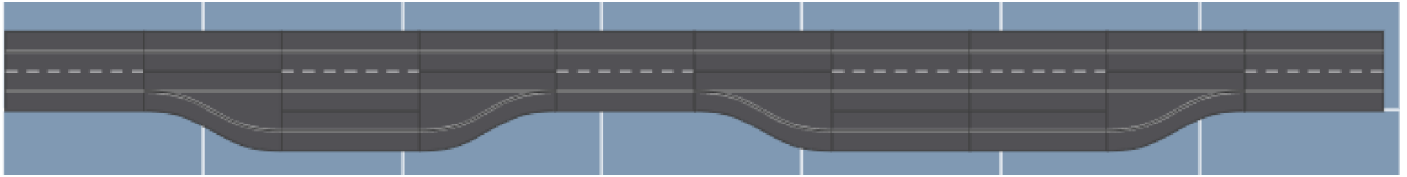


Pace Car/ Pit Box security

The pace car is in the pit box ready for departure, however this setup is often right in front of the Pit box for the race cars?



Setup Pace car

Pit box

To avoid operating the 'change button' too early and thereby driving into the back of the Pace Car, you can build in a safety device to prevent this. The same applies to the Pit box (if, as here, it is singular). Once a car is there, no one else can accidentally drive up behind it.

How does it work?

There are **2** possibilities:

- 1) With reed contacts, this works completely autonomously
- 2) Without reed contacts, control is external (e.g. computer)

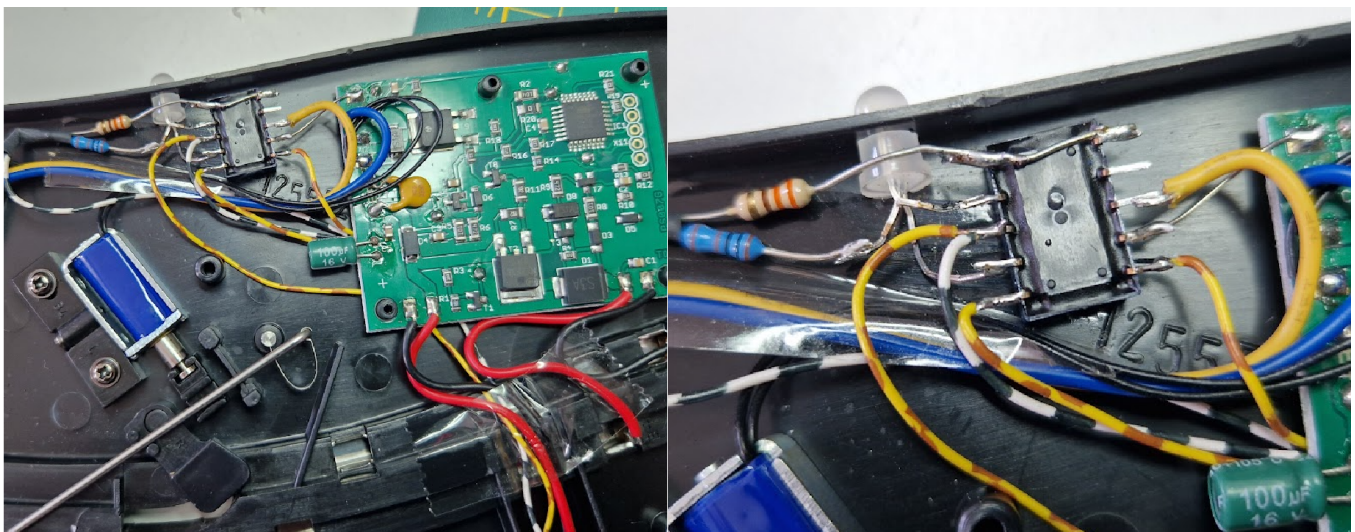
With reed contacts:

Simply using 2 reed contacts and a bistable relay (Diagram in other pdf).

