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October 24, 2008

VIA ELECTRONIC FILING

Chairman Kevin J. Martin
Commissioner Jonathan S. Adelstein
Commissioner Michael J. Copps
Commissioner Robert M. McDowell
Commissioner Deborah Taylor Tate
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Re: *Ex Parte* Comments of **Beyerdynamic, Lectronsonics, Inc., Samson Technologies Corp., Sennheiser Electronic Corporation, Shure Incorporated, and Telex Communications, Inc.** as members of the
PROFESSIONAL AUDIO MANUFACTURERS ALLIANCE

**Introduction of Unlicensed Devices in the “White Spaces”
ET Docket No. 04-186**

Dear Chairman Martin and Commissioners Adelstein, Copps, McDowell and Tate:

The undersigned manufacturers of wireless microphone equipment (“Manufacturers”), are respectfully writing in support of the proposal by Maximum Service Television, Inc. (“MSTV”) and others requesting that the Commission seek public input on the findings contained in the FCC’s Office of Engineering and Technology (“OET”) report entitled *Evaluation of the Performance of Prototype TV-Band White Space Devices*, released on October 15, 2008. In addition, while the Manufacturers believe that there is no solution at this time that would allow new, unlicensed equipment to operate in the “white spaces” band without causing harmful interference or significant change to wireless microphone operations, the Manufacturers support plans such as those set forth by Shure Incorporated (“Shure”) or Sennheiser Electronic Corporation (“Sennheiser”) that could allow the Commission to move forward in this proceeding while providing some adequate protections to wireless microphone operations.

The Commission is well aware of the challenges faced by wireless microphone manufacturers and operators in providing the real-time, crystal-clear audio that millions of Americans have come to expect for their sports, theatre, and music entertainment, as well as in their local churches and business conferences. The numerous comments and *ex parte* filings made in this proceeding have affirmed that there is no reliable, properly tested, and commercially available spectrum sensing solution that will prevent debilitating interference to wireless microphones. As well-established by others on the record in this proceeding, the nascent

spectrum sensing technology simply cannot be relied upon as a cure-all solution for interference to wireless microphones in the “white spaces” band.

The Manufacturers were disturbed and surprised to learn that on the same day OET released its lengthy Test report providing the detailed results of extensive laboratory and field tests of prototype white space devices, the Chairman also announced that the Commission would, in only a few short weeks, vote on an order based on the conclusions in OET’s report. In light of the results of the most recent round of OET testing, where unlicensed white space devices failed to demonstrate that the spectrum sensing technology was able to detect wireless microphones more than 50% of the time in a real-world environment, while in other cases the devices just simply failed, the Commission must be careful not to rush to adopt rules.

Given the continued pendency of this issue, the Manufacturers are also concerned of reports that an order currently before the commissioners for a November 4th vote would provide only two protected channels for wireless microphones (and perhaps not even in all markets); and worse, that, subject to certain procedural steps, spectrum sensing will be authorized as the sole means of interference protection in the UHF channels, even though the record in this proceeding already demonstrates that reliance on spectrum sensing would be highly premature and counterproductive. More industry analysis of the OET report is necessary before unlicensed white space device operators can have any hope of co-existing without harmful interference with wireless microphones in the “white spaces” band.

The Commission should therefore allow interested parties an adequate opportunity to review, analyze, and comment on this important report and the conclusions drawn from OET’s laboratory and field testing before the Commission brings its order to a vote. Only after a thorough and inclusive dialogue from interested parties about the results in the OET report and the feasibility of spectrum sensing will the Commission be in a better position to adopt meaningful rules that could enable new white space devices to co-exist with wireless microphones. At bottom, any Commission order at this juncture allowing for the use of spectrum sensing technologies to detect wireless microphones would require a tremendous leap of faith, with no real foundation in the record. Thus, the Manufacturers support MSTV’s proposal that the Commission issue a public notice seeking comment on the OET report, with initial comments due within 45 days of the release of that public notice, and with reply comments due 25 days thereafter.

If the Commission, however, is insistent that it move forward in this proceeding by adopting an order on November 4th, the Manufacturers urge the Commission to implement, at a minimum, Shure’s proposal that would accommodate the Commission’s desire to open the TV spectrum to new uses without causing debilitating interference to incumbent wireless microphone users. As discussed in greater detail on Shure’s September 24, 2008 *ex parte* filing, under this plan, all white space devices would be required to be managed by geolocation and a dynamic database, as opposed to using spectrum sensing. Moreover, several locally available channels, 6 UHF and 2 VHF, which could later be reduced to 4 UHF and 2 VHF after three years, would be registered in the geolocation database as protected channels for wireless microphones in each market. Larger events would be allowed to register in the database to protect additional channels for a certain period at a certain location. Access to the protected

channels would not require FCC licensing. Eligibility to register in the database under Part 74 would moreover, be expanded to include a broad range of large event operations, including news, sports, theater, religious, music, conference, and similar operations.

The Manufacturers stress that this type of proposal represents the absolute minimum amount of protection the Commission must afford incumbent wireless microphone operators. Much more work needs to be done and much more attention needs to be paid to the needs of wireless microphone systems - including those used in news productions, religious services, music concerts, theatrical shows, business settings, and sporting events. Adopting this or a similar solution will provide much-needed certainty to wireless microphone operations in the TV bands as well as create a transition path for 700 MHz operations moving away from the 700 MHz band into the core TV band.

We appreciate your thoughtful consideration of these requests.

Sincerely,

Members of the **PROFESSIONAL AUDIO MANUFACTURERS ALLIANCE**

BEYERDYNAMIC (Farmingdale, NY)

LECTROSONICS, INC. (Rio Rancho, NM)

SAMSON TECHNOLOGIES CORP. (Hauppauge, NY)

SENNHEISER ELECTRONIC GMBH & CO. (Old Lyme, CT)

SHURE INCORPORATED (Niles, IL)

TELEX COMMUNICATIONS, INC. (South Burnsville, MN)