

**FEDERAL TRADE COMMISSION
16 CFR Part 432**

**TRADE REGULATION RULE RELATING TO POWER OUTPUT CLAIMS FOR
AMPLIFIERS UTILIZED IN HOME ENTERTAINMENT PRODUCTS**

AGENCY: Federal Trade Commission.

ACTION: Supplemental notice of proposed rulemaking.

SUMMARY: The Federal Trade Commission ("Commission" or "FTC") is issuing a supplemental notice of proposed rulemaking to amend its Rule relating to Power Output Claims for Amplifiers Utilized in Home Entertainment Products ("Amplifier Rule" or "Rule"). The Commission proposes amending the Rule to specify the channels of amplification that are to be considered "associated" under the Rule and, therefore, subject to simultaneous operation during the Rule-required power measurements of multichannel audio/video receivers and separate power amplifiers. The Commission is conducting this supplemental rulemaking proceeding because of comments filed in response to a Notice of Proposed Rulemaking ("NPR") published in the *Federal Register* on July 19, 1999, and other information discussed in this notice. The notice includes a description of the procedures to be followed, an invitation to submit written comments, a list of questions and issues upon which the Commission particularly desires comments, and instructions for prospective witnesses and other interested persons who desire to participate in a hearing where oral testimony could be presented.

DATES: Written comments must be submitted on or before February 23, 2001. Notifications of interest in testifying must be submitted on or before February 23, 2001. If interested parties request the opportunity to present testimony, the Commission will publish a document in the *Federal Register*, stating the time and place at which the hearings will be held and describing the

procedures that will be followed in conducting the hearings. In addition to submitting a request to testify, interested parties who wish to present testimony must submit, on or before February 23, 2001, a written comment or statement that describes the issues on which the party wishes to testify and the nature of the testimony to be given. If there is no interest in a hearing, the Commission will base its decision on the written rulemaking record.

ADDRESS: Written comments and requests to testify should be submitted to Office of the Secretary, Federal Trade Commission, Room H-159, 600 Pennsylvania Ave., N.W., Washington, DC 20580. Comments and requests to testify should be identified as “16 CFR Part 432 Comment - Amplifier Rule” and “16 CFR Part 432 Request to Testify - Amplifier Rule,” respectively. If possible, submit comments both in writing and on a personal computer diskette in Word Perfect or other word processing format (to assist in processing, please identify the format and version used). Written comments should be submitted, when feasible and not burdensome, in five copies.

FOR FURTHER INFORMATION CONTACT: Dennis Murphy, Economist, Division of Consumer Protection, Bureau of Economics, (202) 326-3524, or Neil Blickman, Attorney, Division of Enforcement, Bureau of Consumer Protection, (202) 326-3038, Federal Trade Commission, Washington, DC 20580.

SUPPLEMENTARY INFORMATION:

Part A - Introduction

This Supplemental Notice of Proposed Rulemaking (“SNPR”) is published pursuant to section 18 of the Federal Trade Commission Act, 15 U.S.C. 57a *et seq.*, the provisions of Part 1, Subpart B of the Commission’s Rules of Practice, 16 CFR 1.7 *et seq.*, and 5 U.S.C. 551 *et seq.* This authority permits the Commission to promulgate, modify, and repeal trade regulation rules

that define with specificity acts or practices that are unfair or deceptive in or affecting commerce within the meaning of section 5(a)(1) of the FTC Act, 15 U.S.C. 45(a)(1).¹

The Amplifier Rule was promulgated on May 3, 1974 (39 FR 15387), to assist consumers in purchasing power amplification equipment for home entertainment purposes by standardizing the measurement and disclosure of various performance characteristics of the equipment. On July 19, 1999, the Commission published in the *Federal Register* a Notice of Proposed Rulemaking that proposed amending the Rule to (1) exempt sellers who make power output claims in media advertising from the requirement to disclose total rated harmonic distortion and the associated power bandwidth and impedance ratings; (2) clarify the manner in which the Rule's testing procedures apply to self-powered subwoofer-satellite combination speaker systems; and (3) reduce the preconditioning power output requirement from one-third of rated power to one-eighth of rated power (64 FR 38610).

