



Proprietary Ear-Protecting Technology Proposing New Value in Response to Hearing Loss Risks Facing Youths Worldwide

- Bluetooth® Earphones Equipped with Listening Care Function -

The World Health Organization (WHO) estimates that 1.1 billion, or roughly half, of the world's youths (individuals aged 12 to 35) are at risk of hearing loss as a result of continuously listening to music at high volumes. In light of this risk, the concept of safe listening, which refers to methods of enjoying music without damaging one's ears, is gaining attention.

On this front, Yamaha is creating new value through its launch of earphones equipped with Listening Care, a proprietary technology that automatically adjusts sound balances in conjunction with volume levels, to deliver superior sound quality while protecting users' hearing.

Yamaha's Goal of Reducing Hearing Loss Risks Inherent in Music Enjoyment

Music has become an indispensable part of our everyday lives. As a result, attention is now being turned toward the idea of an appropriate relationship with sound. This trend gained steam in February 2019 when the WHO sounded the alarm regarding the high risk of hearing loss facing 1.1 billion, or roughly half, of the world's youths. This risk emerges as a result of ongoing exposure to high-volume sound, whether through extended music listening sessions using one's smartphone or mobile music device or at concert halls, clubs, or sports stadiums. This ongoing exposure can place an excessive burden on one's ears and thereby result in hearing loss.

Against this backdrop, an increasing amount of attention is being turned toward the concept of safe listening, which refers to the idea of using appropriate volume levels and breaks to safeguard one's hearing when enjoying music via headphones or earphones. The WHO and the International Telecommunication Union have put forward safe listening guidelines that state the recommended safe level for leisure noise to be below 80 decibels (75 decibels for children) for a maximum of 40 hours' duration in a week. The concept of safe listening is also being promoted in Japan through the educational efforts of SAFE LISTENING.

Yamaha proposed a resolution to this shared global issue with a series of new earphones launched in November 2019.

The most noteworthy feature of these headphones is that they are equipped with Yamaha's proprietary Listening Care technology

designed to reduce the burden placed on users' ears. Our ears work in a manner that makes it difficult to hear low- and high-frequency sounds at low volumes, a trait that creates the temptation to raise volume levels and place a greater burden on our ears. Listening Care is a technology designed to help fight this temptation by delivering an ideal sound balance at any volume. Our Listening Care earphone lineup includes the TW-E7A and two other models of truly wireless Bluetooth earphone models as well as the EP-E50A and one other Bluetooth earphone model. These earphones were launched in Japan in December 2019, and we are sequentially rolling out these products on a global scale.



WHO Makes Listening Safe initiative logo (from WHO's official website)



New Ear Protection Value Delivered Together with Higher Pinnacles of Sound Quality

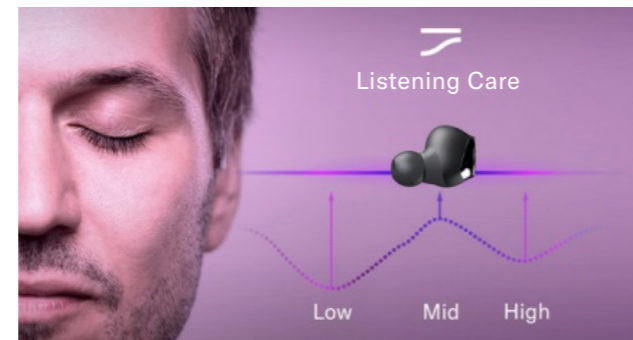
The development of Listening Care earphones was grounded on data that supports the recommendations of the WHO and that was amassed during the course of Yamaha's distinctive user insight surveys, which look at both fundamental desires and depth psychology. It is not uncommon for teens and millennials*1 to listen to music for several hours a day, and such individuals thus often harbor concern regarding the potential adverse impacts of this practice on their hearing, driving them to seek out methods of protecting their hearing.

With sound and music at the heart of its business, Yamaha has a social mission to respond to such market needs by developing products that allow users to enjoy high-quality sound while protecting their hearing. Our dedicated efforts to fulfill this mission led to the creation of TW-E7A and other ambitious earphone models that deliver the new value of ear protection together with higher pinnacles of sound quality.

In addition to the hearing protection benefits, these earphones were shaped by Yamaha's commitment to excellence in sound. Rather than merely amplifying the bass to make for an exaggerated sound balance, we focused on reproducing the notes of every instrument as clearly and authentically as possible to allow users to hear even the most subtle nuances of their music. After launch, feedback was

received from several users indicating that the sound produced by the earphones felt natural and that users did not experience fatigue even after extended listening sessions.

