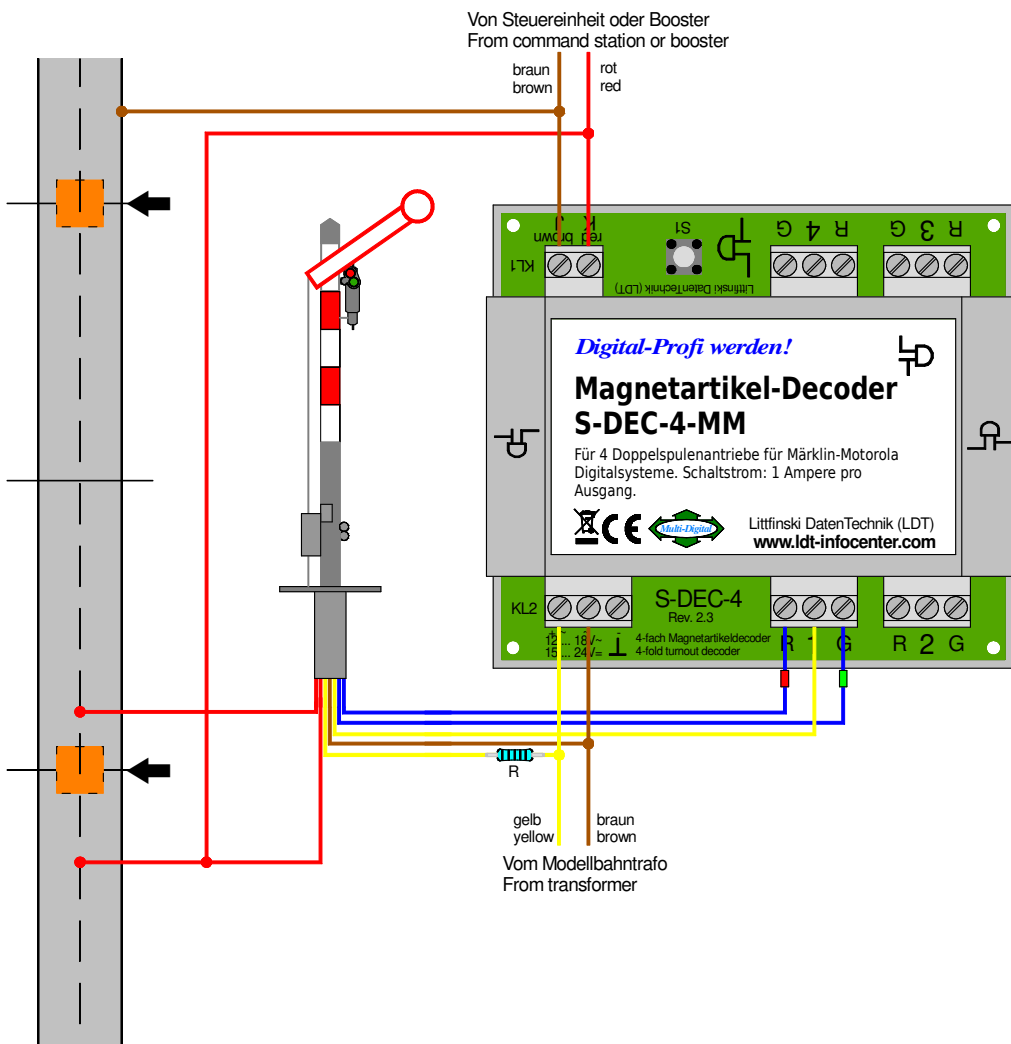


*To be a Digital-Professional!*

Digital switching of Viessmann Semaphore Signals with one and two drive units (Märklin 3-rail conductor)

**DIGITAL OPERATION OF VISSMANN SEMAPHORE SIGNALS WITH ONE DRIVE UNIT (E.G. 4400, 4401, 4405, 4500, 4501, 4505, 4900 AND 4901)**

