

HARMAN INTERNATIONAL INDUSTRIES INC /DE/
Form 10-K
August 11, 2016

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

(Mark One)

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended June 30, 2016

or

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF
1934

For the transition period from _____ to _____

Commission File Number 001-09764

Harman International Industries, Incorporated

(Exact Name of Registrant as Specified in Its Charter)

Delaware (State or other jurisdiction of incorporation or organization)	11-2534306 (I.R.S. Employer Identification No.)
400 Atlantic Street, Suite 1500 Stamford, CT	06901

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(Address of Principal Executive Offices) (Zip Code)

Registrant's telephone number, including area code (203) 328-3500

Securities registered pursuant to Section 12(b) of the Act:

Title of Each Class	Name of Each Exchange on Which Registered
Common Stock, par value \$.01 per share	New York Stock Exchange

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§ 229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one)

Large accelerated filer Accelerated filer
Non-accelerated filer (Do not check if a smaller reporting company) Smaller reporting company

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes No

The aggregate market value of the voting common stock held by non-affiliates of the registrant as of December 31, 2015 (the last business day of the registrant's most recently completed second fiscal quarter) was \$6,664,593,936 based upon the closing price of the shares on the New York Stock Exchange on that date.

Indicate the number of shares outstanding of each of the registrant's classes of common stock, as of the latest practicable date: 69,783,053 shares of common stock, par value \$.01 per share, as of July 31, 2016.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's definitive Proxy Statement to be delivered to shareholders in connection with the 2016 Annual Meeting of Stockholders are incorporated by reference into Part III.

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References to “Harman,” “Company,” “we,” “us” and “our” in this Form 10-K refer to Harman International Industries, Incorporated and its subsidiaries unless the context requires otherwise.

Harman, the Harman logo, and Harman products and brand names referred to herein are either the trademarks or the registered trademarks of Harman. All other trademarks are the property of their respective owners.

Forward-Looking Statements

This report contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. You should not place undue reliance on these statements. Forward-looking statements include information concerning possible or assumed future results of operations, cash flows, capital expenditures, the outcome of pending legal proceedings and claims, goals and objectives for future operations, including descriptions of our business strategies and purchase commitments from customers. These statements are typically identified by words such as “believe,” “anticipate,” “expect,” “plan,” “intend,” “estimate,” “should,” “will” and similar expressions. We base these statements on particular assumptions that we have made in light of our industry experience, as well as our perception of historical trends, current conditions, expected future developments and other factors that we believe are appropriate under the circumstances. As you read and consider the information in this report, you should understand that these statements are not guarantees of performance or results. They involve risks, uncertainties and assumptions. In light of these risks, uncertainties and assumptions, we cannot assure you that the results and events contemplated by the forward-looking statements contained in, or incorporated by reference into, this report will in fact transpire.

You should carefully consider the risks described below and the other information in this report because they identify important factors that could cause actual results to differ materially from those predicted in any such forward-looking statements. Our operating results may fluctuate significantly and may not meet our expectations or those of securities analysts or investors. The price of our stock would likely decline if this occurs. Factors that may cause fluctuations in our operating results include, but are not limited to, the following:

- the loss of one or more significant customers, the loss of a significant platform with an automotive customer or the in-sourcing of certain services by our automotive customers;
- our ability to maintain a competitive technological advantage through innovation and leading product designs;
- our ability to maintain profitability if there are delays in our product launches or increased pricing pressure from our customers;
- fluctuations in currency exchange rates, particularly with respect to the value of the U.S. Dollar and the Euro;
- the inability of our suppliers to deliver materials, parts and components including, without limitation, microchips and displays, at the scheduled rate and disruptions arising in connection therewith;
- fluctuations in the price and supply of raw materials including, without limitation, petroleum, copper, steel, aluminum, synthetic resins, rare metals and rare-earth minerals, or shortages of materials, parts and components;
- our failure to protect the security of our products and systems against cyber crime; and
- our failure to maintain the value of our brands and implementing a sufficient brand protection program.

