BRAINLAB
Press Release

Loop-X Imaging System Earns Coveted
Red Dot Award: Product Design 2020

New mobile device for intraoperative robotic 2D/3D imaging wins over jury of world-renowned design competition

Munich, July 13, 2020 — Brainlab, one of the world's leading specialists for software-based medical technology, announced that Loop-X™, developed in close collaboration with Austrian company medPhoton, received the coveted Red Dot Award in Product Design 2020. The jury was particularly impressed by the outstanding, space-saving design and its sophisticated mobile robotic functionality. With this device, both companies set a new standard in concept and technology for intraoperative 2D and 3D imaging. At first glance, Loop-X stands out with its striking ring-shaped design and radial arrangement of radiation source and detector.

Thanks to its slim design and large gantry opening, Loop-X Mobile Imaging Robot can flexibly position patients. The shapely construction of its closed ring is highly stable and supports precise image quality. With the extra-large detector and the independently moving X-Ray source, the device achieves a large, three dimensional field of view, giving insights into larger areas of anatomy with just one scan. With its compact design, Loop-X is easy to maneuver and can therefore be quickly transported between different operating rooms. The wireless remote control in the form of an intuitive tablet device also contributes to its ease-of-use.

The Red Dot Jury honors "intelligent functionality" [1]

With automated steps and robotic controls, the system works hand-in-hand with the surgical team. In this way, the entire procedure benefits from the system's agility and efficiency. "Loop-X Mobile Imaging Robot captivates with its space-saving, minimalistic design and intelligent functionality which supports mobile robotic imaging in the operating room," said the Red Dot Award Jury upon presenting the award[1]. The 40-member international panel evaluated 6,500 entries and awarded the coveted seal of quality for design to the best products in each respective category. Brainlab has already received the Red Dot Award three times: Curve® won for its user-oriented design in 2012, Airo® for its unique design for imaging systems in 2014 and the straightforward construction and mobility of Kick® and Kick EM® earned them the award in 2015.

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[1] https://www.red-dot.org/de/project/loop-xtm-mobile-imaging-robot-45888

"We are very proud of this award. With Loop-X, we have succeeded in combining new technologies such as artificial intelligence, big data, cloud computing, augmented reality

and spatial computing with a high degree of flexibility and within a sophisticated design," commented Stefan Vilsmeier, Brainlab President & CEO.

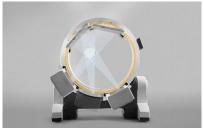**Construction and robotics reduce beam volume and increase image quality**

Due to its construction and robotics, the X-Rays of Loop-X can be focused on the region of the body in which the surgeon requires those images. Special algorithms also make it possible to continuously change the direction and size of the X-Ray beams to always focus on the targeted region. This can work to protect the surrounding tissue and, at the same time, improve the image quality due to reduced scatter radiation. Its automated robotics also support optimized workflow steps in the operating room, allowing Loop-X to move automatically into stored parking and imaging positions.

Close partnership with Salzburg company medPhoton

The Loop-X imaging robot was developed by medPhoton in close collaboration with Brainlab, a strategic investor in the Salzburg-based company and its exclusive sales partner for Loop-X in the field of surgery. Both companies have agree to work closely together in the future with the aim of creating technological synergies for the benefit of surgeons and their patients.

For more information, visit brainlab.com/loop-x

Brainlab and medPhoton win the Red Dot Award: Product Design 2020 with Loop-X, the new mobile robotic 2D/3D imaging system (Source: Brainlab).

Stefan Vilsmeier, Brainlab President & CEO (Source: Brainlab)

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About Brainlab

Brainlab is a digital medical technology pioneer founded in 1989 and headquartered in Munich. The company employs more than 1,400 people in 19 offices around the globe. Brainlab serves physicians, medical professionals and their patients in over 5,500 hospitals in 116 countries.

Brainlab creates software-driven medical solutions that digitize, automate and optimize clinical workflows for neurosurgery, spine, trauma, craniomaxillofacial (CMF), general and vascular surgery as well as radiotherapy and radiosurgery. Core products center around surgical navigation, radiotherapy, digital operating room integration, and information and knowledge exchange. The Brainlab open framework operating system will allow third parties to develop medical applications to further advance the field of spatial computing and mixed reality.

Brainlab is dedicated to creating an impact in healthcare. The company connects opportunities from emerging digital technologies to transform healthcare at scale and help improve the lives of patients worldwide. For more information please visit brainlab, and follow on LinkedIn, Twitter and Facebook.

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About medPhoton

medPhoton develops and manufactures CE marked and FDA cleared medical devices for image guided procedures in radiation therapy, with a strong focus on particle therapy. Advanced product development centers on innovative, universal solutions for robotic, navigated applications in surgery, interventional radiology, brachytherapy and intraoperative radiation therapy (IORT). The company's core competencies and patented solutions with X-ray-based imaging chains and algorithms are being customized for system integrators in B2B partnerships worldwide. Founded in 2012 in Salzburg, medPhoton employs close to 50 people including physicists, mechanical and electrical engineers and software developers. The company is a spin-off of Paracelsus Medical University and the Salzburg public hospital (SALK).

About the Red Dot Design Award:

In order to appraise the diversity in the field of design in a professional manner, the Red Dot Design Award breaks down into the three disciplines of Red Dot Award: Product Design, Red Dot Award: Brands & Communication Design and Red Dot Award: Design Concept. With more than 18,000 entries, the Red Dot Award is one of the world's largest design competitions. In 1955, a jury convened for the first time to assess the best designs of the day. In the 1990s, Red Dot CEO Professor Dr. Peter Zec developed the name and brand of the award. Ever since, the sought-after distinction "Red Dot" has been the revered

international seal of outstanding design quality. The award winners are presented in the yearbooks, museums and online. More information is available at www.red-dot.de.

Disclaimer:
Loop-X mobile intraoperative imaging robot is currently under development and not FDA approved, nor commercially available. Brainlab is not soliciting or accepting orders for Loop-X mobile intraoperative imaging robot, nor is Brainlab attempting to market or solicit any orders. The information being provided is for informational purposes only. Commercial availability is contingent on the current development schedule, achieving certain performance according thereto, and approval by the appropriate regulatory agencies.