



Permanent-Power-Switch-Unit DSU

Part-No.: 700012

For the Turnout-Decoder

S-DEC-4 and for the TurnTable-Decoder

TT-DEC

from the *Digital-Professional-Series* !

>> finished module <<

- ⇒ **Bistable relay with two switch contacts for a maximum current load of 2 * 1 Ampere.**
- ⇒ **Suitable for the switching of turnout-, street- and building illumination on each output of the Turnout-Decoder S-DEC-4.**
- ⇒ **Changes the polarity of the turntable bridge on a 2-conductor turntable in conjunction with the TurnTable-Decoder TT-DEC.**

This product is not a toy! Not suitable for children under 14 years of age! The kit contains small parts, which should be kept away from children under 3! Improper use will imply danger of injuring due to sharp edges and tips! Please store this instruction carefully.



Introduction/Safety instruction:

You have purchased the Permanent-Power-Switch-Unit **DSU** for your model railway.

The Permanent-Power-Switch-Unit **DSU** is a high quality product that is supplied within the *Digital-Professional-Series* of Littfinski DatenTechnik (LDT).

We wish you having a good time using this product.

The Permanent-Power-Switch-Unit **DSU** comes with a **24 month warranty**.

- Please read the following instructions carefully. Warranty will expire due to damages caused by disregarding the operating instructions. LDT will also not be liable for any consequential damages caused by improper use or installation.
- We designed our devices for indoor use only.

Function:

Information for switching the digital systems are active as long as the respective key of the keyboard will be pressed.

On this way is it possible to operate turnouts, signals or uncoupling devices by repeated pressing the key.

If a standard mono-stable relay has been connected to the decoder output this relay will be activated for the duration of pressing the key only. Such a relay can not be used for street-, building- or turnout illumination.

For such applications is it suitable to use the Permanent-Power-Switch-Unit **DSU** because this unit includes a bistable relay.

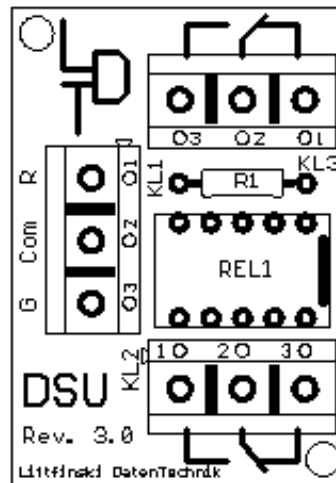
A short impulse will switch-over this relay into the secondary switch position and remains there even without voltage at the switch contacts.

If the permanent power switch **DSU** will be combined with the **TurnTable-Decoder TT-DEC** the **polarity** of a **2-conductor** turntable bridge will be **automatically changed** on every **180 degree turning**.

Connecting the Permanent-Power-Switch DSU to the Turnout-Decoder:

Attention: Before starting the installation switch off the voltage of the layout (switch-off the transformers or disconnect the mains supply).

Connect the Permanent-Power-Switch Unit **DSU** to an output of a Turnout-Decoder **S-DEC-4** or to the Turntable-Decoder **TT-DEC** as per advice on the backside of this instruction.



The clamp KL1 on the left side of the **DSU** marked "G", "COM" and "R" shall be used for this connection.

The output clamps of the Turnout-Decoder S-DEC-4 are as well identified by the letters "G" and "R".

The connection at the **DSU** marked with "COM" shall be connected to the **middle connection** of the decoder output.

The clamps of the Turntable-Decoder **TT-DEC** are corresponding marked with "G", "Com" and "R".

The bistable relay of the Permanent-Power-Switch-Unit **DSU** contains two switches over contacts at the clamps KL2 and KL3 (upper and lower position). Each switch contact can cover a maximum load of 1 Ampere.

The common contact of the switch (block pole) is always the middle contact of the **DSU** output clamps.

With respect to the required power load of the consumers the output can be connected to one or to both clamps.

Further products within the *Digital-Professional-Series*:

M-DEC

4-fold decoder for motor driven turnouts (Conrad, Hoffmann, Fulgurex etc.) With free programmable decoder addresses and possible external power supply.