Although we believe that these forward-looking statements are based on reasonable assumptions, you should be aware that many factors could affect our actual results of operations and could cause actual results to differ materially from those expressed in the forward-looking statements. As a result, the foregoing factors should not be construed as exhaustive and should be read together with the other cautionary statements included in this and other reports we file with the Securities and Exchange Commission. For additional information regarding certain factors that may cause our actual results to differ from those expected or anticipated see the information under the caption “Risk Factors” which is located in Item 1A of Part I of this report. We undertake no obligation to publicly update or revise any forward-looking statement (except as required by law). This report also makes reference to our awarded business, which represents the estimated future lifetime net sales for all our automotive customers. Our awarded business does not represent firm customer orders. We report our awarded business primarily based on written award letters from our customers. To validate these awards, we use various assumptions including global vehicle production forecasts, customer take rates for our products, revisions to product life-cycle estimates and the impact of annual price reductions and exchange rates, among other factors. The term “take rate” represents the number of units sold by us divided by an estimate of the total number of vehicles of a specific vehicle line produced during the same timeframe. The assumptions we use to validate these awards are updated and reported externally on an annual basis.

Market, ranking and other data

In this report, we refer to information regarding market data obtained from internal sources, market research, publicly available information and industry publications. Estimates are inherently uncertain, involve risks and uncertainties and are subject to change based on various factors, including those discussed under the caption “Risk Factors” which is located in Item 1A of Part I of this report.

Part I

Item 1. Business

Our Company

We believe we are a leader in the design and engineering of connected products and solutions for automakers, consumers and enterprises worldwide, including connected car systems, audio and visual products, enterprise automation solutions and connected services. We have developed, both internally and through a series of strategic acquisitions, a broad range of product offerings sold under renowned brand names in our principal markets. Our AKG®, AMX®, Crown®, Harman/Kardon®, Infinity®, JBL®, JBL Professional, Lexicon®, Mark Levinson®, Martin®, Revel®, Soundcraft® and Studer® brand names are well known worldwide for premium quality and performance. Our software solutions power mobile devices and systems that are designed to be connected, integrated, personalized and adaptive across all platforms, from work and home, to car and mobile.

Connected Car

Our Connected Car segment designs, manufactures and markets connected car systems for vehicle applications to be installed primarily as original equipment by automotive manufacturers. Our scalable connected car platforms deliver enhanced and connected capabilities to the car, including intelligent high-performance navigation with embedded solutions for multimedia, premium entertainment tuners, and on-board and off-board connectivity that address a wide range of vehicle categories. Leveraging a software-driven computer platform, we offer an integrated suite of technologies that extends beyond infotainment to encompass telematics, connected safety, and over-the-air update capabilities. We also offer a comprehensive suite of automotive cyber security solutions through a multi-layer architecture that can protect not only future vehicles, but connected cars on the road today. Global customers for our connected car systems include BMW, Daimler, Fiat Chrysler Automobiles, Ford, Geely, General Motors, Hyundai, Qoros, Subaru, Suzuki, TATA Group, Toyota/Lexus, Ssangyong, the Volkswagen Group and Yamaha. We also produce an infotainment system for Harley-Davidson touring motorcycles.

Lifestyle Audio

Our Lifestyle Audio segment designs, manufactures and markets car audio systems for vehicle applications to be installed primarily as original equipment by automotive manufacturers, as well as a wide range of consumer audio products including mid-to high-end loudspeakers and electronics, headphones, embedded audio products for consumer electronics and branded portable wireless speakers. We believe that we continue to redefine audio excellence for the home, the car and on-the-go listening. Our Lifestyle Audio products are marketed worldwide under renowned brand names including AKG, Harman/Kardon, Infinity, JBL, JBL Professional, Lexicon, Mark Levinson, JBL Synthesis® and Revel. We also have rights to use the Bowers & Wilkins®, Bang & Olufsen® and Canton® brand names within the automotive space. Global customers for our premium car audio systems include Aston Martin, BMW, Daimler, Fiat Chrysler Automobiles, Ford, Geely, General Motors, Great Wall, Hyundai, McLaren, PSA Peugeot Citroën, SAIC, Subaru, Tesla, Toyota/Lexus and the Volkswagen Group. Our car audio products feature innovative technologies such as Clari-Fi™, HALOsonic™ and Quantum Logic Surround™.

