

## MECP Product Technology Specialist Job Description – 2021-2022



### Position Summary - MECP Product Technology Specialist

The MECP Product Technology Specialist position involves directly interfacing with end-user clientele in a retail environment. This interaction requires asking qualifying questions, evaluating the client's vehicle for fitment and product compatibility, and recommending in-vehicle electronics products and installation services that fit their needs to provide a successful solution for their vehicle modification desires.

### Full Description - MECP Product Technology Specialist

#### MECP Product Technology Specialist

##### Duties and Responsibilities

- Answer phone calls and electronic communication inquiries from prospective clientele with accurate product and installation information to bring them into the retail facility as a customer or secure an online sale.
- Greet and qualify walk-in clientele with questions about their vehicle and car electronics technology interests to provide personalized product and installation recommendations.
- Inspect the client's vehicle before quoting costs on undefined scopes of installation work.
- Recommend products and installation services correlated to the client's goals after answers to qualifying questions have been established.
- Ensure compatibility of aftermarket electronics with the vehicle's existing electronics and customer's portable device(s) using vehicle fitment guides, manufacturer technical support resources, or verifying with in-store colleagues and technicians.
- Be the interface between the client and installation technician(s) during the period of installation services taking place.
- Demonstrate completed installations to clientele, showing features, operational characteristics, and locations of essential components (fuses, equipment, or reference pages in the user manuals).
- Attend manufacturer product training webinars or in-person events to maintain product-specific application and knowledge.

##### Knowledge, Skills, and Ability

- Knowledge of MECP-defined car electronics installation guidelines relating to safety and longevity, including proper wire routing techniques, proper wire gauge for circuit current, proper circuit protection devices, MECP-recommended wire-to-wire connection methods, etc.
- Knowledge and understanding of the Magnusson-Moss Warranty Act. Also, general knowledge of safety-related and driver distraction concerns that may vary State-to-State (or Province-to-Province), provide a fundamental background on how to advise prospective clients on installation-related features, placement, and configuration.
- Knowledge and understanding of MECP defined, industry-standard terminologies for products and installation details (ex: head unit, vehicle security system, preamp level, speaker level, shock sensor, auxiliary input, dash kit, wiring harness, hands-free kit, etc.).

The listed expectations are recommendations only and imply no qualification to work on any particular product or vehicle. Any damages caused by a specialist or any missing or misrepresented capability, regardless of MECP Certification level, are not the responsibility of MECP or the Certification Systems Technology Company.

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- Knowledge and understanding of electrical terminologies and relationships (volts, ohms, amperes, watts, farads, etc.) including the base unit and smaller or larger units (milli, micro, kilo, mega, etc.).
- Knowledge and understanding of audio terminologies (amplitude, frequency, period, wavelength, frequency response, S/N ratio, channel separation RMS, peak, octave, harmonics, decibels, etc.)
- Knowledge of audio system components and what function each serves (ex: head unit, satellite radio, HD radio, AUX input amplifier, subwoofer, coaxial speaker, component speaker – including tweeter, midrange and midbass drivers, analog and digital signal processors of all types, line output converter, line driver, active crossover, passive crossover, etc.).
- Knowledge and understanding of audio signal delivery methods (ex: FM transmitter, Bluetooth streaming, preamp level, speaker level and S/PDIF) and the audio bandwidth capability of each.
- Knowledge and understanding of various commercially available installation accessories such as dash kits, wiring harnesses, antenna adapters, speaker adapters, line output converters, steering wheel control (SWC) adapters, specialty interfaces for OEM audio system replacements, audio patch cables, high current power/ground wiring, circuit protection devices, etc.
- Knowledge and understanding of series and parallel wiring calculations for connecting multiple speakers (or voice coils).
- Knowledge and understanding of aftermarket rear-seat entertainment (RSE) sources, screen types/common locations, and audio output (connection to speakers, use of headphones, etc.).
- Knowledge and understanding of vehicle security and convenience system terminologies (1-way, 2-way, air-interface, transponder interface, keyless entry, entry point, sensor types, common programmable features such as siren duration, driver's door only or all doors unlock, etc.)
- Knowledge of the differences between analog (wire to wire) and digital (data module to module) connections in vehicle security and convenience installations.
- Knowledge of satellite location systems, how in-dash or smartphone-based navigation systems collect and process the signals (GPS or GLONASS) data on maps displayed to the user. Knowledge of the requisite navigation-related terminology (GPS, POI, latitude, longitude, elevation, destination, re-route, etc.)
- Knowledge of Bluetooth wireless communication profiles (HSP, HFP, A2DP, AVRCP, HID, etc.), device pairing, and interoperability.
- Knowledge of wireless data delivery methods/networks for use in the vehicle (ex: smartphone for Wi-Fi hotspot, dedicated Wi-Fi hotspot, head unit interface through the phone's data connection, 3G/4G/LTE/5G data networks, etc.) and typical applications which utilize wireless data (ex: streaming internet radio, security/RS activation, accessing email/text/maps/social media via Apple® CarPlay™, Android™ Auto or proprietary user interfaces, etc.)
- Knowledge of reverse camera and viewing screen configurations for correct image viewing (ex: standard or mirror image) as well as what integrates with existing equipment (interface to an in-dash LCD screen, add a stand-alone screen, rearview mirror screen, using a factory camera with aftermarket head unit, etc.) Additionally, knowledge of reverse sensor systems and how they sense obstacles within their range.

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- Knowledge of Forward Collision Warning (FCW), Lane Departure Warning (LDW), and Blind Spot Detection functionality concerning each system's specific purpose, even if contained as a multi-use system.
- Skill to use a personal computer, phone, tablet, email systems, internet browser, and various point-of-sale and inventory management software. In some cases, knowledge of social media platforms may be beneficial.
- Skill to demonstrate products configured as a 'system' on a demonstration board or installed in a vehicle.
- Ability to establish priorities, and work with supervision, ask for clarification when necessary.
- Ability to diagnose and resolve common consumer operational errors through in-person and over-the-phone troubleshooting assistance.

### **Credentials and Experience**

- Although a potential employer may expect some familiarity with products or installation, no professional experience is necessary. This candidate is expected to be entering an entry-level position.
- The candidate should possess a current MECP Product Technology Specialist certification.
- Training at an installation-related school or program is a plus.
- Previous professional installation experience is a plus.

### **Special Requirements**

- Willing to work weekends, holidays, and shift overtime as required by the employer.
- In most states or provinces, the individual will be required to supply their essential installation tools.

### **Notes about MECP Product Technology Specialist Certification**

- MECP Product Technology Specialist level certification is intended for individuals with minimal previous experience installing aftermarket 12v vehicle electronics.
- The learning content contains eight key topic areas and related questions and a certification exam with 50 total questions.
- Once achieved, the certification is valid for the remainder of the specialist's membership. Membership does not equate to certification; only successful completion of the learning content and the subsequent certification exam results in certification.
- MECP certified specialists are granted a digital certificate with an alphanumeric license number that can be validated at any time by contacting [mecp@mecp.com](mailto:mecp@mecp.com) or on [www.mecp.com](http://www.mecp.com) as a free service to potential employers or clients.
- Prospective employers are encouraged to place any candidates with MECP Product Technology Specialist certification but limited professional experience in a supervised work environment for at least 60 days to ensure the best employee development and retention.

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