On September 21, 1999, the Commission published in the *Federal Register* its decision granting an extension of the public comment period on the NPR until October 15, 1999 (64 FR 51087). The extension was granted to allow the Consumer Electronics Manufacturers Association ("CEMA"), the principal trade association of the U.S. electronics industry, additional time to elicit information from its members concerning the testing and performance of certain multichannel audio/video receivers and amplifiers, such as those used in home theater installations. These receivers and amplifiers, which incorporate five or more discrete channels of

¹ In accordance with section 18 of the FTC Act, 15 U.S.C. 57a, the Commission submitted this SNPR to the Chairman of the Committee on Commerce, Science, and Transportation, United States Senate, and the Chairman of the Committee on Commerce, United States House of Representatives, 30 days prior to its publication in the *Federal Register*.

amplification, are designed to decode and/or amplify digitally encoded multichannel movie soundtracks or music program material recorded on video cassette tapes, laser discs, or digital video disks. CEMA informed Commission staff that marketers of such equipment are not interpreting the Rule's testing procedures in a uniform fashion, and that certain advertised power specifications might mislead consumers.²

Audio/video receivers with digital decoding circuitry and five or more discrete channels of amplification were not available to consumers when the Commission initiated its review of the Amplifier Rule in 1997 to determine the Rule's current effectiveness and impact.³ The Commission has tentatively concluded that such components raise unique interpretational issues under the Rule that were not addressed in the 1997 review or in the subsequent NPR. The Commission has determined, therefore, to publish this SNPR commencing a supplementary rulemaking proceeding, and inviting interested persons to submit written comments addressing the issues raised in this notice. In a separate document published elsewhere in today's *Federal Register*, the Commission announces a final rule resolving the three issues that were the subject of the NPR.

² CEMA, (5), pp. 6-7. All Rule NPR comments are on the public record and are available for public inspection in the Public Reference Room, Room 130, FTC, 600 Pennsylvania Ave., NW, Washington, DC, from 8:30 a.m. to 5:00 p.m., Monday through Friday, except holidays.

³ 62 FR 16500 (April 7, 1997).

Part B - Analysis of Proposed Amendment to Designate “Associated Channels” for Multichannel Audio/Video Receivers and Power Amplifiers

Section 432.2(a) of the Rule requires that an amplifier’s rated continuous power output per channel be “[m]easured with all *associated* channels fully driven to rated per channel power.” [Emphasis added.] When the Rule was promulgated in 1974, virtually all amplifiers available to consumers incorporated either one channel of amplification (“monophonic” amplifiers), or two channels in a left and right “stereophonic” configuration. For such amplifiers, interpretation of the term “all associated channels” in section 432.2(a) is self evident. By definition, a monophonic amplifier can be measured only with its single channel driven to full rated power. For stereophonic amplifiers, the left and right channels clearly are associated presentations of the same musical performance and, in any event, are the only channels that could be considered “associated” under the Rule.

In recent years, multichannel audio/video receivers and power amplifiers with five or more channels of amplification have accounted for an increasingly large share of consumer audio equipment sales. This equipment is designed to reproduce digitally encoded cinema soundtracks and musical program material recorded on video cassette tapes, laser discs, and digital video discs. Current digital audio/video receivers and amplifiers typically incorporate a pair of front left and right stereophonic amplification channels, a center channel designed to reproduce the dialog portion of cinema soundtracks, and two discrete rear amplification channels that may reproduce special sound effects or ambient sound information encoded in cinema soundtracks or music program material. Some home theater amplifiers may also provide one or more “subwoofer” amplification channels that are dedicated to reproducing only deep bass frequencies (below

approximately 100 Hertz). Future developments may include additional surround or special effects channels placed around the listening room.

Manufacturers of multichannel audio/video receivers and amplifiers who wish to rate power output under section 432.2 of the Rule must decide which of the five or more discrete channels of amplification are to be considered “associated” and, therefore, subject to simultaneous operation at full rated power. Under the strictest interpretation of section 432.2(a), all available channels would be considered associated and all channels would be driven to full rated power simultaneously during testing. Such a regimen might severely tax the common power supply utilized in many home theater receivers, and the resulting per channel power ratings might be considerably below those that would be obtained if, for example, only the specific set of channels being rated (*e.g.*, surround channels) were driven to full power simultaneously. The controlling consideration in determining the proper interpretation of “associated channels” is whether audio/video receivers and amplifiers would, when operated by consumers in the home at high playback volume, be required to deliver full rated power output in all channels simultaneously, or whether such maximum stress conditions would more likely be restricted at any given moment of time to certain sub-groupings of available channels.

The Commission already has reached a determination relevant to the appropriate treatment of any subwoofer channels of amplification that might be provided in audio/video receivers. This determination, which the Commission announced in a separate section of today’s *Federal Register*, applies to self-powered combination subwoofer-satellite loudspeaker systems, such as those used with personal computers and in home theater installations. Specifically, the Commission amended section 432.2 of the Rule to specify that:

. . . when measuring maximum per channel output of self-powered combination speaker systems that employ two or more amplifiers dedicated to different portions of the audio frequency spectrum, such as those incorporated into combination subwoofer-satellite speaker systems, only those channels dedicated to the same audio frequency should be considered associated channels that need be fully driven simultaneously to rated per channel power.