Professional Solutions

Our Professional Solutions segment designs, manufactures and markets an extensive range of audio, lighting, video and control, and automation solutions for entertainment and enterprise applications, including live concerts and festivals, stadiums, airports, hotels and resorts, conference centers, educational institutions, command centers and houses of worship. We offer a variety of products, including loudspeakers, amplifiers, digital signal processors, microphones, headphones, mixing consoles, guitar pedals, lighting, video and control, and enterprise automation

solutions. Our Professional Solutions audio products are used at important events and in prestigious venues, such as the GRAMMY® Awards, the Emmy® Awards, the Super Bowl®, the Oscars®, the MTV® Video Music Awards, the Country Music Awards® and Yankee Stadium. Our Professional Solutions products are marketed globally under a number of well-established brand names, including AKG, AMX, BSS®, Crown, dbx®, DigiTech®, JBL Professional, Lexicon, Martin, Soundcraft and Studer.

Connected Services

Our Connected Services segment includes the operating results of Symphony Teleca Corporation (“STC”), Red Bend Ltd. (“Redbend”), and our automotive services businesses. Our Connected Services segment creates innovative software solutions that integrate design, mobility, cloud and analytics and brings the benefits of the connected world to the automotive, retail, mobile, healthcare, media and consumer electronics markets. Our Connected Services segment offers services and solutions in order to help customers understand and visualize their data so they can make faster and more informed decisions, cloud-enable their businesses,

support technical agility and exploit omni-channel strategies. Our Connected Services segment customers include BMW, Daimler, the Volkswagen Group, Jaguar Land Rover, Microsoft, British Telecom and Polycom.

Other

Other includes compensation, benefits and occupancy costs for corporate employees, net of reporting segment allocations, expenses associated with new technology innovation and our corporate brand identity campaign.

Results of Operations

Our results of operations depend on our sales in the connected car, car audio, consumer audio, professional solutions and connected services industries. Our products and services are sold worldwide, the largest markets of which are the United States and Germany.

Our Strengths

World-class brand portfolio

We believe that our brands and the innovative technologies they represent, many of which Harman pioneered, have helped establish our Company as a leader in the primary markets we serve. We have successfully leveraged our brands across our Connected Car, Lifestyle Audio, Professional Solutions and Connected Services segments to increase awareness and build brand equity to the benefit of all of the markets we serve.

Innovation and technological expertise

We believe that innovation is an important element to gaining market acceptance of our products and strengthening our market position. We have a history of leveraging our continuous technological innovation across all of the markets we serve. We have a well-deserved reputation for delivering premium audio and connected car solutions across a full spectrum of applications. We believe that our technological innovation, the quality of our products and our reputation for on-time delivery have resulted in Harman being awarded a substantial amount of Connected Car and Lifestyle Audio automotive business. As of June 30, 2016, we have a cumulative estimated \$24.1 billion of awarded Connected Car and Lifestyle Audio automotive business, which represents the estimated future lifetime net sales for all our automotive customers. This amount does not represent firm customer orders. We report our awarded business primarily based on award letters from our customers. To validate these awards, we use various assumptions, including global vehicle production forecasts, customer take rates for our products, revisions to product life-cycle estimates and the impact of annual price reductions and exchange rates, among other factors. The term “take rate” represents the number of units sold by us divided by an estimate of the total number of vehicles of a specific vehicle line produced during the same timeframe. The assumptions we use to validate these awards are updated and reported externally on an annual basis. We believe our awarded automotive business will position us well for follow-on and new business with these existing customers. However, our estimates of awarded automotive business are forward-looking statements and may not actually be achieved. See the risk factor “We may not realize sales represented by awarded business” in Item 1A “Risk Factors” of Part I of this report.

Seasoned management team with extensive global experience

Our senior management team possesses substantial experience leading technology-oriented companies, promoting profitable growth through continuous value-added innovation and providing guidance, leadership and cost-discipline through challenging economic conditions.

Our Growth Strategy

Continued growth through innovation

We design and engineer connected products and solutions for automakers, consumers, and enterprises worldwide, including connected car systems, audio and visual products, enterprise automation solutions, and connected services.

Our talented workforce and innovation strength create value for our stakeholders by enabling seamless, connected lifestyles across all platforms.

Our innovative and highly integrated embedded connected car technologies offer automakers the most complete solutions for advanced navigation, intuitive user interfaces, integrated audio, device connectivity, cyber security, and connected safety. We are delivering a dynamic in-car experience for an increasingly connected world.

We have developed entry-level and mid-range connected car systems that we believe will deliver industry-leading performance at an affordable price that will allow us to penetrate the emerging entry-level and mid-range automotive market.