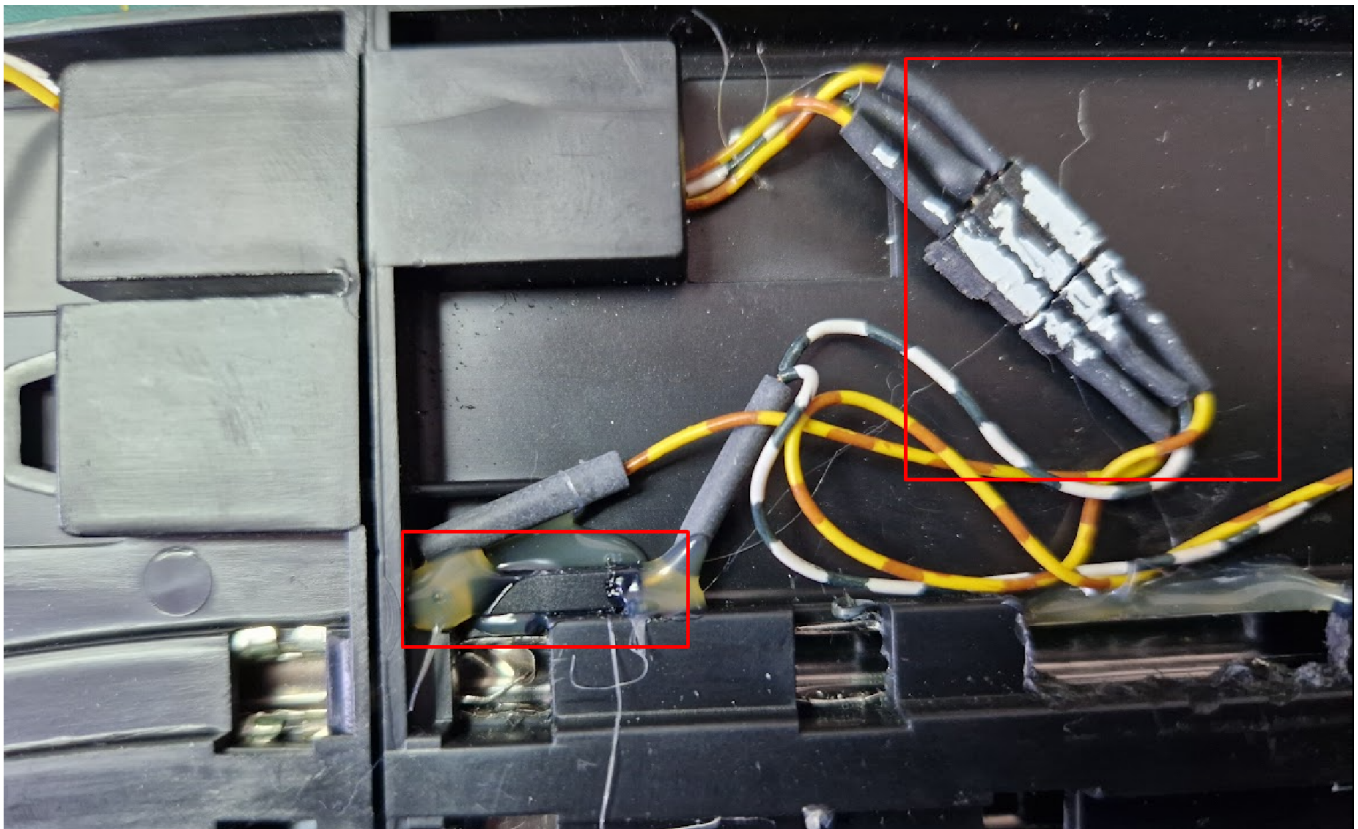
As soon as the car activates the first reed contact, the receiving IR diode is switched off. As soon as the car leaves the pit box, the 2nd reed contact switches the IR diode on again (Car must have a magnet).

Installation:

