



## The oXigen small FAQ

### What is oXigen anyway?

The obvious answer is that it's an element of the periodic table, typically found in a diatomic (O<sub>2</sub>) form, spelled incorrectly with a misplaced capital letter. Alternatively, it could be oxygen in Catalan (the language spoken in Catalunya). However, in the slot car world, oXigen refers to a wireless digital control system for slot cars.

### Who is developing oXigen?

Galileo Engineering, an Italian company known in the slot car world for its Slot.it and Policar brands, developed the oXigen digital system. In other words, oXigen is a product of Slot.it.

### How does oXigen work?

Traditional digital slot car systems use the track rails to deliver both power and control signals to the cars. This setup has inherent limitations: as the number of cars increases, so does the demand for current and data transmission via the rails. Managing control signals through the rails becomes increasingly challenging with higher current loads, as is typical with many cars running simultaneously. Additionally, control signals are transmitted in a very noisy environment, affected by factors such as rail and braid conditions, dirt, and electrical arcing from motors, which complicates reliable signal transmission.

The oXigen solution addresses these issues by separating power and control signal transmission. The rails provide full power to the cars, while the control signals are sent via a 2.4 GHz wireless system. This ensures that cars receive all the power they need without interference, and the control signals remain clean and reliable. In other words, oXigen is developed by Slot.it.

### Do I need to change my analog tracks?

One of the primary goals of oXigen was to enable smooth coexistence of analog and digital systems on the same track. To achieve this, minimal modifications are required: simply create a finish line by placing magnets under a straight section of track and install lane changers. As long as the lane changers are not affected by the voltage fluctuations when the track is used in analog mode, the same track can seamlessly switch between analog and digital racing.

### Why should I use oXigen?

To start with, decide by yourself if you are interested in a digital system, that is, racing multiple cars on a track with overtaking, nose to tail action, pit stops and full race simulation. If the answer is yes, oXigen provides a system with unmatched features and performance.

### What do I need?

Unsurprisingly, you need a track, controllers, and cars to set up the oXigen system. While we recommend Policar track, oXigen can also be used on Carrera, Ninco, or Scalextric SSD circuits.



You'll need at least oXigen in-car chips (O203c type) and Slot.it SCP-3 or Scalextric ARC PRO controllers.

A complete digital setup requires a 'dongle', a 2.4 GHz receiver attached to the PC's USB port, and lane changers. These can be Policar P090 lane changers, standard Scalextric SSD lane changers, or Ninco or Carrera units upgraded with the specific LC driver. There is no Power Base, and the finish line and pit lane entry/exit are marked by magnets hidden under the track.

#### **Does it have pit lane speed limit?**

Yes. When a car enters the pit lane, its speed is automatically reduced to the selectable pit lane speed.

#### **How many cars can run on the track at the same time?**

You can race up to 20 cars simultaneously. Additionally, it's possible to operate more than one track (up to two) in the same space.

#### **Are there alternatives to a PC to control the race?**

For up to 6 racers Exoslot is a brilliant solution comprising a receiver, remote control, and a video.

#### **Is it reliable?**

oXigen has been in development for about 15 years now, and has been used by likely thousands of racers worldwide in home, club and large scale events such as 16 teams, 24 hours races. oXigen 4 is very robust.

#### **Is it user upgradeable?**

Yes it is, either through the so called 'Bootloader' app via PC, or with Slot.it's own oXigne app or also with a 3rd party app.

#### **Does it support ghost cars? Refueling? Safety car? Drive through?**

Yes to all... Some features such as refueling depend on what Racing Management System used.

#### **How do I learn more?**

Take a look at the manual available from the Slot.it's web site



Policar's own XXLC high speed lane changer