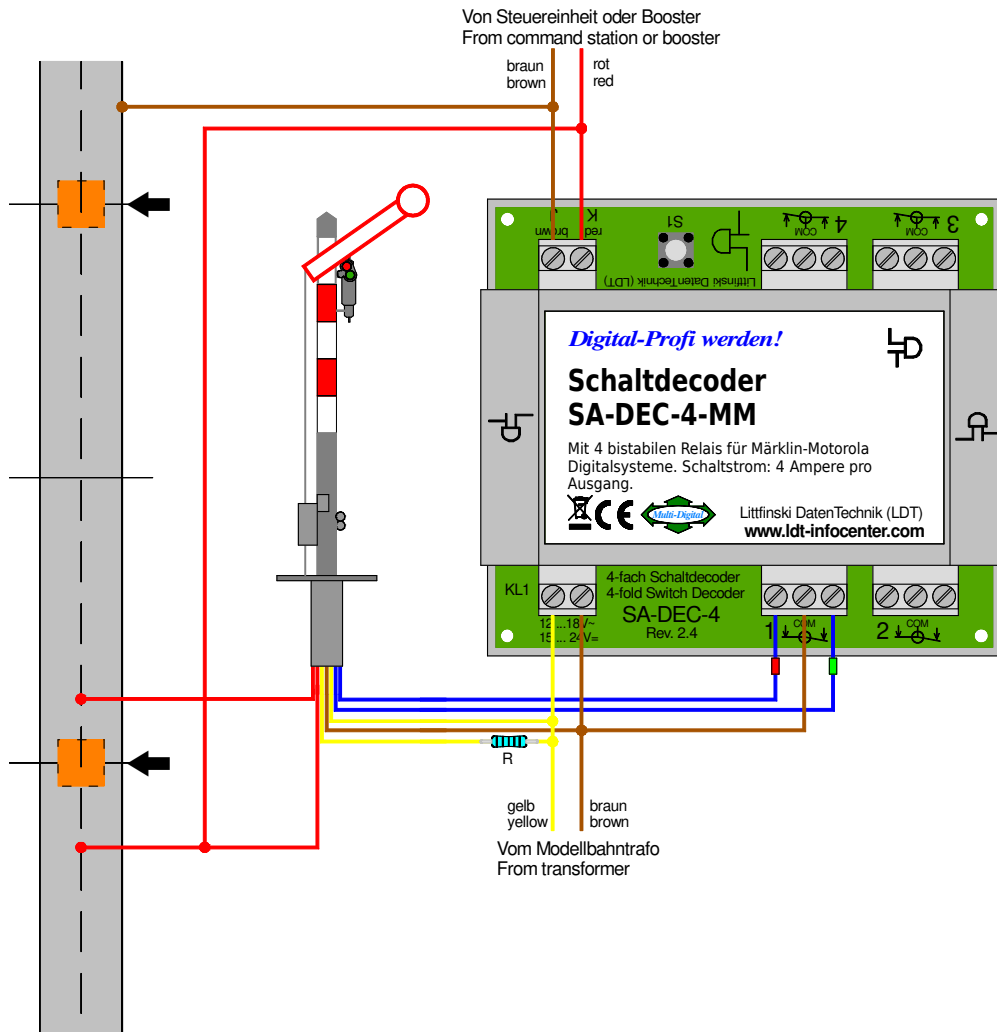
Viessmann Semaphore Signals with one drive unit can be operated either via the **LDT-Turnout Decoder S-DEC-4** or the Switch Decoder **SA-DEC-4**. One signal can be digital controlled by each output. The following sample connections will show the function.



■ Digital switching of Viessmann Semaphore Signals (page\_844)

Semaphore Signal with one drive unit connected to the **Turnout Decoder S-DEC-4-MM** or **S-DEC-4-DC**

■ Digital switching of Viessmann Semaphore Signals (page\_846)



Semaphore Signal with one drive unit connected to the **Switch Decoder SA-DEC-4-MM** or **SA-DEC-4-DC**

