



ACUTRONIC Group – Company Profile

ACUTRONIC is the world leader in the development, design, and manufacture of precision motion simulation solutions for the aviation, space, defense, transportation, and consumer electronics industries. ACUTRONIC employs over 120 people from offices in Switzerland, the USA, and Spain.

Our Products

Products include one, two, and three-axis simulators; Hardware-In-The-Loop five-axis simulators; flight motion simulators; and target motion systems. ACUTRONIC's products make it possible for customers to accurately reproduce motion profiles in laboratory or production environments. Common applications include testing and calibrating gyroscopes, accelerometers, MEMS-based sensors, inertial measurement units, avionics equipment, star trackers, and other similar instruments. To ensure high fidelity with real environments, temperature chambers and other features are often required. These products help customers to accelerate R&D development or production-line efficiency.

In addition to its core set of products, ACUTRONIC offers engineering services in support of customers' technical requirements. Recent projects have included linear motion systems, a space docking simulator, and automatic test equipment ("ATE") solutions.

Our Teams

ACUTRONIC brings to bear market-leading teams in mechanical, electrical, software, and systems engineering. The firm has a deep bench of project management expertise and dedicated customer service technicians.

Our Customers

ACUTRONIC's customers include leading corporations such as Boeing, Bosch, BAE Systems, EADS, Honeywell, Lockheed Martin, DLR, MBDA, Mitsubishi Electric Company, Northrop Grumman, Raytheon, Safran, and Thales. ACUTRONIC has sales representation in all regions of the world and its customer service teams cover client needs globally.

Acutronic Robotics

Acutronic Robotics is a leading robotics development firm focused on next-generation solutions for a range of clients. The division has three primary business lines: the development and commercialization of the Hardware Robot Operating System ("H-ROS"); robot and drone interoperable hardware products; B2B engineering services offered to corporate and governmental clients. In 2016, Acutronic Robotics acquired Erle Robotics, a leading robotics and drone startup based in Spain's Basque region. Acutronic Robotics is headquartered in Switzerland and has locations in Spain and the United States. For more information, visit www.acutronicrobotics.com.



Our Values

Do right. We care about our customers, employees, partners, and the world at large. We thrive when they thrive. Our teams seek to deliver the right solutions, using the right technologies, at the right prices. Doing right also means paying attention to detail, being rigorous in all decisions, and having a passion to be the best. Above all, however, we believe that good ethics make good business.

Go long. We value our long-term reputation over short-term results. We are always on the look-out for the next big problem to solve. We invest for the future and put resources behind ideas.

Serve quick. We are responsive, dynamic, and modern. We are restless in our pursuit of growth and we recognize that cash flow today enables growth tomorrow. We value team players who correct mistakes immediately, praise victories selflessly, and help each other constantly.

Our Heritage

Including work done by its predecessor companies Fecker and Goerz Optical, ACUTRONIC has accumulated close to a century of experience in motion simulation technology. Over the last 50 years, ACUTRONIC, CARCO Electronics (purchased by ACUTRONIC in 2005), and the Contraves Goerz Corporation (purchased by CARCO in 1996) have delivered several thousand systems, of which over a thousand are still serviced by ACUTRONIC today. Almost 100% of the Hardware-In-The-Loop systems delivered worldwide over the last 50 years have been designed and built by ACUTRONIC or CARCO Electronics.

ACUTRONIC introduced the world's first digital real-time motion controller, the ACUTROL®2000, in the 1990s. This tradition was continued with the introduction of the ACUTROL®3000 and 3000e digital motion controllers.

Facts & Figures

Founding and growth of the ACUTRONIC Group

- **1973:** ACUTRONIC AG founded in Rapperswil (Switzerland). Subsidiaries are established in England, France, and Germany shortly thereafter.
- **1989:** ACUTRONIC USA founded in Pittsburgh. Launch of the ACUTROL®2000 Series, the first digital motion controller on the market.
- **1996:** ACUTRONIC acquired by Jung Technologies Holding AG in Cham, Switzerland (owned by Thomas W. Jung). The Group restructures. Focus on core business (test equipment for the aviation and space industries) and consolidation of branch offices in Switzerland, Germany and the USA.
- **2000:** Successful entry into in the field of Flight Motion Simulators for end customers like Boeing, Thales, Diehl, MBDA...etc...
- **2003:** ACUTRONIC celebrates its 30-year anniversary. Revenues have more than tripled since 1996.
- **2004:** The ACUTROL®3000 is released: the most advanced digital motion controller on the market enters a second generation and becomes soon the de-facto industry standard.

