



Bosch releases Episode 2 of a special movie series featuring Bosch technology: BOSCHLERS, fighting evil with the power of IoT technology

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- ▶ A special movie series featuring Bosch technology as "superheroes"
- ▶ Introducing the Earth Enemies, evil villains personifying threats such as cyber attacks and air pollution
- ▶ The BOSCHLERS fight evil, using original Bosch automotive IoT technologies such as Road Signature and Perfectly Keyless
- ▶ In addition to official digital channels, movie also scheduled to air on digital signage in JR trains
- ▶ Making-of movie for Episode 2 also released

Tokyo — Bosch Corporation has released Episode 2 of BOSCHLERS—a special movie series where a team of heroes use Bosch products to help solve problems affecting society—to their official YouTube, Facebook and Twitter. BOSCHLERS was created in 2019 to encourage audiences, especially younger viewers, to learn more about Bosch technologies. Episode 2 also features the Earth Enemies, a band of evil villains on a quest for world domination. The BOSCHLERS use original IoT technology to protect the planet from the Earth Enemies.

Bosch is actively recruiting young people and has released Episode 2 on YouTube, Twitter and Facebook to coincide with the recruiting season in Japan. Bosch also plans to air the movie on digital signage in JR trains this autumn.



From left: Rider Woman, Captain Autonomous, The Creator

The BOSCHLERS are a team of three heroes personifying just some of the many areas in which Bosch operates: automotive, eBike and power tool technologies. Team members include Captain Autonomous, who freely commands the powers of mobility; Rider Woman, who is capable of supercharging objects; and The Creator, a demolition and creation specialist.

Episode 2 introduces the Earth Enemies, mysterious villains who represent societal problems addressed by Bosch, such as cyber threats and air pollution. In Episode 2, the BOSCHLERS fight the Earth Enemies using automotive IoT technology such as Road Signature and Perfectly Keyless.

With a corporate slogan of "Invented for Life", Bosch provides innovative solutions that serve mankind and society. In addition to mobility, Bosch aims to grow as a world-leading IoT company leveraging AI, and pursues innovative projects in a wide range of fields, including manufacturing, logistics, smart-homes and even agriculture. Bosch pioneers new business opportunities in digital services.

BOSCHLERS Official Release Channels

- ◆ The BOSCHLERS Official Website: <https://boschjapan-brandtopics.jp>
- ◆ YouTube: <https://www.youtube.com/watch?v=GJUzUt66WuU>
- ◆ Facebook: @bosch.co.jp <https://www.facebook.com/bosch.co.jp>
- ◆ Twitter: @BoschJapan <https://twitter.com/BoschJapan>

Bosch has also released a "making-of" Episode 2 movie and Episode 1.5 (an interview with the BOSCHLERS).

- ◆ Youtube(making-of movie): <https://www.youtube.com/watch?v=l4KqqPqnEWI>
- ◆ Youtube (Episode 1.5): https://www.youtube.com/watch?v=DG_bU9nyAz4

New Characters

Gigadence, a cyber-monster that attacks by emitting electromagnetic pulses

The ringleader of the Earth Enemies. Originally a resident of Earth, Gigadence once belonged to the anti-cyberterrorism squad of one of the world's leading nations. However, he turned away from his mission of protecting the world from hacking, seduced instead by the terror inflicted by such attacks... He wears a mask and cloak to hide his true identity and past. Through a real-time interface with the advanced equipment at Earth Enemies headquarters, Gigadence is able to absorb electromagnetic pulses into his body and release them as attacks. His only desire is to take over the world and plunge the people of Earth into fear. He is forever devising new predicaments for the BOSCHLERS, as his eyes glow with a wicked light.



Real name	Unknown
Height	200.69 cm
Weight	102.47 kg
Special abilities	Using a personal holographic interface, Gigadence is able to charge electromagnetic pulses that he releases in powerful bursts. Additionally, he is also able to attack from the air by commanding the Enemy Soldiers named Bad-Osens, which leave behind pollution in their wake.

The Bad-Osens who leave pollution in their wake

The Earth Enemies, whose aim is not to attack any specific person or organization but to take over Earth itself, understand that one of their most effective strategies is to spread pollution and cause ongoing damage. The Bad-Osens are uncanny, humanoid machines developed through detailed research by the Earth Enemies. They emit a full range of harmful pollutants, including CO2. While the amount of pollution that one Bad-Osen can produce is limited, the Earth Enemies' ability to create Bad-Osens is not. The Bad-Osens flock together and attack by the thousands, making them a dangerous enemy.



Real name	Unknown
Height	Differs depending on the unit and when they are created
Weight	Differs depending on the unit and when they are created
Special abilities	Bad-Osens automatically scan the surrounding environment, and release pollutants calculated to produce the most damage. Their bodies, themselves, are made of pollution.

Automotive IoT Technologies Appearing in Episode 2

■ Road Signature

Road Signature is a vehicle localization technology to create highly precise 3D maps for automated driving by comparing two types of data set: first, information of stationary features detected by radar and video sensors mounted on an automated vehicle while driving and, secondly, information of stationary features in a previously generated localization layer (map elements based on location data of stationary features detected by series production vehicles). By comparing these two data sets in real time, the service can constantly determine the relative position of the vehicle on the highly precise 3D map. Since it uses radar as well as video sensors, the system is highly robust also at poor weather conditions. Bosch's expertise gained from in-house development of radar and video sensors and deep knowledge of their respective characteristics is an advantage in developing Road Signature. Another feature of the service is its dynamics in data. Under the Road Signature concept, data is obtained from series production vehicles and service provider fleets. This enables changes in road status such as lane changes due to constructions and traffic accidents to be recognized, and a localization layer that reflects the changes can be provided. For more details on Road Signature, see [here](#).