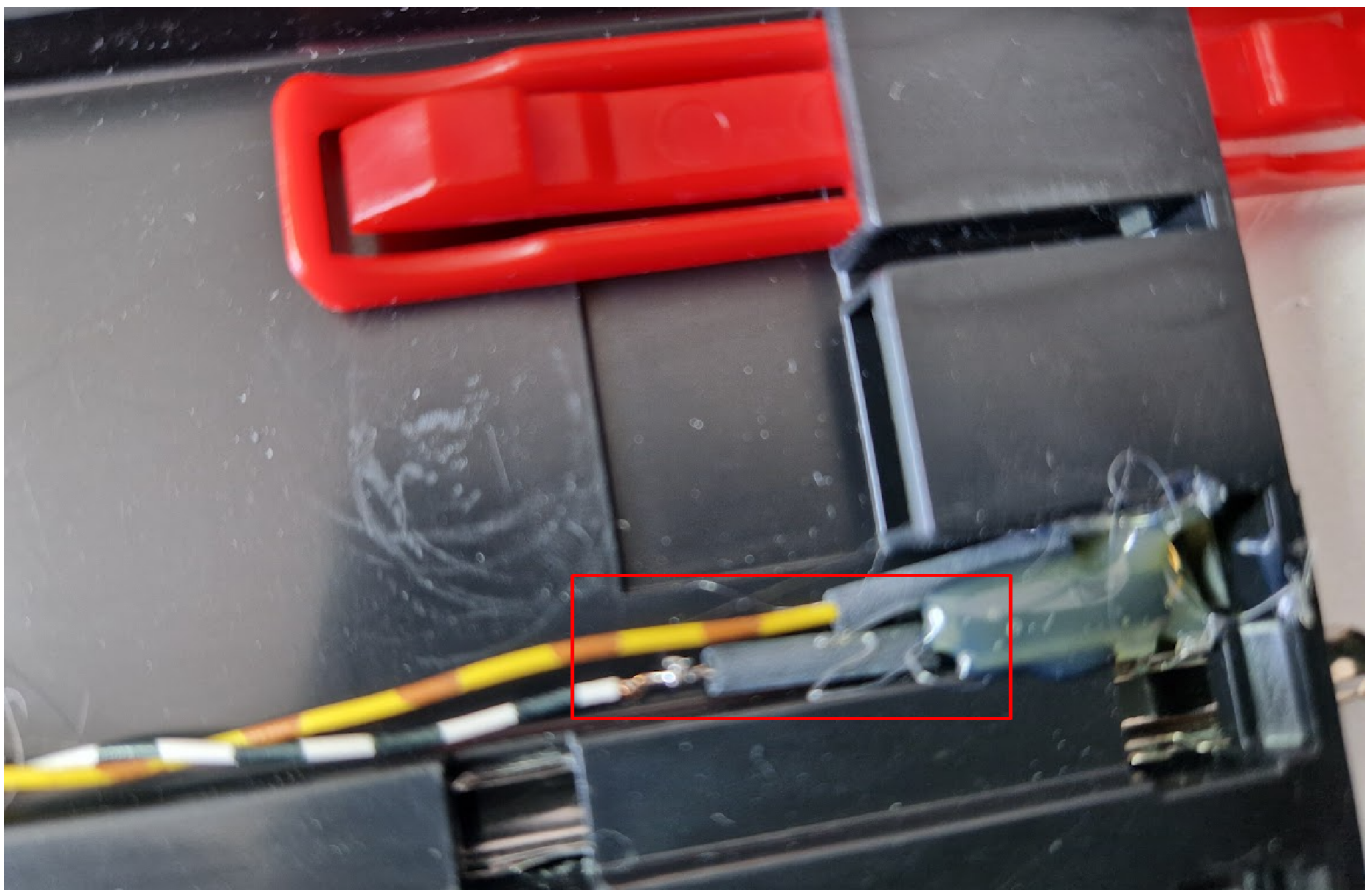
No PCB is required to build in these components.



Installation of reed contacts:



Left reed contact 1, right in the picture a connector.



On the right, the 2nd reed contact.

Without reed contacts:

The control is now external and can now be done with a "normal" relay. As long as the relay is not controlled, the turnout does not work either. Naturally, the sense of operation can also be reversed.

Why would you want this?

- 1) Pit lane is occupied or blocked before or after a number of laps.
- 2) You drive cars without magnets.

This electrical circuit is most similar to the solution below, however here the IR diode is switched off instead of the track voltage.

Pace Car makes jerky movement

Perhaps you haven't noticed, but every now and then the Pace Car goes off by itself? This happens because the Pace Car occasionally drives forward for a bit until it moves on after the switch. Usually it stops halfway and another car drives into the Pace Car and then you wonder how can that be?

It turns out to be a 'known problem'? There are several causes, interference from other cars and the number of cars driving there at the time. The problem is also hard to find because it occurs randomly.

