



Booster Keep Separation Module

from the *Digital-Professional-Series!*

BTM-SG-F LDT-Part-No.: 780502

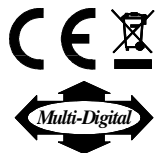
>> finished module <<

Suitable for all digital formats, for all Command Stations and all DigitalBoosters

This module provides a secure electrical separation of booster current circuits via a switch-over track and two sensor-tracks (three isolated track-sections).

The switch-over track section between the two sensor-tracks shall have at least the same length as the longest train on the layout.

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 or injuring due to sharp edges and tips! Please store this instruction carefully.



Introduction / Safety instruction:

You have purchased the **Booster Keep Separation Module BTM-SG** for your model railway layout.

The **BTM-SG** module is a high quality product that is supplied within the *Digital-Professional-Series* of Littfinski DatenTechnik (LDT).

We are wishing you having a good time using this product.

- Please read the following instructions carefully. Warranty will expire due to damages caused by disregarding the operating instructions. LDT will also be not liable for any consequential damages caused by improper use or installation.
- Also, note that electronic semiconductors are very sensitive to electrostatic discharges and can be destroyed by them. Therefore, discharge yourself before touching the modules on a grounded metal surface (e.g. heater, water pipe or protective earth connection) or work on a grounded electrostatic protection mat or with a wrist strap for electrostatic protection.
- We designed our devices for indoor use only.

The **BTM-SG** module comes as finished module and as finished module in a case with a **24 month warranty**.

Connecting the Booster Keep Separation Module BTM-SG to your digital model railway layout:

- **Attention:** Before starting the installation switch off the voltage supply by pushing the stop button or better disconnect the main supply.

The **Booster Keep Separation Module BTM-SG** receives the power supply via the clamp KL6. The voltage of 16...18V~ of a model railway transformer (ac output) is acceptable.

Operation mode:

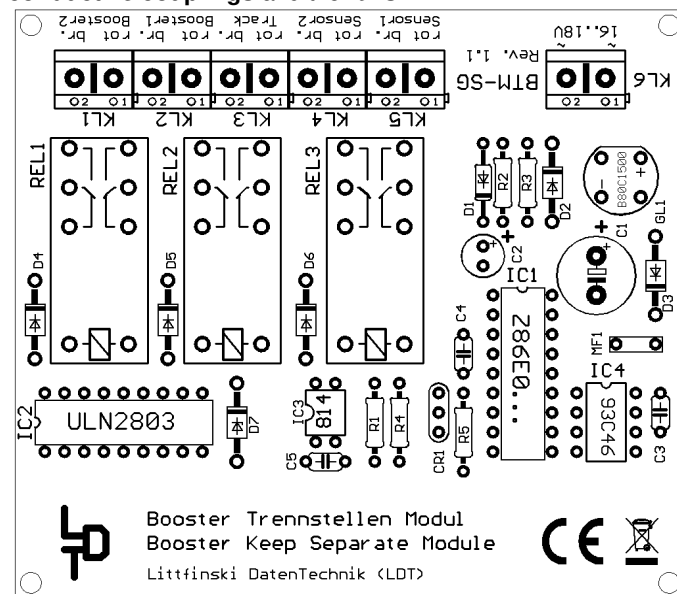
Each booster supplies current for an own rail section. The rail sections have to be electrically isolated against each other by separation sections.

If a locomotive passes a separation section the electrical isolation will be temporary cancelled. At the 3-conductor

track will this be caused by the sliding contact of the locomotive. At the 2-conductor track this will happen if the locomotive has more than one axle with sliding conductor.

During the electrical bypass of a separation section some balance current can flow over the loc. Through the whole train if the train contains conductive couplings and sliding conductors at the train front and end.

Related to the level and duration of the balance current flow it can cause damage to the boosters, the locomotives, the conductive couplings and the rails.