We have developed advanced solutions for the connected car with our next-generation scalable infotainment platform based on an innovative system architecture that offers rapid development of connected car apps and advanced safety and security features. Our Life-Enhancing Intelligent Vehicle Solution (“LIVS”) compute platform brings together previously discreet or separate connectivity and operational domains under a new, holistic automotive computing platform. We believe LIVS is the industry’s most complete end-to-end system to provide drivers intelligent, adaptable and personal solutions in the car.

We are addressing the continued demand for connectivity in the car with advanced telematics platform solutions, as well as secure over-the-air (“OTA”) software management solutions to ensure a variety of vehicle networks and electronic control units are kept up-to-date.

With over 60 years of deep expertise in acoustic design, tuning and signal processing, we are leading the way in elevating the entire in-cabin listening experience. Our brands have been introducing important innovations in home entertainment for more than 50 years, and we continue to develop new solutions that best meet consumer needs for more seamless and personalized listening experiences in the home and on-the-go.

We have developed new car audio technologies which leverage next generation connectivity capabilities. The Summit Car Audio system addresses the growing demand for personalization and adaptability through flexible software solutions. This scalable platform integrates the best of our sound processing and management technologies, such as Quantum Logic Surround Sound™, Individual Sound Zones (“ISZ”), HALOsonic and Clari-Fi. With new features like Connected Jukebox and Virtual Venues to create a highly personalized in-car audio experience for drivers. We have also developed, through our GreenEdge™ initiative, environmentally friendly technologies to reduce power consumption and product weight, a growing area of opportunity for environmentally conscious customers.

We have developed audio, lighting, video and control and automation solutions for the world’s best entertainment venues, cinemas, recording studios, enterprises and public spaces. Our integrated product suites and go-to-market approach maximizes our reach to address the increasingly inter-connected requirements of the enterprise and entertainment markets.

We are focused on expanding our partnerships with key technology leaders such as Google, Microsoft and Under Armor to capitalize on the opportunities presented by the Internet of Things (“IoT”) for automotive, enterprise and consumer electronics.

We have introduced a cloud-based Service Delivery Platform for the connected car which allows automakers and service providers to introduce and easily deploy new enterprise cloud services to connected vehicles. The new platform facilitates the integration of a variety of enterprise and vehicle-centric applications and services from leading providers. The new platform enables the launch of a variety of services including uploading new software features after vehicle sale, using vehicle data to predict part failures, forecasting for preventative maintenance, and analysis of warranty claims.

Continued growth through acquisitions

On March 10, 2016 (the “TowerSec Acquisition Date”), Harman Becker Automotive Systems Manufacturing Kft, our indirect wholly-owned subsidiary, acquired all of the outstanding shares of TowerSec Ltd. (“TowerSec”), a leader in automotive cyber security. TowerSec’s products, featuring intrusion detection and prevention systems, will be

integrated into our 5+1 cybersecurity framework, which we believe will position us as the de facto standard for automotive cyber security. The operating results of TowerSec are included in our consolidated financial statements from the TowerSec Acquisition Date within our Connected Car segment.

Continued growth through diversification of our business portfolio

Approximately 65% of our consolidated net sales were to automotive customers with our three most significant customers accounting for approximately 40% of our consolidated net sales for the fiscal year ended June 30, 2016. Although we work to maintain and grow our business with our existing portfolio of customers, we also seek to further diversify our customer base as profitable opportunities arise. Over the years, we have diversified our customer portfolio by expanding the proportion of our business with customers outside of our largest three customers, such as the addition of Ford, GM and Subaru.

Expansion into emerging markets

We believe opportunities exist to grow our business in all of our business segments in emerging markets, such as Brazil, Russia, India and China (“BRIC”). Our BRIC revenue has grown over the last five years, and we expect our market share to continue to grow in the BRIC countries. We have repositioned our research and development and production capabilities and have developed distribution channels to be able to meet the demand for our products in these markets.

Products

Connected Car

We believe that we are a leader in the development and manufacture of high-quality, digitally-integrated connected car systems for automobiles. In recent years, the automotive industry has experienced increased demand for information and entertainment in vehicles. We have developed leading technical competencies to address this demand. In fiscal year 2016, we supplied connected car systems for vehicles manufactured by BMW, Daimler, Fiat Chrysler Automobiles, Geely, Hyundai, Qoros, Suzuki, TATA Group, Toyota/Lexus, Ssangyong, and the Volkswagen Group. We also produce an infotainment system for Harley-Davidson touring motorcycles.