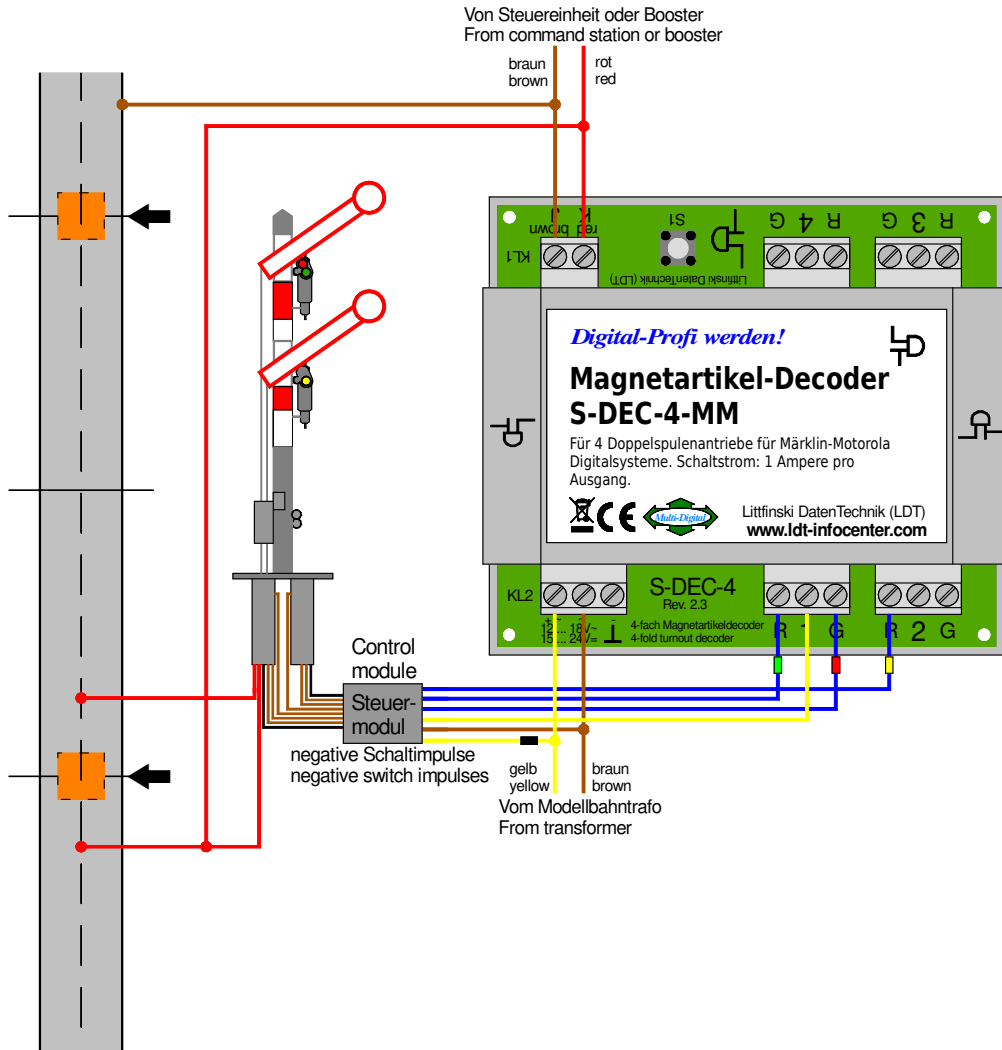
### DIGITAL OPERATION OF VISSMANN SEMAPHORE SIGNALS WITH TWO DRIVE UNITS (E.G. 4402, 4502 AND 4902)

As semaphore signals with two wings require eventually only one control command for a new signal aspect with both wings there is a control module implemented within the connection of the signal with two drive units to assure the required intersection.

For the selection of the control system Viessmann has themselves orientated to positive control impulses as used by the Märklin system.

**LDT** Decoder produces negative control impulses. For controlling turn-outs or signals with solenoid drives or uncoupling devices the polarity of the control impulses are not important.

1. For the application of decoder with negative switch impulses Viessmann offers a suitable control module by a respective request.



