

October 20, 2023

Federal Trade Commission  
600 Pennsylvania Avenue, NW  
Washington, DC 20580

**Re: Trade Regulation Rule Relating to Power Output Claims for Amplifiers Utilized in Home Entertainment Products, Docket No. 2023-16792**

To the Federal Trade Commission:

The Consumer Technology Association® (“CTA”) submits these comments to the Federal Trade Commission (“FTC” or “Commission”) in response to the supplemental proposed amendments<sup>1</sup> to the Trade Regulation Rule Relating to Power Output Claims for Amplifiers Utilized in Home Entertainment Products (“Amplifier Rule”).<sup>2</sup>

As CTA outlined in comments filed last year,<sup>3</sup> we share the FTC’s objective of ensuring that consumers have the ability to make informed audio technology purchases and appreciate the Commission’s focus over the years on ensuring that consumers are able to obtain helpful, relevant information about sound amplification equipment.

While CTA respectfully disagrees with the Commission’s proposed approach of standardizing power output test conditions governing impedance, power band, and distortion, we outline the following recommendations, which would better align the rules with the realities of today’s audio marketplace. We also propose specific wording changes to the FTC’s proposed language in Exhibit 1.

*CTA Urges the Commission to Reconsider the Proposed Standard Test Conditions*

CTA urges the Commission to avoid setting a fixed load impedance of 8 ohms.<sup>4</sup> Today’s modern amplifiers are digital amplifiers, and some digital amplifiers use constant voltage power supplies

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<sup>1</sup> *Trade Regulation Rule Relating to Power Output Claims for Amplifiers Utilized in Home Entertainment Products*, Supplemental Notice of Proposed Rulemaking, 88 Fed. Reg. 56780 (Aug. 21, 2023) (“Supplemental Notice”).

<sup>2</sup> *Trade Regulation Rule Relating to Power Output Claims for Amplifiers Utilized in Home Entertainment Products*, Notice of Proposed Rulemaking, 87 Fed. Reg. 45047 (Jul. 27, 2022).

<sup>3</sup> See Comments of Consumer Technology Association, Docket No. FTC-2022-0048 (filed Sept. 26, 2022), <https://www.regulations.gov/comment/FTC-2022-0048-0008>.

<sup>4</sup> Supplemental Notice at 56782.

where the desired output cannot be obtained unless the load impedance is as specified by the manufacturer.

For products with built-in speakers or products with specified load impedances, the stated output power will only be achieved at the specified load impedance. Especially for products that have built-in or attached speakers, it is impossible for customers to use speakers with different impedances. CTA urges the Commission to allow flexibility for manufacturers to determine the load impedance for each product. At a minimum, the final rule must accommodate products with speakers that are permanently attached and are not 8 ohms. These products must be tested as configured with their matching speakers.

Second, CTA urges the Commission to revise the use of a proposed power band of 20 Hz to 20 kHz.<sup>5</sup> There are many audio applications where the historical “full range” of 20 Hz to 20 kHz is not achievable or expected by consumers. Generally, the frequency range of radio is 50 Hz to 15 kHz for FM broadcasting and 100 Hz to 7.5 kHz for AM broadcasting. Popular bookshelf and wireless speakers for example, may not support frequencies down to 20 Hz. The FTC’s proposal to increase the frequency range will impose additional costs that all consumers must pay and does not reflect the diversity of audio products available in today’s marketplace. The Commission should allow the frequency range of the power band to be determined by the manufacturer for each product.

Third, CTA respectfully requests that the Commission reconsider its decision to measure THD+N over the entire band.<sup>6</sup> The method of measuring THD+N in the power band, as proposed by the Commission, is problematic. While THD+N can be measured at 1 kHz, low frequencies in the power band are affected by the hum of the commercial power supply and cannot be measured correctly. As previously noted, modern amplifiers are digital, and are affected by out-of-band noise of 20 kHz or higher, which is sampling noise. The Commission should specify distortion measurement as THD at 1 kHz.

#### *The Commission’s Required and Optional Disclosures Should be Revised*

In the supplemental proposed amendments to the Audio Amplifier Rule, the Commission proposes “requiring sellers to use specific language to clearly distinguish power output disclosures under § 432.2 from Optional Disclosures under § 432.4.”<sup>7</sup> For reasons of standard test conditions, the rated load impedance and frequency range should continue to be specified by the manufacturer for each product.

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<sup>5</sup> *Id.*

<sup>6</sup> *Id.* at 56782-83.

<sup>7</sup> *Id.* at 56784.

