

To enable the **DigitalBooster DB-2** to supply the maximal possible digital current it has to get a **minimum of 52VA** from a **model railway transformer** at **clamp KL1**. The **transformer output voltage** can be between **16 and 18 Volt AC**.

If the transformer supplies already other consumers on the layout you have to take special attention to the **correct terminal occupation at the supply clamp KL1**. You have to attend to the correct colors "**yellow**" and "**brown**" by connecting to a command station of Märklin **Control Unit** or **Intellibox**.

### 3. Booster connected to a rail:

The digital current of the **DigitalBoosters DB-2** is available at **clamp KL2** next to the light emitting diode.

Each booster must supply an own current circuit on the layout.

**Therefore the center conductor of a 3-conductor rail** has to be **isolated** at the **joint** to the next current-circuit.

The output "**brown**" of the **clamp KL2** supplies **both rails**. The output "**red**" supplies the **center conductor of the isolated section**.

On the **2-conductor rail** shall as **minimum one rail be isolated at the joints**. The rail inside the **isolated section** gets the supply from the output "**red**" of the **booster clamp KL2**. The **second rail** (not necessarily isolated) receives the supply from output "**brown**".

### Booster in action:

After switching-on the model railway layout and actuating the **push button "GO"** at the command station the **red light emitting diode (LED)** of the **DigitalBooster DB-2** will **glow**. This indicates that the booster supplies digital current to the connected rail-section.

**The booster will switch automatically off** by any **short circuit** at the rail section. **The red light emitting diode will go out**. The event of a short circuit will be reported from the booster to the command station via the 5-poles booster bus. These will switch to "Stop".

After **eliminating the short circuit** you can supply digital current to the rail by actuating again the **push button "Go"** at the command station.

**Will the current** at the connected rail section **extend 2.5 Ampere** the booster will **switch off as well**, to **prevent overheating**.

### Booster assembly:

Please assemble the **Booster DB-2** at a location that **sufficient air** can **circulate at the heat sink**.

If you have purchased the **Booster DB-2** as a **kit** you can assemble the completed unit into a **suitable empty case LDT-01**. This case is available as **accessory** within our program.

Littfinski DatenTechnik (LDT)

Operating Instruction



## DigitalBooster DB-2 from the *Digital-Professional-Series* !

DB-2-G Part-No.: 080063

>> finished module in a case <<

The DigitalBooster DB-2 is a short-circuit-proofed power amplifier (booster) for digital model railway layouts.

Maximal power output: 2.5A.

The DB-2 amplifies the data formats Märklin-Motorola, mfx®, M4 and DCC

The DB-2 can be directly operated on several digital command stations by use of the attached 5-poles booster-bus cable:

- ⇒ **Control Unit (6021)**
- ⇒ **Central Station 1 and 2 (CS1 and CS2)**
- ⇒ **Intellibox, EasyControl, ECoS, DiCoStation, KeyCommander**
- ⇒ **TWIN-CENTER**

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.



Made in Europe by  
Littfinski DatenTechnik (LDT)  
Bühler electronic GmbH  
Ulmenstraße 43  
15370 Fredersdorf / Germany  
Phone: +49 (0) 33439 / 867-0  
Internet: www.ldt-infocenter.com

Subject to technical changes and errors. © 09/2022 by LDT  
Märklin and Motorola are registered trade marks.

## Introduction / Safety instruction:

You have purchased the **DigitalBooster DB-2** for your model railway. The **DB-2** is a high quality product that is supplied within the assortment of **Littfinski DatenTechnik (LDT)**.

**We are wishing you having a good time using this product!**

The finished module in a case 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 not be 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.

## Connecting the booster to the digital system:

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

### 1. Booster connected to the command station respectively to other boosters:

The **DigitalBooster DB-2** is a power-amplifier for your digital model railway layout. It supplies digital current to an **own rail section**.

The **DB-2** shall be connected to the digital command station (e.g. Central Station Control Unit, Intellibox, TWIN-CENTER, DiCoStation) or to an other booster (e.g. DB-2, DB-4, 6015, 6017, Power 2, Power 3) with the supplied **5-poles booster-bus-cable**. The first booster shall be always directly connected to the command station via the 5-poles cable. The second booster shall be connected to the first booster etc.

Connect the plug of the attached 5-poles booster-bus-cable to the command station or the previous booster. The correct position of the plug at **Control Unit, Intellibox, TWIN-CENTER, Märklin Booster 6017, Power 2 and Power 3** is, that the **cable** at the plug **shows downwards**. The **booster-bus cable** attached to the DB-2 has to **show upwards** by connecting to **Märklin Booster 6015**.

If you use the **DigitalBooster DB-2** on the PC-Direct Control **DIGITAL-S-INSIDE** insert the plug to the pin-plug bar of the pc-adaptor or to the DiCoStation so that the **white single wire** of the cable **corresponds** to the **white marking** on the **pin-plug bar**. The cable will go now straight away from the adapter.

The second plug of the booster-bus cable has to be connected at the **DigitalBooster DB-2** on the **pin-plug-bar ST1** marked with "IN".

Please attend to the correspondence of the **white single wire** of the 5-poles cable with the **white marking** on the **pin-plug-bar ST1**.

You have connected the plug of the attached 5-poles booster-bus cable correct to the **DigitalBooster DB-2** whenever the twisted cable goes straight away from the booster.

Other manufacturers supply a **5-poles ribbon-cable** as booster cable. If you use these connect the plug on the pin-plug bar ST1 so that the ribbon-cable shows to the booster cover and has then to be directed over the plug to the command station or to the previous booster.

Shall a following booster connected to the **DigitalBooster DB-2** by using the 5-poles booster-bus cable it has to be connected to the **pin-plug bar ST2** ("OUT").

### 2. Booster connected to the model railway transformer:

The **DigitalBooster DB-2** supplies a **maximal digital current of 2.5 Ampere** to the rail.