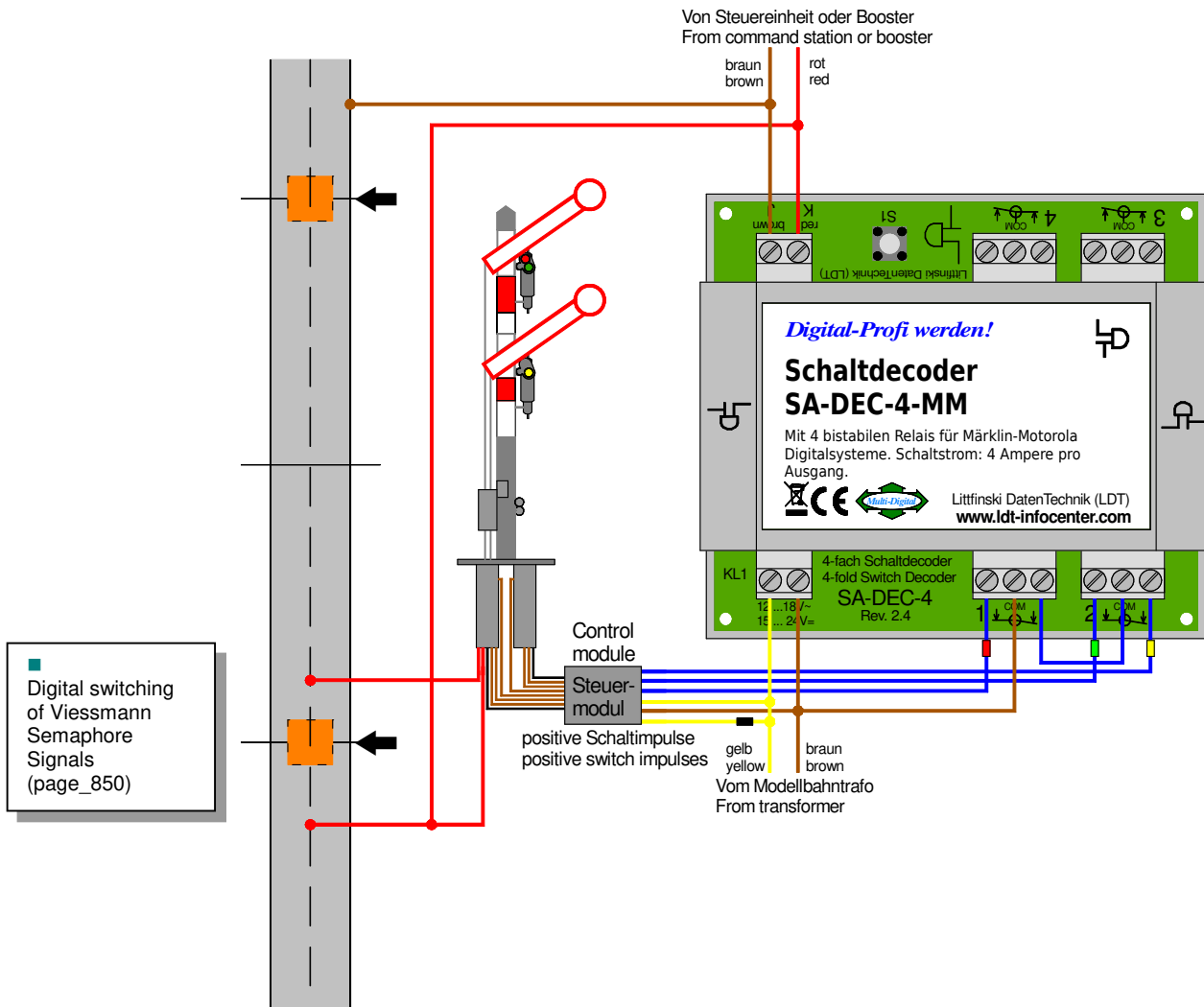
■ Digital switching of Viessmann Semaphore Signals (page\_848)

Semaphore Signal with two drive units on the **Turnout Decoder S-DEC-4-MM** or **S-DEC-4-DC** with control module for **negative** switch impulses (supplied by Viessmann by respective request or realized by turning the diodes at the control module as explained under 2).

2. Even with low experience in soldering electronic components you can easily rebuild a module for negative switch impulses out of a control module with positive switch impulses. You have just to unsolder all 4 diodes of the control module, turn them by 180 degree and re-solder them at the old position.

The connection plan at the previous page shows how to connect the **LDT-Decoder S-DEC-4-MM** or the **S-DEC-4-DC** to a two wings semaphore signal.

3. The next sample connection shows the possible application of a semaphore signal with two drive units and a control module for positive switch impulses (as supplied ex-factory by Viessmann together with the signal) with **LDT-Decoder**. It is possible to use our switch decoder **SA-DEC-4-MM** or **SA-DEC-4-DC** for this.  
 The wiring corresponds to the sample connection within the Viessmann operation instruction for the signal. The switch decoder includes 4 potential-free switch contacts for digital control.



■ Digital switching of Viessmann Semaphore Signals (page\_850)

Semaphore Signal on the **SA-DEC-4-DC** or **SA-DEC-4-MM** with control module for **positive** switch impulses

To be able to a digital switching of a three-aspect signal are two decoder addresses respectively outputs required. Via the address 1 will be the signal switched to “Stop” and “Proceed”. With the address 2 will be the semaphore signal switched to “Slow approach”.

The signal will be switched as follows:

- „Stop“                      Output 1 ON
- „Proceed“                  Output 1 OFF; Output 2 ON
- „Slow approach“        Output 1 OFF; Output 2 OFF

This possibility is very usable if you switch the signal automatically via the drive ways (with your digital central unit or a model railway software). But if you prefer to switch the signal via a KEYBOARD or a remote control is the first option to switch via the Turnout Decoder S-DEC-4 more practical because there is the activation of only one key per signal aspect required.

## ADDITIONAL INFORMATION

Additional Information about installation and operation of our digital components and various helpful sample connections are available with-in our operation instructions, which will be supplied with each module and are available at our Internet Site.

■  
Internet: [www.ldt-infocenter.com](http://www.ldt-infocenter.com)

All shown sample connections can be loaded down as PDF-files (e.g. page\_844.pdf) and printed at an A4 format.

**Autor: Peter Littfinski**

**Subject to technical changes and errors.  
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