

An automatic water crane

We do not have to build complicated electronic devices to get useful layout effects.

We can use some kits in a slightly different way from their original intention.

The EzyPoints kit is a module that simplifies the operation of points by servos. However, it is now commonly used to create all kinds of animations on a layout.

Here is one that you may have missed on our *'Backen Forth'* demonstration layout.

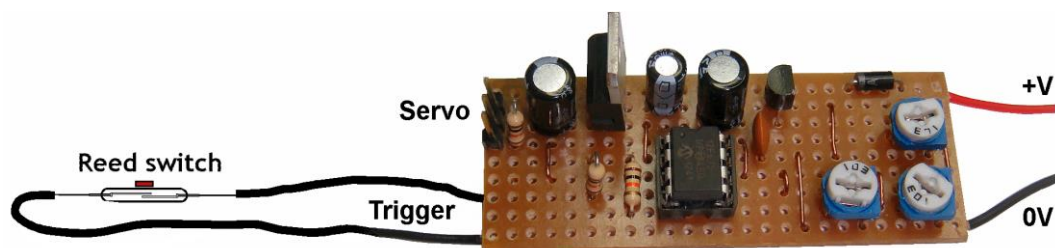
When the train enters the siding, the water crane automatically rotates towards it.

When the train leaves the siding, the crane returns to its original position.



The crane's pivoting pipe is attached to a rod that drops through the baseboard and is fixed to the servo. As the servo rotates, the crane is rotated.

The 'trigger' input to the EzyPoints kit is often a normal on/off switch and this could still be used to manually control the water crane.



However, a closer look at the picture shows the *'load'* on the wagon to be a magnet.

A reed switch is embedded in the track and when the wagon approaches, the magnet operates the reed switch and triggers the servo to rotate.

The water crane will remain in its new position as long as the magnet is positioned over the reed switch.

When the train departs, the reed switch drops out and the servo returns the water crane.

It need not use a reed switch as the trigger. Any detector that has an output that drops from +5V to 0V could be used. However, a reed switch is handy in a mixed layout, as magnets can be fitted solely to steam locos.

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