The Commission also proposes under the optional disclosures the use of the phrase, ““This rating does not meet the FTC standard.””<sup>8</sup> In countries other than the US, the International Electrotechnical Commission (“IEC”) power output ratings are standard, and it is necessary to list FTC and IEC specifications at the same time. It is inappropriate for the FTC to require manufacturers to flag other, perfectly acceptable standardized measurements as not meeting the FTC standard. Other countries do not require products to mark FTC ratings as not meeting IEC standards. CTA proposes that this phrasing not be required when additionally disclosing other operating characteristics and technical specifications (Output specifications such as IEC and Japan Electronic Information Technology Association (“JEITA”)).

CTA appreciates the Commission’s attention to these issues and urges the agency to reconsider its proposed changes to more closely align with the current state of the audio marketplace and the actual needs of consumers.

Respectfully submitted,

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<sup>8</sup> *Id.*

## Exhibit 1: CTA Recommended Revisions to FTC Proposal

CTA's proposed revisions to the language proposed by the FTC are listed below. Proposed deletions are indicated with strikethrough marks, and proposed additions are indicated with underlines.

### 1. CTA proposed revisions to § 432.2 language proposed by FTC:

#### § 432.2 Required disclosures.

Whenever any direct or indirect representation is made of the power output, power band or power frequency response, or distortion characteristics of sound power amplification equipment, the manufacturer's rated power output shall be disclosed subject to the following conditions:

- (a) The rated power output is measured in compliance with the standard test conditions in § 432.3;
- (b) The rated power output is disclosed clearly, conspicuously, and more prominently than any other representations or disclosures permitted under this part;
- (c) The disclosure of the rated power output is clearly and conspicuously labeled "FTC Power Output Rating"; and
- (d) The disclosures or representations required under this section shall not be made by a footnote, asterisk, or similar notation.

### 2. CTA proposed revisions to § 432.3 language proposed by FTC:

#### § 432.3 Standard test conditions.

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(e) Any power level from 250 mW to the rated power shall be obtainable at all frequencies within the rated power band stipulated by the manufacturer ~~of 20 Hz to 20 kHz~~ without exceeding 1.0% of total harmonic distortion ~~plus noise~~ (THD+N) at an impedance stipulated by the manufacturer ~~of 8 ohms~~ after input signals at said frequencies have been continuously applied at full rated power for not less than five (5) minutes at the amplifier's auxiliary input, or if not provided, at the phono input. Provided, however, that for amplifiers utilized as a component in a self-powered subwoofer in a self-powered subwoofer-satellite speaker system that employs two or more amplifiers dedicated to different portions of the audio frequency spectrum, any power level from 250 mW to the rated power shall be obtainable at all frequencies within the subwoofer amplifier's intended operating bandwidth without exceeding 1.0% of total harmonic distortion ~~plus noise~~ (THD+N) at an impedance stipulated by the manufacturer ~~of 8 ohms~~ after input signals at said frequencies have been continuously applied at full rated power for not less than five (5) minutes at the amplifier's auxiliary input, or if not provided, at the phono input.

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(g) Rated power shall be minimum sine wave continuous average power output, in watts, per channel (if the equipment is designed to amplify two or more channels simultaneously), measured with all associated channels fully driven to rated per channel power.

(h) Associated channels for multichannel amplifiers shall include, at a minimum, the left front and right front channels used for reproducing stereo programming. Provided, however, when measuring the 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 spectrum should be considered associated channels.

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3. CTA proposed revisions to § 432.4 language proposed by FTC:

§ 432.4 Optional disclosures.

Other operating characteristics and technical specifications not required in § 432.2 of this part may be disclosed provided that the disclosure required by § 432.2 is clearly indicated to be the “FTC power rating.” ~~Provided, that:~~

~~(a) Any other power output is rated by the manufacturer, expressed in minimum watts per channel, and clearly and conspicuously labeled “This rating does not meet the FTC standard” without the use of a footnote, asterisk, or similar notation to make the representation;~~

~~(b) All disclosures or representations made under this section are less conspicuously, and prominently made than any rated power output disclosure required in § 432.2. Any disclosure or representation bold faced or more than two-thirds the height of any rated power output disclosure required in § 432.2 is not less prominent; and~~

~~(c) The rating and testing methods or standards used in determining such other representations are must be well known and generally recognized by the industry at the time the representations or disclosures are made, and shall not be ~~are neither~~ intended nor likely to deceive or confuse consumers, and are not or otherwise likely to frustrate the purpose of this part.~~