

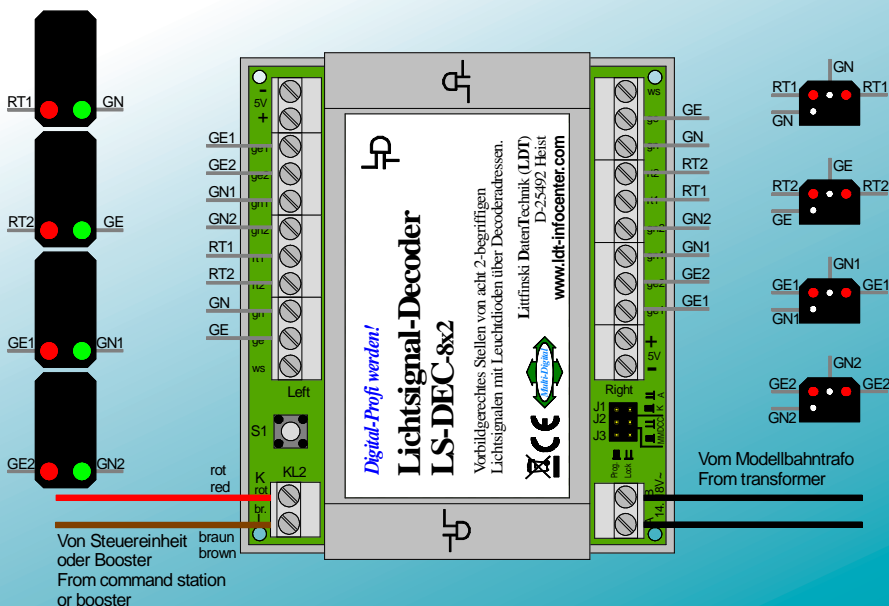
# Model railway electronic

Components for control, digital switching and feedback monitoring on digital model railways!

## *Be a Digital-Professional! Novelties 2018*

**1. LS-DEC-CSD:** Light-Signal Decoder for light signals of the Czechoslovakian National Railway, CSD.

**2. LS-DEC-8x2:** Light-Signal Decoder for eight 2-aspect light signals.



**Low cost kits, finished modules and finished modules in a case**

## Littfinski DatenTechnik - LDT

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



Our **Light-Signal Decoders (LS-DEC)** are a valuable **accessory** for **Digital-Layouts**, if a **prototypically switching** of light signals is expected. With **one digital switch command** it is possible to **display** as well **complex signal aspects** with the **Light-Signal Decoder**.

The **signal aspects** are **different** by the **various railway companies**. Therefore we offer many **variances** of the **LS-DEC** to **suit the requirement** of a **particular railway company**.

Till now we have **Light-Signal Decoder** within our program for **light signals**

of the **Deutsche Bahn** (German Railways) (**DB** and **KS**),

of the **Deutsche Reichsbahn** (Imperial German Railways) (**DR**),

of the **Austrian Federal Railway** (**OEBB**),

of the **Swiss Federal Railway** (**SBB**),

of the **Nederlandse Spoorwegen** (**NS**),

of the **Nationale Maatschapping** of the

**Belgian Spoorwegen** (**NMBS**),

of the **British Railway** (**BR**),

of the **Governmental Railway Corporation** of

**Italy** (**FS**),

of the **Swedish State Railway** (**SJ**) and

of the **Governmental Railway Corporation** of

**French** (**SNCF**),

of the **Luxembourg National Railway Company** (**CFL**) and

of the **American Color light signals**.

With the **LS-DEC-CSD** for **light signals** of the **Czechoslovakian National Railway** and the **LS-DEC-8x2** for **eight 2-aspect light signals** we completed our range by two further **Light-Signal Decoder**.

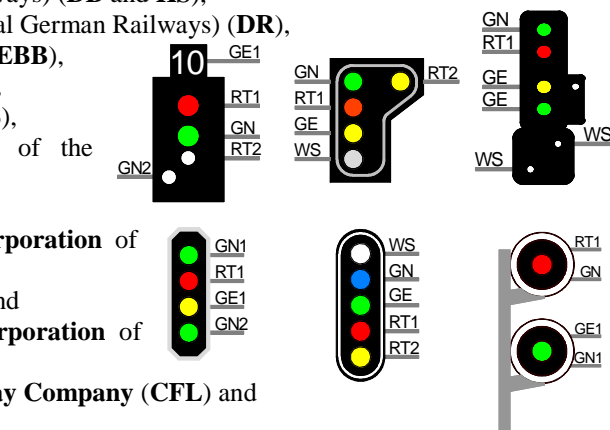
## 1. LS-DEC-CSD:

### Light-Signal Decoder for up to 4 light signals of the Czechoslovakian National Railway, CSD.

With the **Light-Signal Decoder LS-DEC-CSD** can be **CSD-light-signal aspects** switched via **accessory addresses**.

It can be **CSD departure-signals**, **home-signals**, **advance-signals**, **block-signals** as well as **shunting signals** connected and controlled.

