

# Single-inlet electric vehicle charging to showcase in LA

May 5 2012, by Nancy Owano

---



(Phys.org) -- Big names in global car manufacturers have announced a common method for charging electric vehicles. The companies are in agreement with a common charging technology for use on electric vehicles in Europe and the United States. The new method will provide special convenience by enabling car owners to charge their EVs using AC or DC from a single inlet. The charging system will allow for both alternating current and faster direct current charging on the same port. Another feature of the new system is that the charge can be done in faster time; a battery charge will take only 15 to 20 minutes.

Audi, [General Motors](#), BMW, Chrysler, Daimler, Ford, Porsche, and [Volkswagen](#) are the [automakers](#) who support the technology, which will be showcased next week at the Electric Vehicle Symposium (EVS) in Los Angeles, from May 6 to May 9.

The first vehicles to use the system are expected next year. Vehicles are already in development that will be capable of using the new system. The charging solution is titled "DC Fast Charging with a Combined Charging System" or Combined Charging System, for short. An EVS statement says this is a step forward in reducing complexity with its combined AC and DC charging. "One vehicle inlet, one control logic, one communication path, and one electric architecture." The LA event will show vehicles and charge pumps for the Combined Charging System.

According to reports, the system was developed for all international vehicle markets. Uniformity was key, with identical electrical systems, charge controllers, package dimensions and safety mechanisms.

Numerous auto blogs point to the announcement as good news for an EV industry trying to achieve wider consumer adoption by coming up with practical solutions for battery charging.

Car buyers understandably are skittish about not having available

charging opportunities on longer drives or about charging waits. The new method takes 15 to 20 minutes to power up a car using a similar standard.

The charging system integrates one-phase AC-charging, fast three-phase AC-charging, DC-charging at home and ultra-fast DC-charging at public stations into one vehicle inlet.

The International Society of Automotive Engineers (SAE) has chosen the Combined Charging System as a standard that incrementally extends existing Type 1-based AC charging. The standard is to be officially published this summer. ACEA, the European association of vehicle manufacturers, has chosen the Combined Charging System as its AC/DC charging interface for new vehicle types in Europe as of 2017.

According to a Chrysler release, the timeline is as follows: Commercially available combined charging units are projected for later this year. All committed OEMs have vehicles in development that will use the Combined [Charging System](#). The first vehicles to use this system will reach the market in 2013.

© 2012 Phys.Org

Citation: Single-inlet electric vehicle charging to showcase in LA (2012, May 5) retrieved 10 April 2024 from <https://phys.org/news/2012-05-single-inlet-electric-vehicle-showcase-la.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--