**Pit-Pro or SmartSensor? – A review by Andy P**

**Pit-Pro**

Pit-Pro is a modified Scalextric Pit-Lane game (C7041). It is available from a number of suppliers.

Pit-Pro can be used to detect a digitally chipped car when it crosses the sensors. It can be purchased with either one Sensor or Two Sensors.

**SmartSensor**

SmartSensor is produced by Kåre Rasmussen using Arduino technology. It can be used to run start lights and sense digitally chipped cars when they cross the sensors. SmartSensor comes with two sensors.

**Race Management Software compatibility**

Both Pit – Pro and SmartSensor are compatible with the following Race Management Systems:

* RCS64
* SSDC
* Pc Lap Counter

**Sensor Positioning**

SmartSensors two small sensors can be placed easily under the track in any position that you like. Pit – Pro’s sensors are set in to half straight track pieces. Your track has to be designed with these track pieces in mind.

**Reliability**

A number of problems with the sensors in Pit-Pro have been reported on SlotForum. Personally I had one sensor fail in the Scalextric track piece attached to the tower. My supplier supplied me with a replacement sensor which I fitted myself. One of the Pit-Pro suppliers has reportedly stopped supplying Pit-Pro due to poor sensor quality on new Scalextric Pit Lane games.

No reports of reliability issues have been reported on the Forum with regard to the SmartSensor – although it is early days yet! Personally my SmartSensors have worked without any problems since I received them a few months ago.

**Functionality** – **Pit Entry and Exit**

Both units sense cars both entering and exiting a pit lane – you must have two sensors for Pit- Pro to do this.

The main issue that I have found with Pit-Pro, which is particularly annoying, is that there is no way of the Race Management System knowing which sensor is the In-Sensor and which is the Out-Sensor. This is not a problem when cars are sensed correctly. However, when a car misses the In-Sensor, for any reason, the RMS thinks that the Out-Sensor is the In-Sensor which causes problems. With RCS64 the car reverts to Safe Speed (Slower Speed) when it crosses the In-Sensor and reverts back to normal speed when the car crosses the Out-Sensor. In practice the car reverts to Safe Speed when it is sensed by the first sensor that it crosses after the Start/Finish line. If that sensor is actually the Out-Sensor the car will go into Safe Speed and only revert to normal speed when it crosses the Start/Finish line or another Pit Lane Sensor. Confused!

Also, as you probably know it can often be difficult to put a car back on the track during a race without getting your hand hit by a passing car. For this reason, before getting Pit-Pro, I got used to putting a deslotted car on in the pit lane which was a lot easier. However, when I purchased Pit-Pro I was no longer able to do this as the car would revert to safe speed when it crossed the Out-Sensor. With SmartSensor, due to it having a designated In and a designated Out-Sensor, I can now revert to my former practice.

**Start Lights**

With SmartSensor you can set up start and track call lights. This option is not available with Pit-Pro

**Fuel Lights**

Pit-Pro uses the lights on the tower to indicate the fuel status of each car. This I found to be one of the best features of Pit-Pro. At a quick glance you can see ‘approximately’ what your fuel level is. When I changed to SmartSensor I, at first, missed not seeing the lights. At the time I was using SSDC which used a similar fuel gauge with no unit read out for fuel level measure, so this was just fine. When I started using RCS64 I found that the more accurate fuel measure (numerical representation of fuel level) made the Pit-Pro lights redundant – they were just not accurate enough when it came down to making really good refueling choices.

Also the lights on the Pit-Pro tower are just fine if every user can see them clearly. On my track racers are spread out around the track and the pit lane is down the side – in practice only one person could see the lights properly and one could not see them at all. I thought of separating the tower from the track piece however I could still not find a spot around the track where the lights could be seen by all. Other users I’m sure will not find this a problem.

For me the tower also got in the way of racers moving around the track-limited places to put it! Most others, I guess, will not find this a problem.

**Appearance**

In my opinion the Pit-Pro tower is ugly others I know disagree, some even like it. The SmartSensor however can be easily hidden from view with no adverse visual effect (no clutter person me!).

**Price**

The price of Pit-Pro and SmartSensor is approximately the same -this is if you compare both units with 2 sensors. If you already own a Scalextric Pit lane Game conversion to Pit-Pro is approximately £15 (C7041 costs £45 from Scalextric).

SmartSensor - €60 euros

Pit-Pro – £50 (with two sensors)

**Conclusion**

In my opinion SmartSensor is the pit sensing method that is the best choice. The fact that the SmartSensor has designated pit-in and pit-out sensors being the main deciding factor.

Don’t worry whichever you decide to choose they both add greatly to the Scalextric Digital experience.

Many thanks to all the developers past and present who have made this such a fun hobby, only wish I had the skills to do what they do!

Andy P