*1: Millennials is a marketing term coined in the United States that is used with a broad range of definitions, but generally refers to individuals born in the period from the 1980s to the early 2000s, or the so-called "digital native" generation that grew up while interacting with IT. Millennials in Japan exhibit values and consumption patterns that differ from those of the bubble generation or the second-generation baby boomer generation. Specific characteristics of Japan's millennials include a lack of preoccupation with consumption, income, and the pursuit of higher socio-economic status; an emphasis on cost performance; and a strong drive toward social contribution.



Listening Care promotional image

COMMENT

Importance of Demonstrating Corporate Purpose and Value Means of Delivering Social Value

The current era is one in which society has the benefit of an abundance of goods and information. However, this abundance can make it difficult for consumers to decide the standards based on which they should choose brands and products. This era is thus also one in which the very purpose of companies is being called into question with regard to the role they should play in society and the returns they should make to society. With the release of Listening Care earphones, Yamaha has gone beyond simply educating consumers on the subject of hearing loss, and I feel that the provision of such a concrete solution to this issue has significant meaning for this reason. This answer also hints at the future potential that lies before us. For example, earphone users are not the only ones who need a means of protecting their ears from damage due to noise. Artists and musicians performing on stage also need such protection, as do the engineers working backstage. In this manner, there is a wide range of possibilities for the products, technologies, and services Yamaha proposes.

Product Strategy Group
Home Audio Division, Audio Products Business Unit

Yuta Yuyama



Earphones Creating New Value with Ear Protection and Superior Sound Quality

Make Waves 1.0, the Yamaha Group's medium-term management plan, defines one of the strategies for the AV products business to be pursuing growth in the personal audio domain, which includes wireless speakers, earphones, headphones, and other products. The AV product industry features intense competition among highly capable major players. Yamaha will thus need to propose new value if it is to carve out a unique position in this industry.

Previously, no one would have imagined that Yamaha's musical instrument and audio equipment businesses would be directly linked to the accomplishment of Goal 3 of the United Nations Sustainable Development Goals: "Ensure healthy lives and promote well-being for all at all ages." However, the launch of Listening Care earphones has

brought the Yamaha Group to this new horizon. Yamaha has set the medium-term target for its musical instrument and audio equipment businesses of having 70% of its headphone and earphone products designed to protect user hearing three years from now. To this end, we plan to equip all wireless earphones launched going forward with Listening Care functions while simultaneously moving ahead with research and development to further refine this technology. As a company with sound and music at the heart of its business, Yamaha will seek to create unique value with earphones that allow users to enjoy music while protecting their hearing, a product that will be indispensable to the world of tomorrow.

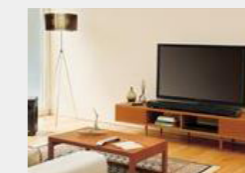
Transform AV product business portfolio

Achieve growth in personal audio domain

- Shift product lineup towards wireless speakers, etc. in line with changing lifestyles



Hi-Fi AV receivers



Sound bars



Wireless speakers



Headphones / earphones

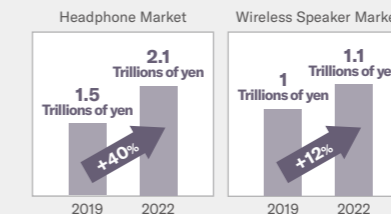
Yamaha's existing strengths

Further expand domain

AV Product Business Strategy (from Medium-Term Management Plan)

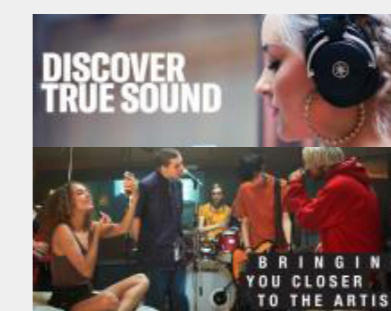
Transform business portfolio

- Reinforce product lineup launches in the personal audio market targeting millennials



Develop customer interface and strengthen brand appeal

- Communicate the appeal of the Yamaha brand outlook to millennials
- Expand direct marketing and exclusive display in stores



Enhance product competitiveness with new value propositions

- Launch 3D Sound headphones offering totally immersive surround sound experience
- Offer wireless sound systems via MusicCast™*2

*2: Yamaha's proprietary wireless network system