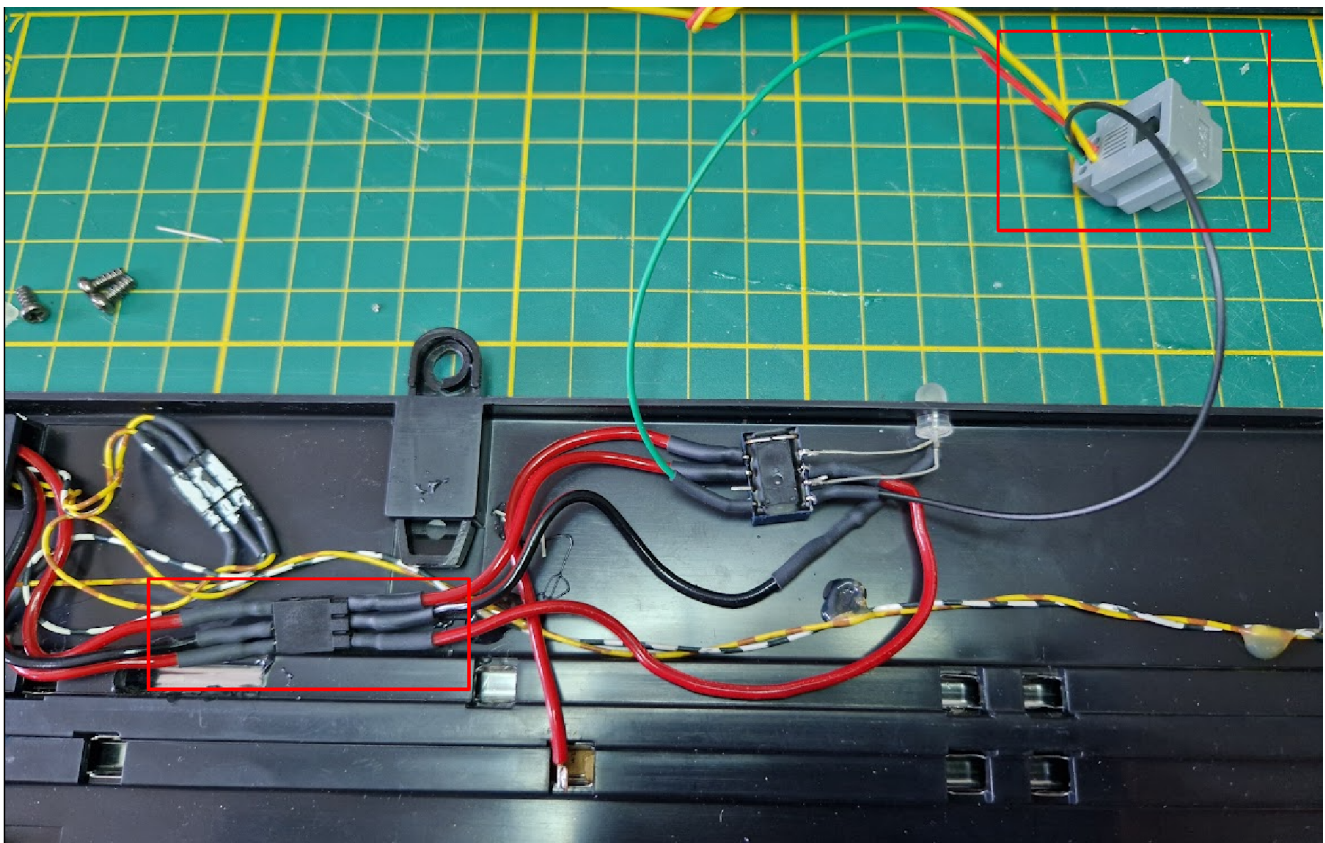
Solution:

A simple but effective solution is to take a relay and have it switch off the Pace Car's track power. The disadvantage is that the lights will then go out. As soon as the Pace Car has to leave, this relay is activated and the Pace Car regains power and drives off. Activation could be done immediately if one activates the 'ESC' button on the CU (30352).

(See schematic for this solution)

Installation:

No PCB is required to build in these components.



Left a connector, top right the RJ12 connector for control relay.