

# Audi R18 e-tron quattro



**Audi R18 e-tron quattro**  
#1 - 1st 24h Le Mans 2012

A. Lotterer, M. Fässler, B. Tréluyer.

Scale	CW14	Release date Nov 2018			
<b>1:32</b>	↔ 150mm ↓ 34mm ●↔ 93mm ↔ 64mm 📦 86gr				

Motor	Pinion/Gear	Front Rims/Tyres	Rear Rims/Tyres
Flat-6 20.5K	11/28	17.3x10 1152C1	17.3x10 1152C1

Digital	Chassis	Cockpit
	<input type="radio"/>	<input type="radio"/>
	<input type="radio"/>	<input type="radio"/>
Carrera D132	<input type="radio"/>	<input type="radio"/>

Inline	Sidewinder	Inline Boxer	Anglewinder	4WD System

Setup	Nd Magnet	Race Magnet	Suspension	Lights

Motor mount	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> [1]	<input checked="" type="checkbox"/>
-------------	-------------------------------------	-------------------------------------	-------------------------------------	---	-------------------------------------

● Standard  
○ Compatible  
X Not Compatible

[1] box stock standard: offset 1 mm



# Audi R18 e-tron quattro



The R18 e-tron quattro is a hybrid version of the R18 ultra, named after Audi "e-tron hybrid technology", which consists of a front mounted electric motor working in synch with Audi integral traction system. A diesel engine provides power to the rear axle both on the Audi e-tron as well as on its more traditional sibling Audi R18 Ultra. The energy storage unit for the electric motor is a flywheel system designed by Williams Hybrid Power. The Audi R18 e-tron belongs to the 2 megajoule (2MJ) category.

A four wheels drive system, as per the Le Mans regulations, can only be used on hybrid cars if the electric motor is mounted on the opposite axle of the traditional motor. Besides, electric traction may only be available at speeds above 120 km/h (75 mph), to limit the traction advantage of a 4WD system at slow speed. Management of electric motor and of drive train is completely automatic.

On its Audi R18 e-tron Slot.it has created a 4WD system which is truly unique and innovative. In the Slot.it system, a toothed belt provides power to the front axle through two micro pulleys which are coupled to the left wheels. Here, the work of two clutched bearings (unidirectional bearings), mounted between the front wheels and the front shaft, makes it possible to transmit positive torque only, removing any braking torque, so that the model, while retaining real 4WD traction, keeps its top speed on straights and handles like it should when turning.

In 2012 for this race was Toyota's highly anticipated TS030. Despite leading briefly the race, a series of technical failures and accidents eliminated both Japanese cars from the race. The 2012 podium consisted entirely of Audi entries, with the second R18 e-tron and one R18 ULTRA in 2nd and 3rd place.

