# MOVERIO BT-200 USED IN JAPANESE NATIONAL OPERA



## EPSON'S MOVERIO BT-200 TESTS OPERA SUBTITLE DELIVERY SYSTEM

Seiko Epson Corporation is partnering with the Japanese New National Theatre Foundation (NNTF), Information Services International - Dentsu, Ltd., and Zimaku+ Inc. to test an opera subtitle delivery system.

The system was tested from 28th February to 2nd March 2014 during performances by the New National Theatre Opera Studio in Japan. Selected guests were able to follow the performances with subtitles projected onto the see-through lenses of Epson's new Moverio BT-200 smart glasses.

Operas are commonly sung in Italian or German, so opera houses in Japan often install large LED displays in front of the stage wings to provide subtitles during performances. The problem with these systems, however, is that opera-goers have a hard time immersing themselves in the performance because they are constantly taking their eyes off the stage to read the subtitles.

Epson and its partners have created the practical potential of a more convenient subtitle system that they hope solves this problem. The new system takes advantage of the ability of the Moverio BT-200, which can be worn like an ordinary pair of glasses, to display subtitles seemingly in the air while guests watch the action on the stage. Moverio BT-200 smart glasses will be loaned to selected guests who want a more natural opera viewing experience with line-of-sight subtitles.

#### The roles of the parties in the demonstration

#### Epson

Epson provided the Moverio BT-200 smartglasses.

#### New National Theatre, Tokyo (NNTT)

The NNTT Opera Studio presented a production of Ariadne auf Naxos.

Information Services International - Dentsu (ISID)

ISID provided "potaVee," an area-limited, Wi-Fi multicasting platform that delivers subtitles that are synchronised with the opera. ISID also created a subtitle app for the Moverio BT-200.

#### Zimaku+

Zimaku+ produced the subtitles for the opera, provide and run the server used to deliver the subtitles, and manage the test during the sessions.

### New National Theatre, Tokyo (NNTT)

#### **Key Facts**

- Opera performances took place over three days in February and March 2014
- The Moverio BT-200 was used to project subtitles over the viewer's entire field of vision, so they could immerse themselves in the opera
- This trial loaned the smart glasses to selected users in the audience

"Epson believes that Moverio's binocular, transparent display and hands-free navigation give it the potential to transform the way people experience and interact with the world around them."



Recreated image/ Photo by M.Terashi, TokyoMDE/ Experiment conducted by Japanese New National Theatre Foundation



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#### Epson's Moverio BT-200 smart glasses

Epson believes that Moverio's binocular, transparent display and handsfree navigation give it the potential to transform the way people experience and interact with the world around them. The Moverio technology platform can serve as a foundation for the development of new visual tools in a wide variety of consumer and commercial fields.

Sporting a sleek, light design, Moverio BT-200 smart-glasses offer users the ability to enjoy crystal clear video entertainment, games, music, and web content, anytime and anywhere. With transparent lenses and motion tracking sensors that make navigation hands-free, the Moverio projects see-through overlays of digital content onto the real world so that users can enjoy a compelling augmented reality experience while still being able to see their surroundings. The ways in which smart glasses can be used and enjoyed is rapidly expanding with the development of an increasingly diverse range of applications.



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The Moverio BT-200

For more information, please visit: www.epson.eu/moverio

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