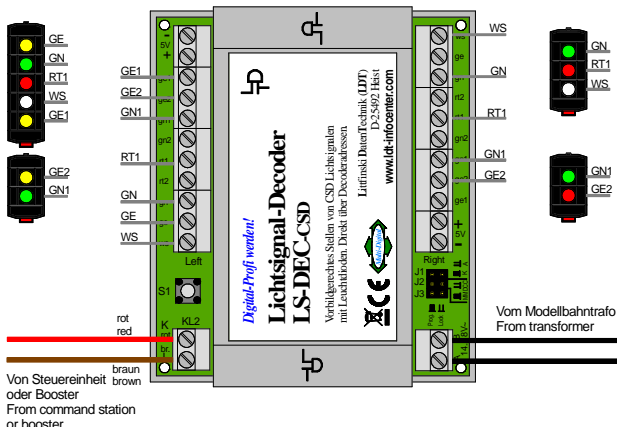
The **signal aspects** will not simply be cross faded but **switched as in reality**. Those signal lamps required for the next signal aspect will remain illuminated.



With the **Light-Signal Decoder LS-DEC-CSD** can be **CSD-light-signal aspects** switched via **accessory addresses**.

It can be **CSD departure-signals**, **home-signals**, **advance-signals**, **block-signals** as well as **shunting signals** connected and controlled.

The **signal aspects** will not simply be cross faded but **switched as in reality**. Those signal lamps required for the next signal aspect will remain illuminated.



# Be a Digital-Professional!



The **Light Emitting Diodes (LED)** of the signal which have to be **switched off and on** will be **dimmed down** respectively **up**. The **Light-Signal Decoder LS-DEC-CSD** is suitable for all **LED-assembled light signals** with **common anode** or **common cathode**. Via a **jumper** is it possible to **select the digital data format Märklin-Motorola** or **DCC**. Therefore is it possible to use the decoder **in interaction** with **any digital command station** which is transmitting the **Märklin-Motorola** and/or **DCC** data format.



The **operation and signal current** has **not necessarily** to be **supplied by the digital current circuit** but can be directly fed into a **separate input** from a **model railroad transformer**. This **saves expensive digital current**.

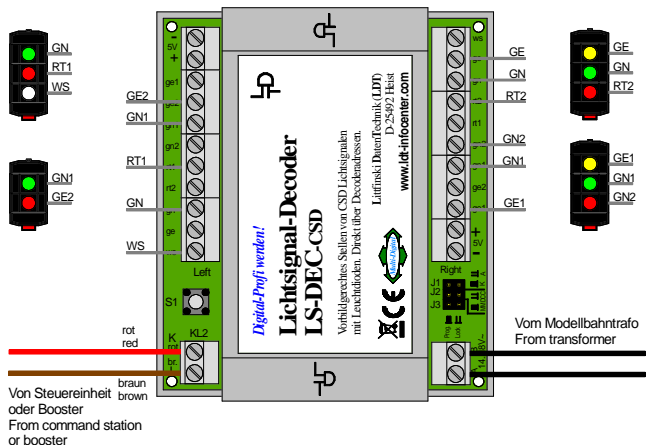
For the **programming of the decoder addresses** has the decoder to be set into the **programming mode** via the **push button S1**. If the **connected signals** are **controlled** via the **digital command station** or by the **model railway control software** the decoder will **recognize the address** and will **store those**. **It's as simple as that!**

## Order code:

**LS-DEC-CSD-B** (Part-No. 510511): Light-Signal Decoder LS-DEC-CSD as **kit**.

**LS-DEC-CSD-F** (Part-No. 510512): Light-Signal Decoder LS-DEC-CSD as **finished module**.

**LS-DEC-CSD-G** (Part-No. 510513): Light-Signal Decoder LS-DEC-CFL as **finished module in a case**.



## 2. LS-DEC-8x2:

Light-Signal Decoder for eight 2-aspect light signals.



With the **Light-Signal Decoder LS-DEC-8x2** it is possible to switch up to **eight 2-aspect light signals** via accessory addresses.

It is possible to switch **2-aspect signals** of different signal systems e.g. with the signal aspect **“Stop”** and **“Proceed”**. At the **DB-Signal** system can be up to **eight block- or line-closed signals** controlled.

The **signal aspects** will not be simply cross faded but as in reality the prior aspect will be firstly dimmed-down and after

a short **dark phase** the new signal aspect will appear. The **light emitting diodes (LED)** will be **dimmed up and down** during this process.

The **Light-Signal Decoder LS-DEC-8x2** is suitable for all **LED-assembled 2-aspect light signals** with **common anode** or **common cathode**. Via a **jumper** it is possible to **select the data format Märklin-Motorola** or **DCC**.

### Order code:

**LS-DEC-8x2-B** (Part-No. 510711): Light-Signal Decoder LS-DEC-8x2 as **kit**.

**LS-DEC-8x2-F** (Part-No. 510712): Light-Signal Decoder LS-DEC-8x2 as **finished module**.

**LS-DEC-8x2-G** (Part-No. 510713): Light-Signal Decoder LS-DEC-8x2 as **finished module in a case**.