In reaching this determination, the Commission concluded that, under actual in-home use of such combination systems, maximum power demands typically would not occur precisely in the crossover region of frequencies that would be reproduced both by the subwoofer and satellite amplifiers. Rather, simultaneous demands would more likely occur in portions of the audio spectrum that would be assigned primarily either to the subwoofer amplifier or the satellite amplifier.⁴ A similar conclusion would appear to hold for home theater receivers that incorporate a separate amplified subwoofer channel(s) and an internal crossover network.

The Commission tentatively concludes, therefore, that subwoofer amplifiers in combination self-powered subwoofer-satellite speaker systems and subwoofer amplifiers in audio/video receivers should be treated consistently under section 432.2(a) of the Rule. That is, the amplified subwoofer channel(s) of digital home theater receivers and the remaining amplified channels need not be considered “associated” channels that must be fully driven to rated per channel power when rating the power output of the subwoofer channel(s).

The Commission is unable, however, to make any tentative determination at this time concerning the appropriate designation of associated channels for the remaining amplified channels in multichannel audio/video receivers and amplifiers, since the comments on the NPR contained no evidence relevant to this issue. The Commission, therefore, is soliciting public

⁴ See, e.g., 64 FR 38610, 38613 (July 19, 1999).

comment on three alternative methods of grouping associated channels for multichannel audio/video receivers. These alternatives would govern power ratings applicable when an audio/video receiver is used in full multichannel mode. The proposed alternative amendments would not affect power ratings for the main left and right front channels that apply when the receiver's intended use is restricted to conventional stereo mode. For such conventional stereo ratings, only the two front stereo channels need be driven simultaneously to full rated power.

Commission adoption of the first alternative ("Alternative A") would designate all amplified channels other than the subwoofer channel(s) as "associated," and would require that all such channels be driven simultaneously to full rated output during power output measurements. Thus, for example, a technician rating the maximum per channel output of the main front left and right channels would be required to drive both front channels, the center channel, and the surround channels to full rated power while performing these measurements. The basis for this designation of associated channels would be a determination by the Commission that multichannel audio/video receivers and power amplifiers commonly would be required to generate full rated power simultaneously in all channels (other than the subwoofer channel(s)) when reproducing multichannel program material in the home at high playback volume.

Commission adoption of the second alternative ("Alternative B") would designate the front left and right channels and the front center channel as one set of associated channels, and all surround channels as a separate set of associated channels. Accordingly, all front channels would have to be driven to full rated power during measurements of rated per channel power output for either the front stereo channels or the center channel. Similarly, all surround channels (but none of the front channels) would have to be driven simultaneously to full rated power during

measurements of the rated per channel power output of the surround channels. The basis for this designation of associated channels would be a Commission determination that multichannel audio/video receivers and power amplifiers commonly would be required to deliver full rated power simultaneously to the front stereo and front center channels when reproducing multichannel program material in the home at high volume, but that such full power demands are not likely to occur simultaneously with full power demands in the surround channels.

Commission adoption of the third alternative (“Alternative C”) would designate the front left and right channels as one set of associated channels, the center channel(s) as a second associated set, and all surround channels as a third set of associated channels. Thus, only the two front stereo channels would have to be driven simultaneously to full rated power during measurements of rated per channel power output for these channels; similarly, only the front center channel(s) would have to be driven to full rated power during power measurement of rated per channel output for that channel set; and only the surround channels would have to be driven simultaneously to full rated power during measurements of rated per channel output of those channels. The basis for this designation of associated channels would be a Commission determination that multichannel audio/video receivers and power amplifiers commonly would be required to deliver full rated per channel power output simultaneously to either the front stereo channels, front center channel(s), or surround channels, but not simultaneously to any two or more sets of these channels, when reproducing multichannel program material in the home at high volume.

Part C - Rulemaking Procedures

The Commission finds that the public interest will be served by using expedited procedures in this proceeding. Using expedited procedures will support the Commission's goals of clarifying existing regulations, when necessary, and eliminating obsolete or unnecessary regulation without an undue expenditure of resources, while ensuring that the public has an opportunity to submit data, views and arguments on whether the Commission should amend the Rule.