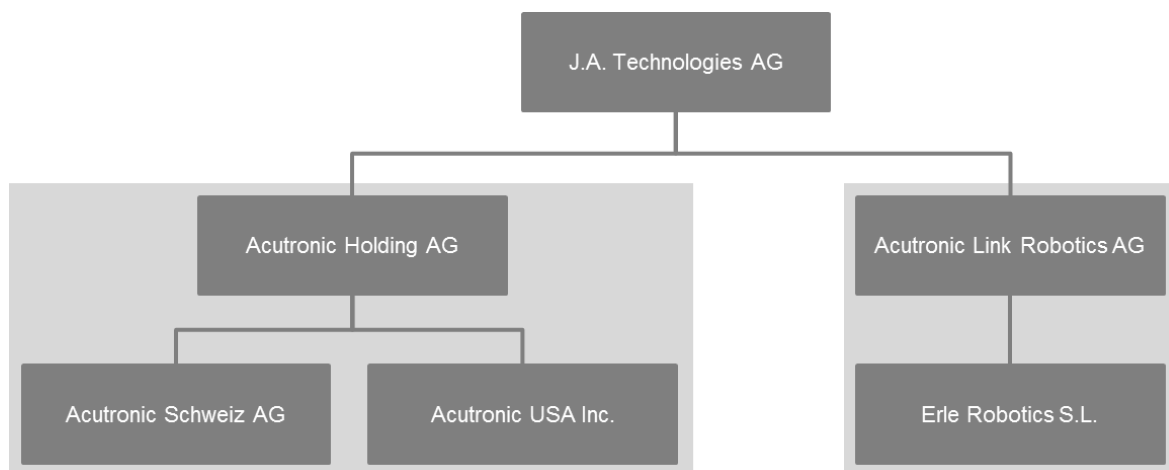


- **2005:** ACUTRONIC USA Inc. acquires main competitor CARCO Electronics with locations in California and Pennsylvania, thereby establishing the ACUTRONIC Group as the dominant worldwide manufacturer in the motion simulator industry.
- **2009:** ACUTRONIC USA celebrates its 20-year anniversary
- **2012:** The ACUTROL®3000e is released.
- **2013:** ACUTRONIC Switzerland celebrates its 40-year anniversary
- **2015:** A majority interest of ACUTRONIC Holding AG is sold to J.A. Technologies AG of Zug, Switzerland. Thomas W. Jung remains a shareholder and a member of the Board of Directors.
- **Jan. 2016:** The ACUTRONIC Ventures initiative is started, in order to pursue new growth opportunities, in sectors including industrial components, robotics, drones, and autonomous systems.
- **Sep 2016:** The ACUTRONIC Group is restructured into four functional divisions: Commercial, Operations, Development, and Group Resources.
- **Oct. 2016:** Acutronic Robotics (www.acutronicrobotics.com) is launched and acquires Erle Robotics, S.L., a leading robotics and drone start-up based in Spain's Basque region.

Locations

- Switzerland: Zug, Bubikon, and Olten.
- USA: Pittsburgh, Pennsylvania.

Group Entities



ACUTRONIC Holding AG

- Florian Aigrain, Chief Executive Officer, Acutronic Holding AG

Group Executive Committee

- Mark Tatkov, Chief Commercial Officer & CEO Acutronic USA Inc.
- Aleksandar Granulic, Chief Operations Officer & CEO Acutronic Switzerland AG



- Christian Sieber, Chief Financial Officer
- Remo Kälin, Head of Engineering & Development Unit
- Paul Hollinger, Head of Engineering & Development Unit
- Nicholas Wichowski, Head of Engineering & Development Unit
- Victor Mayoral, Chief Technology Officer, Acutronic Robotics
- Carlos Uruga, Chief Operations Officer, Acutronic Robotics

Board of Directors of ACUTRONIC Holding AG

- Jacques Aigrain, Chairman of the Board, J.A. Technologies AG (Citizen of Switzerland and France)
- Florian Aigrain, Chief Executive Officer of ACUTRONIC Holding AG (Citizen of Switzerland and France)
- David Johnson, Director (Citizen of the United Kingdom)
- Thomas W. Jung, Director (Citizen of Switzerland and Brazil)
- Mike Perlmutter, Director (Citizen of the United States of America)

Board of Directors of ACUTRONIC USA Inc.

- Mark Tatkow, President & CEO (Citizen of the United States of America)
- Mike Perlmutter, Director (Citizen of the United States of America)
- Laurene Aigrain, Director (Citizen of the United States of America, Switzerland, and France)
- Florian Aigrain, Chairman of the Board (Citizen of Switzerland and France)

Board of Directors of ACUTRONIC Switzerland Ltd

- Aleksandar Granulic, CEO (Citizen of Switzerland)
- Florian Aigrain, Chairman of the Board (Citizen of Switzerland and France)

Board of Directors of Acutronic Link Robotics AG (“Acutronic Robotics”)

- Florian Aigrain, Chairman of the Board (Citizen of Switzerland and France)
- Carlos Uruga, Director (Citizen of Spain)
- Victor Mayoral, Director (Citizen of Spain)
- Mark Tatkow, Director (Citizen of the United States of America)
- Christian Sieber, Chief Financial Officer (Citizen of Switzerland)

International Advisory Board

- Professor Alonzo Kelly, Carnegie Mellon University / National Robotics Engineering Center (Citizen of the United States of America)
- Erik de Ridder, market research advisor (Citizen of South Africa)
- David Johnson, former COO, Meggitt PLC (Citizen of the United Kingdom)
- Brigadier General Mark Kimmitt, retired U.S. Army (Citizen of the United States of America)
- Martin Kägi, technical advisor (Citizen of Switzerland)
- Mike Perlmutter, Co-Founder, Civitanavi Systems s.r.l (Citizen of the United States of America)