## KOITO's LED Compact-Bi-function Won "The Seventh Monodzukuri Nippon Grand Awards The Ministry of Economy, Trade and Industry (METI) Minister's Prize"

KOITO MANUFACTURING CO., LTD. ("KOITO") (Head Office: Minato-ku, Tokyo; President: Hiroshi Mihara) announces that seven engineers of KOITO were awarded "The Seventh Monodzukuri Nippon Grand Awards METI Minister's Prize" in the products and technology development category, for their achievements in developing LED Compact-Bi-function, which helps to accelerate the use of LED headlamps by its compactness.

Monodzukuri Nippon Grand Awards is an award program to recognize outstanding individuals among various generations engaging in the frontline of monodzukuri (manufacturing), for the purpose of developing Japanese industries and cultures, and inheriting and developing such manufacturing methods. This is the first time for KOITO to win this prize.

"LED Compact-Bi-function" switches the high-beam and low-beam by using a single LED, thus realizing smaller size, lighter weight, and higher power-efficiency. KOITO started its mass-production for the first time in the world in 2014.

LED headlamp features vivid white glow, lower power-consumption, instant-lighting, and long-life. However, so far, the high-beam and low-beam functions of LED headlamps had to use respective separate LED unit (therefore 2 LED units were required).

By revolutionizing optical system, minimizing and unifying the unit components, LED Compact-Bi-function materializes both high-beam and low-beam functions by a single LED unit.

LED Compact-Bi-function helps to expand the use of LED headlamps by contributing to safer night drive, enhancing fuel efficiency of motor vehicles, and meeting the needs of diversifying headlamp designs and vehicle styling.

KOITO is committed to further pursue the cutting-edge technologies and to develop "customer-first" products in order to enhance the safety and comfort of motorization society.

[Outline of the prize awarded to KOITO]

- 1. Subject: Development of compactness technology which will accelerate the use of LED headlamps (Development of LED Compact-Bi-function)
- 2. Winners: Masatoshi Yoneyama, Yuji Higashi, Masayasu Ito, Tsukasa Tokida, Shinji Kagiyama, Katsuhito Mochizuki, Yasushi Noyori
- 3. Description of the development:

KOITO succeeded in mass-production of the world's first LED headlamp unit, capable of switching the high-beam and low-beam with a single LED.

Recognized as compact, lightweight, and power-saving LED unit with superior photometry performance, this product is now being used in a wide variety of vehicles, ranging from compact cars to luxury cars in all over the world.

