).

[A separate submission was uploaded to the ATCB site for the joystick under the ID number P5G-368-397-YY. The joystick submission is still pending.](#)

3) The users manual exhibit is unreadable. Please provide a new exhibit for the users manual.

[A readable version of the manual has been uploaded.](#)

4) Please note that since labeling information and test photographs were only provided for the PS2-Plugin, only the test report for the plug-in has been reviewed at this time.

[See note on \(2\)](#)

5) Please explain how the EUT was tested for average emissions > 1 GHz (appears to only have been tested at 1.8 GHz & 2.7 GHz for average measurements). The device states that it was transmitting in normal mode. From the theory of operation, this device sends a command sent every 16 ms (duration unknown). Please note that it is likely that reduction of the VBW will not be allowed down to 10 Hz. The VBW may only be reduced down to the point that each sweep totally captures an entire single transmission pulse. The sweep may not be reduced to the point that it captures the on-off nature of the transmitter. Note that the FCC requests that a transmitter be placed into a 100% duty cycle for purposes of the measurement when possible. Once a proper trace has been captured using a reduced VBW that still captures 1 entire transmission stated here, additional correction may be applied mathematically for the worse case duty cycle of the transmitter. Please provide detailed information as to how the average measurements were made.

[Normal operation for this device is one transmission session every 16 ms. In each session the plug-in transmits for 2 ms and the joystick transmits for 4 ms. For this testing the units were set to transmit these data packets continuously.](#)

[The emissions were all measured with a peak detector \(1 MHz RBW/ 1 MHz VBW\) and the average limit was applied. If the emission was above the average limit then the emission was re-measured average. A revised report has been uploaded with duty cycle information and with the peak data mathematically corrected for duty cycle.](#)