A train-controlled double-track level crossing is shown. The event manager is annotated.

The idea is to use additional contacts to ensure that the barrier remains closed if it is closed again by the opposite train while it is being opened. Otherwise it can happen that the barrier reverses direction while opening (triggered by the "clockwise" pull) and closes again (triggered by the "counterclockwise" pull).

The cars can be started / sent to the depot by the toggle switch:
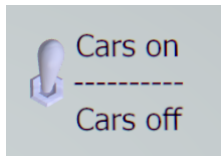
The operating states described below are displayed:
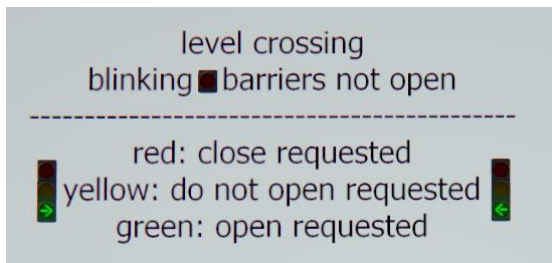
The flashing light indicates that the barrier is not fully open and the cars must stop (stop contact barrier 1/2). The two traffic lights indicate (separated by train direction) which requests are coming from the trains).

The two variants "counterclockwise / clockwise" are subsequently replaced by "*[direction]*".

Red.   The train has given the command to close (Contact barrier close *[direction]*).

Yellow   The train has "registered" (Contact barrier pre-register *[direction]*). This does not close the barrier, but it can no longer be opened by the oncoming train.

Green   The train has given the instruction to open (Contact barrier open *[direction]*).

The trains first set the variable "*[direction]*_pre-registered" and then "*[direction]*_set" on the named contacts and reset "*[direction]*_set" after leaving the level crossing.

If one of the Open or Close contacts is triggered, "Events / Railway / Level crossing / **Check**" uses the variables to check whether "Events / Railway / Level crossing / **Open**" or "… / **Close**" is triggered or not. Check, Open and Close are commented in the event manager.