SA-DEC-4

4-fold switch decoder with 4 bistable relays of 2 Ampere switching load each. With free programmable decoder addresses.

RM-88-N / RM-88-N-O

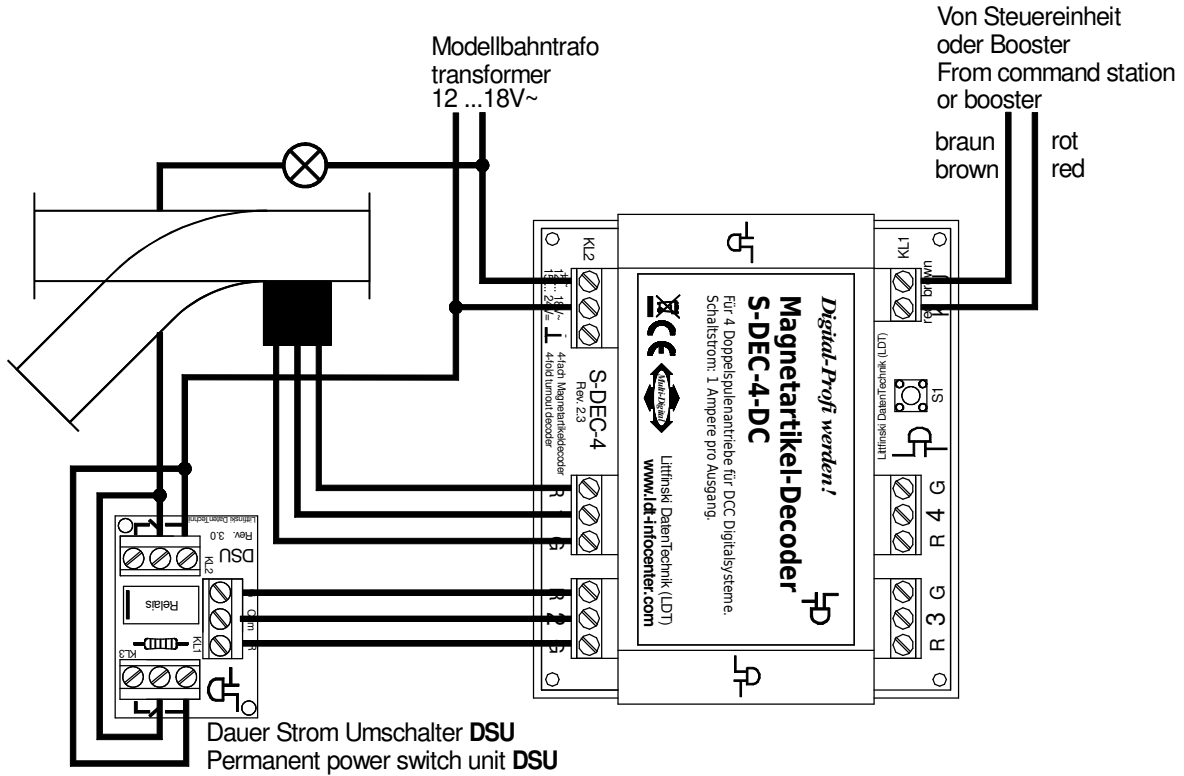
16-fold feedback module (also with integrated opto coupling) for the **s88-feedback bus** for the connection to **Memory und Interface (Märklin-Digital), Intellibox, TWIN-CENTER, Märklin Central Station 1 and 2, EasyControl, ECoS, High Speed Interface HSI-88(-USB) and DiCoStation.**