■ Perfectly Keyless

Perfectly Keyless is a solution that allows users to connect their vehicle with their smartphone to lock and unlock doors and start engines, without an actual key. Perfectly Keyless conveniently allows users to manage keys via smartphone, while also maintaining a level of security not achieved with previous keyless entry systems. The vehicle and smartphone communicate via Bluetooth to lock and unlock doors and start engines. Doors will only unlock and start engines if the radio signature of the smartphone's Bluetooth chip matches that of the one registered in the vehicle's app, preventing unauthorized access by blocking relay attacks from other electronic devices. Additionally, as no physical key is required, doors and engines can be operated while the user's smartphone is still in their pocket. Furthermore, as digital keys can be managed via the cloud, multiple users can share a vehicle via a dedicated app. For more details on Perfectly Keyless, see [here](#).

Production team

Production company: DIGITAL GARDEN Inc. Supporting production company: nac Image Technology, Inc.

Agency: FRONTAGE INC.

Character design/concept: Sejoon Kim

A South Korean animator working in Japan. Animation director for Mobile Suit Gundam AGE. Chief mecha animator for Gundam Build Fighters. Director, animation director, and scriptwriter for Mobile Suit Gundam: Twilight AXIS Kim is the first non-Japanese animator to direct for the Gundam anime TV series.

Costume design: Naofumi Yonetsuka

A special make-up artist, mechanical creator, model maker, and costume designer from Aomori Prefecture. Yonetsuka encountered special effects make-up through his activities with a band while a student of sculpture at Tokyo Zokei University, and in 1993 he established Haunted Ltd. Subsequently, he became active in multiple fields beyond special effects makeup, such as character suit manufacturing, character costume design and creation, and even creating robots for amusement parks.

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Bosch in Japan is currently represented in the country by Bosch Corporation, Bosch Rexroth Corporation and other affiliates. Bosch Corporation is responsible for the development, manufacturing, sales and services of automotive original equipment, automotive aftermarket products and power tools. Bosch Engineering K.K. provides engineering services, such as development and application for automotive systems. ETAS K.K. develops and provides engineering of development support tools of electrical control units. Bosch Rexroth Corporation develops and manufactures hydraulics, FA module components and other systems which contribute to industrial technologies. Bosch Security Systems Ltd. provides security and communication products and solutions to help secure the safety of lives, buildings and properties, and is also a supplier of professional sound systems. In 2019, Bosch Japan achieved sales to third parties of some 330 billion yen and employed approximately 6,700 associates.

Additional information is available online at

<http://www.bosch.co.jp> Bosch Japan Website (Japanese)

<https://twitter.com/BoschJapan> Bosch Japan Twitter (Japanese)

<https://www.facebook.com/bosch.co.jp> Bosch Japan facebook (Japanese and English)

<https://www.youtube.com/boschjp> Bosch Japan Youtube (Japanese)

The Bosch Group is a leading global supplier of technology and services. It employs roughly 400,000 associates worldwide (as of December 31, 2019). The company generated sales of 77.7 billion euros in 2019. Its operations are divided into four business sectors: Mobility Solutions, Industrial Technology, Consumer Goods, and Energy and Building Technology. As a leading IoT provider, Bosch offers innovative solutions for smart homes, Industry 4.0, and connected mobility. Bosch pursuing a vision of mobility that is sustainable, safe, and exciting. It uses its expertise in sensor technology, software, and services, as well as its own IoT cloud, to offer its customers connected, cross-domain solutions from a single source. The Bosch Group's strategic objective is to facilitate connected living with products and solutions that either contain artificial intelligence (AI) or have been developed or manufactured with its help. Bosch improves quality of life worldwide with products and services that are innovative and spark enthusiasm. In short, Bosch creates technology that is "Invented for life." The Bosch Group comprises Robert Bosch GmbH and its roughly 440 subsidiary and regional companies in 60 countries. Including sales and service partners, Bosch's global manufacturing, engineering, and sales network covers nearly every country in the world. The basis for the company's future growth is its innovative strength. Bosch employs some 72,600 associates in research and development at 126 locations across the globe, as well as roughly 30,000 software engineers.

The company was set up in Stuttgart in 1886 by Robert Bosch (1861-1942) as "Workshop for Precision Mechanics and Electrical Engineering." The special ownership structure of Robert Bosch GmbH guarantees the entrepreneurial freedom of the Bosch Group, making it possible for the company to plan over the long term and to undertake significant upfront investments in the safeguarding of its future. Ninety-two percent of the share capital of Robert Bosch GmbH is held by Robert Bosch Stiftung GmbH, a charitable foundation. The majority of voting rights are held by Robert Bosch Industrietreuhand KG, an industrial trust. The entrepreneurial ownership functions are carried out by the trust. The remaining shares are held by the Bosch family and by Robert Bosch GmbH.

Additional information is available online at www.bosch.com, www.iot.bosch.com, www.bosch-press.com, [www.twitter.com/BoschPresse](https://twitter.com/BoschPresse).