The Commission, therefore, has determined, pursuant to 16 CFR 1.20, to use the procedures set forth in this notice. These procedures include: (1) publishing this Supplemental Notice of Proposed Rulemaking; (2) soliciting written comments on the Commission's proposals to amend the Rule; (3) holding an informal hearing, if requested by interested parties; (4) obtaining a final recommendation from staff; and (5) announcing final Commission action in a notice published in the *Federal Register*.

Part D - Request For Public Hearings

Because written comments appear adequate to present the views of all interested parties, a public hearing has not been scheduled. If any person would like to present testimony at a public hearing, he or she should follow the procedures set forth in the **DATES** and **ADDRESS** sections of this notice.

Part E - Description of Proposed Amendment and Alternatives Relating to Designation of "Associated Channels" for Multichannel Audio/Video Receivers and Power Amplifiers

The Commission proposes to amend section 432.2 to define the term "associated channels" for multichannel audio/video receivers such as those used in home theater systems.

The Commission solicits public comment on the following three alternative designations of “associated channels” for such audio equipment:

Alternative A: When measuring maximum per channel output of multichannel audio/video receivers and power amplifiers, the front stereo channels, the center channel(s), and the surround channels should be considered associated channels that need be fully driven simultaneously to rated per channel power. The subwoofer channels should be considered as a second group of associated channels.

Alternative B: When measuring maximum per channel output of multichannel audio/video receivers and power amplifiers, the front stereo channels and the center channel(s) should be considered one group of associated channels; the surround channels should be considered a second group of associated channels; and the subwoofer channels should be considered a third group of associated channels.

Alternative C: When measuring maximum per channel output of multichannel audio/video receivers and power amplifiers, the front stereo channels should be considered one group of associated channels; the center channel(s) should be considered a second group of associated channels; the surround channels should be considered a third group of associated channels; and the subwoofer channels should be considered a fourth group of associated channels.

Part F - Preliminary Regulatory Analysis and Regulatory Flexibility Act Requirements

Under section 22 of the FTC Act, 15 U.S.C. 57b, the Commission must issue a preliminary regulatory analysis for a proceeding to amend a rule only when it (1) estimates that the amendment will have an annual effect on the national economy of \$100,000,000 or more; (2) estimates that the amendment will cause a substantial change in the cost or price of certain

categories of goods or services; or (3) otherwise determines that the amendment will have a significant effect upon covered entities or upon consumers. The Commission has preliminarily determined that the proposed amendment to the Rule will not have such effects on the national economy, on the cost of sound amplification equipment, or on covered businesses or consumers. The Commission, however, requests comment on the economic effects of the proposed amendment.

The Regulatory Flexibility Act ("RFA"), 5 U.S.C. 601-12, requires that the agency conduct an analysis of the anticipated economic impact of the proposed amendment on small businesses. The purpose of a regulatory flexibility analysis is to ensure that the agency considers impact on small entities and examines regulatory alternatives that could achieve the regulatory purpose while minimizing burdens on small entities. Section 605 of the RFA, 5 U.S.C. 605, provides that such an analysis is not required if the agency head certifies that the regulatory action will not have a significant economic impact on a substantial number of small entities.

Because the Amplifier Rule covers manufacturers and importers of power amplification equipment for use in the home, the Commission believes that any amendments to the Rule may affect a substantial number of small businesses. Nevertheless, the proposed amendment would not appear to have a significant economic impact upon such entities.

Depending upon which of the three proposed alternative amendments is adopted, the clarification of testing procedures for multichannel audio/video receivers and separate power amplifiers would have either no impact or a modest impact on the overall cost of producing affected amplification equipment. Proposed Alternative A, which would require all channels of multichannel audio/video receivers and amplifiers to be driven to full rated power during the

power rating tests of either the satellite, center, or surround channels, might lead some manufacturers to install more costly power supplies in order to maximize the power output ratings that could be achieved with this testing procedure. Any such upgrading of electronic components would not, however, require substantial investments in capital equipment or other investments involving high fixed costs (such as expansion of record keeping systems) that could have a disproportionate impact on small businesses. Proposed Alternatives B and C, which would place lower demands on the power supplies of multichannel receivers and amplifiers, would have little or no impact on any business decisions for either large or small businesses.

Based on available information, therefore, the Commission certifies that amending the Amplifier Rule as proposed will not have a significant economic impact on a substantial number of small businesses. To ensure that no significant economic impact is being overlooked, however, the Commission requests comments on this issue. The Commission also seeks comments on possible alternatives to the proposed amendment to accomplish the stated objectives. After reviewing any comments received, the Commission will determine whether a final regulatory flexibility analysis is appropriate.