RM-GB-8-N

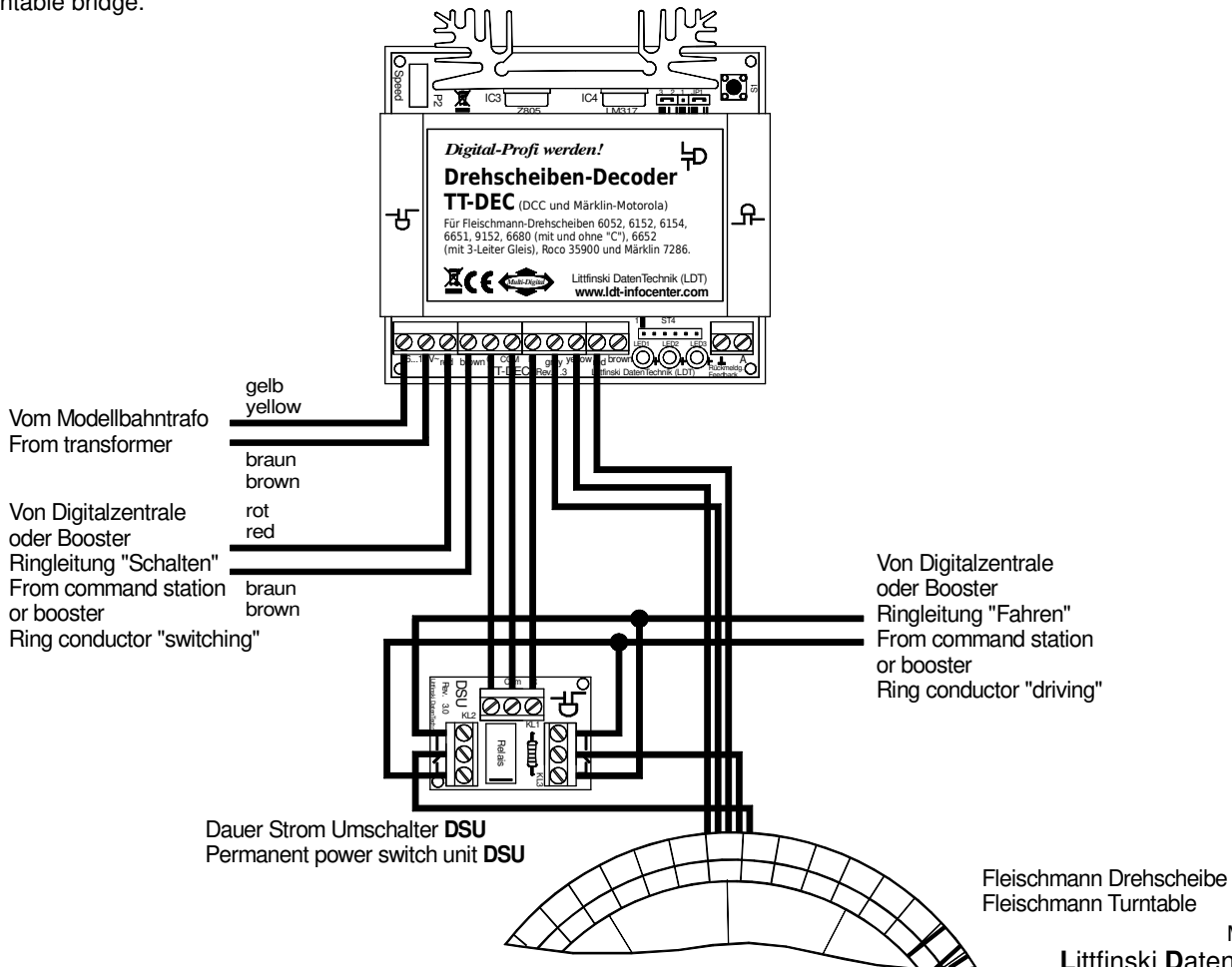
8-fold feedback module with integrated track occupancy detectors for the s88-feedback bus.

All components are available as **kits (-B)**, as **finished modules (-F)** or as **finished modules in a case (-G)**.

Picture 1: Permanent-Power-Switch-Unit **DSU** at output 2 of the Turnout-Decoder **S-DEC-4** for the switching the turnout illumination.



Picture 2: Permanent-Power-Switch-Unit **DSU** in interaction with the Turntable-Decoder **TT-DEC** for the polarity switching of the turntable bridge.



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