The **Booster Keep Separation Module BTM-SG** provides a secure electrical separation between the booster current circuits.

For this separation will get the isolated switch-over track which is situated between the two booster current circuits the

supply from one competent booster only.

Suitable to the drive direction of the train the digital current supply of the switch-over track will be switched automatically under the travelling train onto the competent booster.

The **Booster Keep Separation Module BTM-SG** indicates the travelling direction of the train within two isolated track sections (so-called sensor-tracks) at a length 5 to 20 cm (optimal). Between the sensor tracks shall the switch-over track situated which has to have at least the length of the longest train on the layout.

Both rails of the sensor tracks 1 and 2 and the switch-over track have to be isolated and connected to the corresponding marked clamps of the **Booster Keep Separation Module BTM-SG**. The digital voltage of both boosters which are competent for the separation point shall be connected to the clamps booster 1 and booster 2.

The **Booster Keep Separation Module BTM-SG** is able to switch a digital current of up to 8 Ampere.

The **Booster Keep Separation Module BTM-SG** is able to work without any problems with boosters of various manufacturers and with various electrical characteristics combined on one model railway layout.

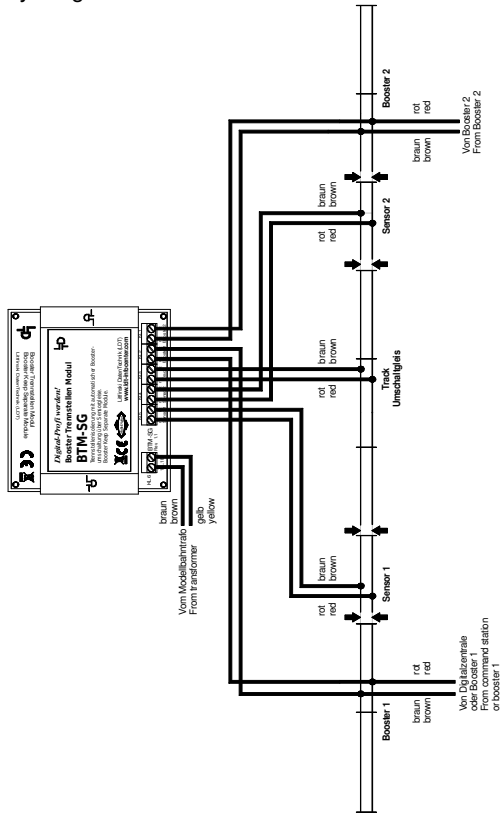
The sample connections 1 to 4 at the rear side of this instruction shows the basic wiring of the **Booster Keep Separation Module BTM-SG**. Colored sample connections can be found on our Web-Site (www.ldt-infocenter.com) at the section "Sample Connections".

Accessories:

For safe installation of the **Booster Keep Separation Module** below your model layout we offer an installation set under the order code **MON-SET** and for the assembled kits a sturdy exact matching case (order code: **LDT-01**).

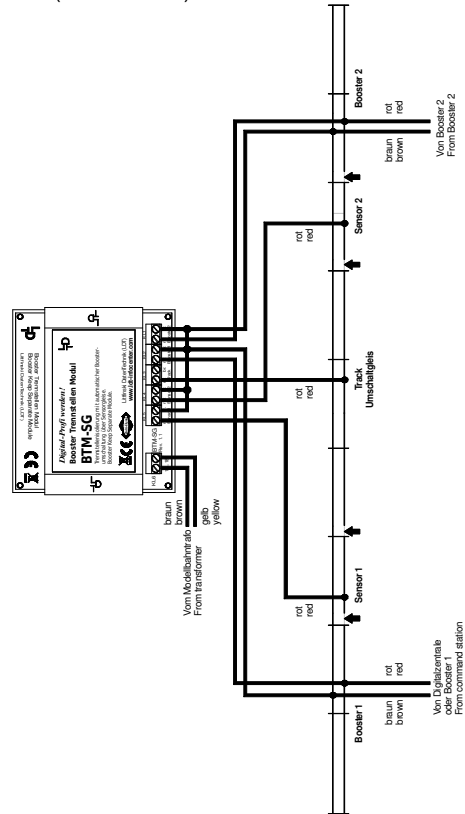
Sample Connection 1: (page_1046)

Booster separation point at a 2-conductor rail system without common layout ground.