Part G - Paperwork Reduction Act

The Amplifier Rule contains various information collection requirements for which the Commission has obtained clearance until August 31, 2002, under the Paperwork Reduction Act, 44 U.S.C. 3501 *et seq.*, Office of Management and Budget ("OMB") Control Number 3084-0105. As noted above, for purposes of performing the tests necessary for affected entities to make the disclosures required under the Rule, Section 432.2(a) of the Rule requires that an amplifier's rated

continuous power output per channel be measured with all associated channels fully driven to rated per channel power.

The amendment proposed by the Commission would not increase or alter the Rule's paperwork requirements. Consequently, there are no additional "collection of information" requirements included in the proposed amendment to submit to OMB for clearance under the Paperwork Reduction Act.

The proposed amendment to designate the channels of amplification that are to be considered "associated" under the Rule and, therefore, subject to simultaneous operation during the Rule-required power measurements of multichannel audio/video receivers and separate power amplifiers would not increase the Rule's paperwork burden. Further, it would not alter the Rule's requirements, but merely would clarify the test procedure that should be followed in applying the Rule's continuous power rating protocol to multichannel audio/video receivers and amplifiers.

Thus, the Commission concludes that the proposed amendment would not increase the paperwork burden associated with compliance with the Rule. To ensure that no significant paperwork burden is being overlooked, however, the Commission requests comments on this issue.

Part H - Additional Information For Interested Persons

1. Motions or Petitions

Any motions or petitions in connection with this proceeding must be filed with the Secretary of the Commission.

2. Communications by Outside Parties to Commissioners or Their Advisors

Pursuant to Commission Rule 1.18(c)(1), 16 CFR 1.18(c)(1), the Commission has determined that communications with respect to the merits of this proceeding from any outside party to any Commissioner or Commissioner advisor shall be subject to the following treatment. Written communications and summaries or transcripts of oral communications shall be placed on the rulemaking record if the communication is received before the end of the comment period. They shall be placed on the public record if the communication is received later. Unless the outside party making an oral communication is a member of Congress, such communications are permitted only if advance notice is published in the Weekly Calendar and Notice of “Sunshine” Meetings.⁵

Part I - Invitation to Comment and Questions For Comment

Members of the public are invited to comment on any issues or concerns they believe are relevant or appropriate to the Commission’s consideration of the proposed amendment to the Amplifier Rule. The Commission requests that factual data upon which the comments are based be submitted with the comments. In addition to the issues raised above, the Commission solicits public comment on the costs and benefits to industry members and consumers of each of the proposals, as well as the specific questions identified below. These questions are designed to assist the public and should not be construed as a limitation on the issues on which public comment may be submitted.

The written comments submitted will be available for public inspection in accordance with the Freedom of Information Act, 5 U.S.C. 552, and Commission regulations, on normal business

⁵ See 15 U.S.C. 57a(i)(2)(A); 45 FR 50814 (1980); 45 FR 78626 (1980).

days between the hours of 8:30 a.m. to 5:00 p.m. at the Federal Trade Commission, 600 Pennsylvania Ave., N.W., Room 130, Washington, D.C. 20580, (202) 326-2222.

Questions

(1) What are the various testing procedures used currently by manufacturers of multichannel audio/video receivers and power amplifiers to determine full rated per channel power of the front left and right channels, center channel(s), surround channels, and subwoofer channels? Which channels of amplification are most frequently driven simultaneously to full rated power when performing such measurements?

(2) Would multichannel audio/video receivers and power amplifiers commonly be required to deliver full rated power simultaneously to all channels (other than the subwoofer channel(s)) when reproducing multichannel cinema soundtracks and other multichannel program material in the home at high playback volume? If not, to which channels would audio/video receivers and power amplifiers commonly be required to deliver full rated power simultaneously when reproducing multichannel program material in the home at high volume?

(3) Should the Commission adopt “Alternative A” to define “associated channels” for multichannel audio/video receivers and power amplifiers? Why or why not?

(4) Should the Commission adopt “Alternative B” to define “associated channels” for multichannel audio/video receivers and power amplifiers? Why or why not?

(5) Should the Commission adopt “Alternative C” to define “associated channels” for multichannel audio/video receivers and power amplifiers? Why or why not?

(6) Are there any other definitions of “associated channels” that would be preferable to any of the three proposed alternative designations? If so, why?

Authority: 15 U.S.C. 41-58.

List of Subjects in 16 CFR Part 432

Amplifiers, Home entertainment products, Trade practices.

By direction of the Commission.

Donald S. Clark
Secretary