Lifestyle Audio

We believe that we are a leader in the development and manufacture of high-quality, high-fidelity, digitally-integrated premium branded car audio systems and components for automobiles. We continue to leverage our expertise in the design and manufacture of premium branded car audio systems and components, as well as our reputation for quality associated with our brand names. As a result of our well-established relationships with automobile manufacturers, our engineers are engaged early in the vehicle design process to develop systems that optimize acoustic performance and minimize weight and space requirements. In fiscal year 2016, we supplied branded car audio systems and components using our portfolio of brand names including Harman/Kardon, Infinity, JBL, JBL Professional, Lexicon, Mark Levinson and Revel for vehicles manufactured by Aston Martin, BMW, Daimler, Fiat Chrysler Automobiles, Ford, Geely, General Motors, Great Wall, Hyundai, McLaren, PSA Peugeot Citroën, SAIC, Subaru, Tesla, Toyota/Lexus and the Volkswagen Group. We also have rights to use the Bowers & Wilkins, Bang & Olufsen and Canton brand names within the automotive space.

In the consumer audio market, we manufacture loudspeakers under the Harman/Kardon, Infinity, JBL and Revel brand names. We also offer a broad range of consumer audio electronics under the Harman/Kardon, Lexicon, JBL Synthesis, Mark Levinson and Lexicon brand names. We also sell headphones, embedded audio products for consumer electronics and branded portable wireless speakers under the AKG, JBL, Harman/Kardon and Infinity brand names.

Professional Solutions

Our Professional Solutions products include audio, lighting, video and control, and enterprise automation solutions that are marketed under what we believe are some of the most respected brand names in the industry including AKG, AMX, BSS, Crown, dbx, DigiTech, JBL Professional, Lexicon, Martin, Soundcraft and Studer. Our integrated product suites and go-to-market approach maximizes our reach to address the increasingly inter-connected requirements of the enterprise and entertainment markets. The professional market is increasingly moving to digital technology, and we believe that we are a leader in this space. Our Professional Solutions segment derives value from our ability to share research and development, engineering talent, technical expertise and other resources among our business units. Our loudspeakers, amplifiers, digital signal processors, mixing consoles, microphones, headphones, lighting, video and control systems, and enterprise automation solutions all have substantial engineering resources

who work together to achieve common goals.

Connected Services

Our Connected Services segment creates innovative software solutions that integrate design, mobility, cloud and analytics. We believe we are a leader in software design and development which includes our end-to-end software engineering, IoT and data analytics services for our customers in the automotive, mobile, and communications and software-enabled businesses. Our software management solutions keep mobile, automotive and IoT devices of all sizes and complexity continuously and reliably relevant with over-the-air software updates, and with virtualization and device management services.

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Manufacturing

We believe that our manufacturing capabilities are essential to maintaining and improving product quality and performance. Our manufacturing facilities are located in North America, Europe, Asia and South America. Our facilities have been designed to emphasize worker safety and compliance with environmental, health and safety regulations.

Our manufacturing facilities for our Connected Car segment are located in Hungary, Mexico, China, India, Brazil and the U.S. These facilities are used to manufacture connected car systems.

Our manufacturing facilities for our Lifestyle Audio segment are located in Hungary, Mexico, China, India and the U.S. These facilities are used to manufacture our car audio systems. Our Lifestyle Audio segment primarily uses original design manufacturers for the manufacture of our consumer audio products to generate cost efficiencies, deliver products faster and better serve our customers. These manufacturers are primarily based in China.

Our manufacturing facilities for our Professional Solutions segment are located in Hungary, Mexico, China, Brazil, and the U.S. These facilities are used to manufacture our audio, lighting, video and control, and enterprise automation solutions.

Suppliers

Although most components essential to our business are generally available from multiple suppliers, a number of components are currently obtained from limited sources. We use rare earth minerals in our products, specifically rare earth neodymium magnets. We also use externally sourced microchips and displays in many of our products. Several independent suppliers manufacture loudspeakers and electronic products for us.