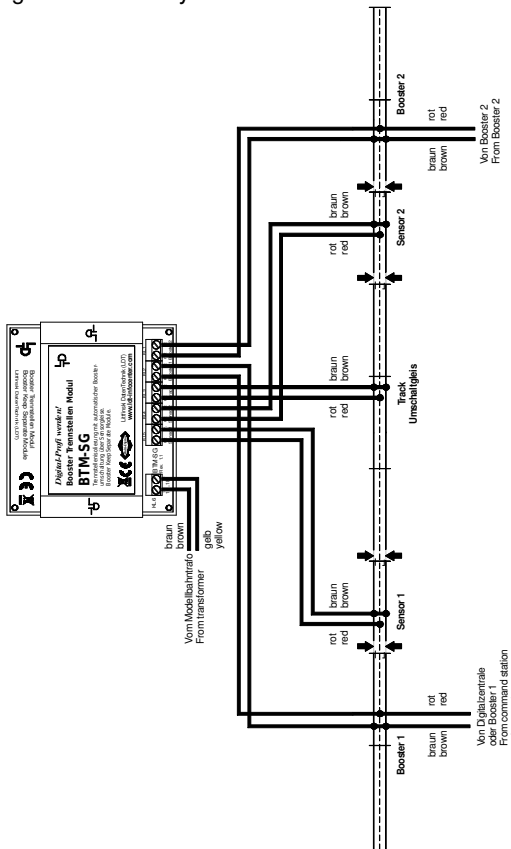
Sample Connection 2: (page_1047)

Booster separation point at a 2-conductor rail system with common layout ground. ("brown" / "J").



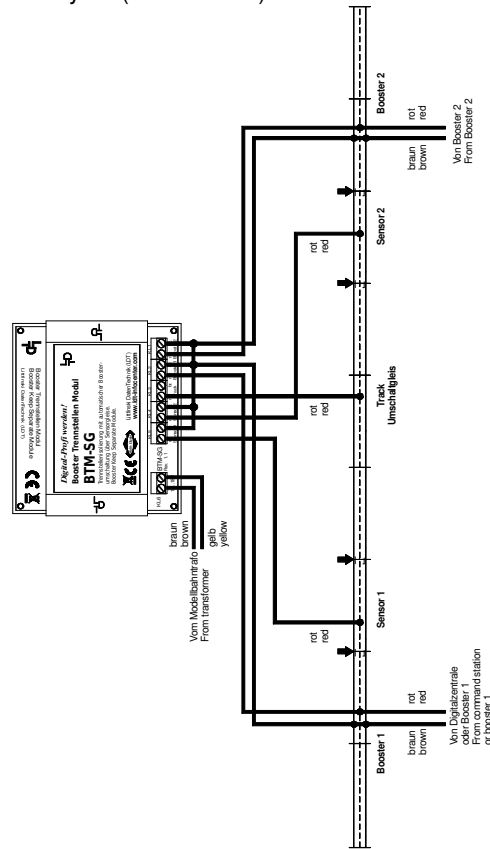
Sample Connection 3: (page_1048)

Booster separation point at a 3-conductor rail system without common ground at the layout.



Sample Connection 4: (page_1049)

Booster separation point at a 3-conductor rail system with common ground at the layout ("brown" / "J").



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Colored sample connections can be found on our Web-Site (www.ldt-infocenter.com) at the section "Sample Connections" for the Booster Keep Separation Module BTM-SG under the indicated page-number.

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