Distribution Channels

Connected Car

We primarily sell our connected car systems directly to automobile manufacturers in the U.S., Europe, Japan, South Korea, China and India, where they are installed as original equipment.

Lifestyle Audio

We primarily sell our car audio systems directly to automobile manufacturers in the U.S., Europe, India, Japan, China and South Korea, where they are installed as original equipment. In both our foreign and domestic markets, we sell our consumer audio products to dealers who sell directly to the end user and to distributors who resell our products to retailers. We market our products to the consumer who chooses what brand of sound system to purchase for their home or their automobile. Our goal is to make Harman brands the preferred brands in both consumer audio and car audio applications. Our consumer audio products are offered through mass-market retail stores, specialty audio stores, Harman stores, and through online retailers including our website Harmanaudio.com.

Professional Solutions

In the enterprise market we primarily sell our solutions through third parties, including dealers, consultants, architects and systems integrators in the U.S. and through a distributor network in other countries. In the entertainment market, we primarily sell our products to dealers via manufacturers' representatives or through distributors. Both manufacturers' representatives and distributors have defined geographic regions. We also solicit business directly with end users and

offer our products in retail stores or direct to customers over the Internet.

Connected Services

Our Connected Services segment is a global provider of product and platform engineering services with software development and market analytics services groups located in China, Germany, India, Poland, Russia, Ukraine, and the U.S. Our Connected Services segment revenues are primarily derived from commercial software services, mainly sold via our internal sales force, directly to the customer.

Trademarks and Patents

We market our products under numerous brand names that are protected by both pending and registered trademarks around the world. Our trademark registrations cover use of trademark rights in connection with various products, such as loudspeakers, speaker

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systems, speaker system components and other electrical and electronic devices. We have registered or taken other protective measures for many of these trademarks in substantially all major industrialized countries. As of June 30, 2016, we had 2,424 trademark registrations and 477 pending trademark applications around the world.

We have a history of innovation and, with more than 3,670 patents and 2,490 pending patent applications at June 30, 2016, covering various audio, connected car and software technologies and products, we continue to take our technology and products into new areas. While we consider our patents on the whole to be important, we do not consider any single patent, any group of related patents or any single license essential to our operations in the aggregate.

Seasonality

We experience seasonal fluctuations in sales and earnings. Historically, our first fiscal quarter ending September 30th is generally the weakest due to automotive model year changeovers and the summer holidays in Europe. Sales of our consumer audio products are generally significantly higher in the second quarter of our fiscal year, due to increased demand for these products during the holiday buying season. Our sales and earnings also vary due to the timing of the release of new products, customer acceptance of our products, product offerings by our competitors and general economic conditions. Our video and control and enterprise automation solutions business also experiences seasonality with sales being historically low during the third quarter of our fiscal year.

Industry Concentration/Key Customers

For the fiscal year ended June 30, 2016, approximately 65 percent of our net sales were to automobile manufacturers. Net sales to BMW, Fiat Chrysler Automobiles and the Volkswagen Group accounted for 13 percent, 15 percent and 12 percent, respectively, of our total consolidated net sales for the fiscal year ended June 30, 2016. Accounts receivable, net due from BMW, Fiat Chrysler Automobiles and The Volkswagen Group accounted for 9 percent, 17 percent, and 8 percent, respectively, of total consolidated accounts receivable, net at June 30, 2016. Our automotive customers, however, are not contractually obligated to any long-term purchase of our products. For a description of the risks related to our key customers and industry concentration, see “Risk Factors” located in Item 1A of Part I of this report.

Backlog Orders

We manufacture our connected car and car audio systems on a just-in-time basis. We maintain sufficient inventories of finished goods to promptly meet customer orders for our consumer audio and Professional Solutions customers. As a result, we do not consider the level of backlog to be an important indication of our future performance. Our backlog, which represents firm orders for all our customers, was approximately \$197.5 million at June 30, 2016. We expect to deliver these products within the next 12 months.

Warranty Liabilities

We warrant our products to be free from defects in materials and workmanship for periods ranging from six months to six years from the date of purchase, depending on the business segment and product. Our dealers and warranty service providers normally perform warranty service in field locations and regional service centers, using parts and replacement finished goods we supply on an exchange basis. Our dealers and warranty service providers also install updates we provide to correct defects covered by our warranties. Estimated warranty liabilities are based upon past