



Components for the Transponder Technology (RFID)

# Interface- RS232 INTER-10

INTER-10-G Part-No.: 060823

>> finished module in a case (G)<<

The interface **INTER-10** is suitable for the serial (**RS232**) interface. It can manage up to **99 Transponder-Readers COL 10** and transmits the transponder data e.g. to the PC.

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 serial interface **INTER-10** for your transponder system. The **INTER-10** is a high quality product which is supplied within the assortment 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 not be liable for any consequential damages caused by improper use or installation.
- We designed our devices for indoor use only.

The finished module in a case comes with **24 month warranty**.

## General functional description

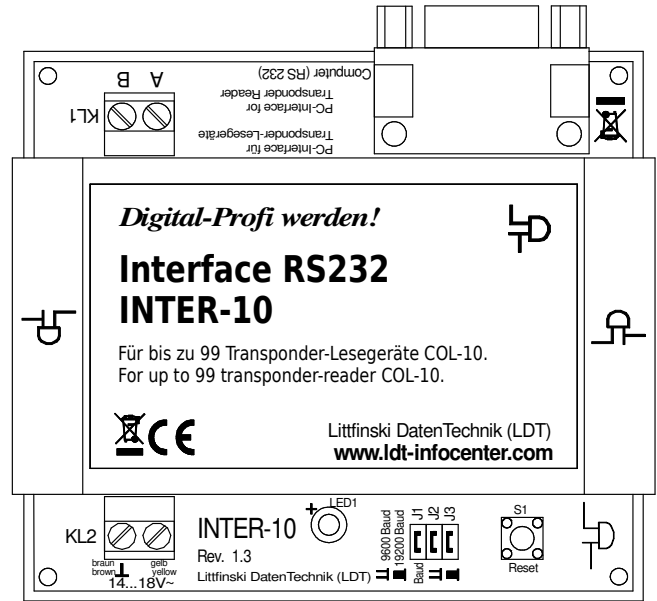
The **Interface INTER-10** has the task to transfer the **transponder data** of up to **99 Readers COL-10** via the **serial RS232-interface** e.g. directly to the **PC**.

## Connecting the Serial Interface INTER-10:

- **Attention:** Before starting the installation take care that all components are voltage free.

The **serial interface INTER-10** receives the **power supply** of **14 to 18 Volt AC** or **12 to 24 Volt DC** at the connection clamp **KL2**. If you supply the **INTER-10** and the **Reader COL-10** from a common power supply please attend especially to the same polarity via the wire colors "**yellow**" and "**brown**" at the supply clamps.

For receiving an **increased reading sensitivity** it is recommended to supply the **Readers COL-10** with a **direct current of 13.6 Volt** from e.g. the **Plug-In Power Supply SNG-10**.



For the operation of the **INTER-10** on a **PC** you require a **serial RS232 interface port** on your **PC**. This port will be also identified as **COM-PORT**.

If your computer has no more available serial interface ports is it possible to use an "**USB to RS232**" **converter**. With this cable you will receive a further **serial COM-interface** from an **USB-port**. But this installation will not always secure a safe operation.

**Better** is the possibility to receive one or more **COM-interfaces** by use of an additional **plug-in pc-board**.

Please use the **supplied computer cable** for the **connection** of the **Interface INTER-10** to the **PC** via an available **COM-interface**.

## Adjusting the plug bridges J1 to J3:

With the **plug bridge J1** you can adjust the data transfer rate to the PC. If the **plug bridge J1** is **not inserted** the transfer rate will be **9600 Baud**. If the **plug bridge J1** has been **inserted** the transfer rate will be **19200 Baud**. Please adjust the **matching transfer rate** for the **INTER-10** at your **PC-software**.

The **plug bridge J2** shall **not be inserted**. **J3** shall be **always inserted**. If your **PC-software** offers several **options** for the **INTER-10** please choose the option "**spontan 1**".

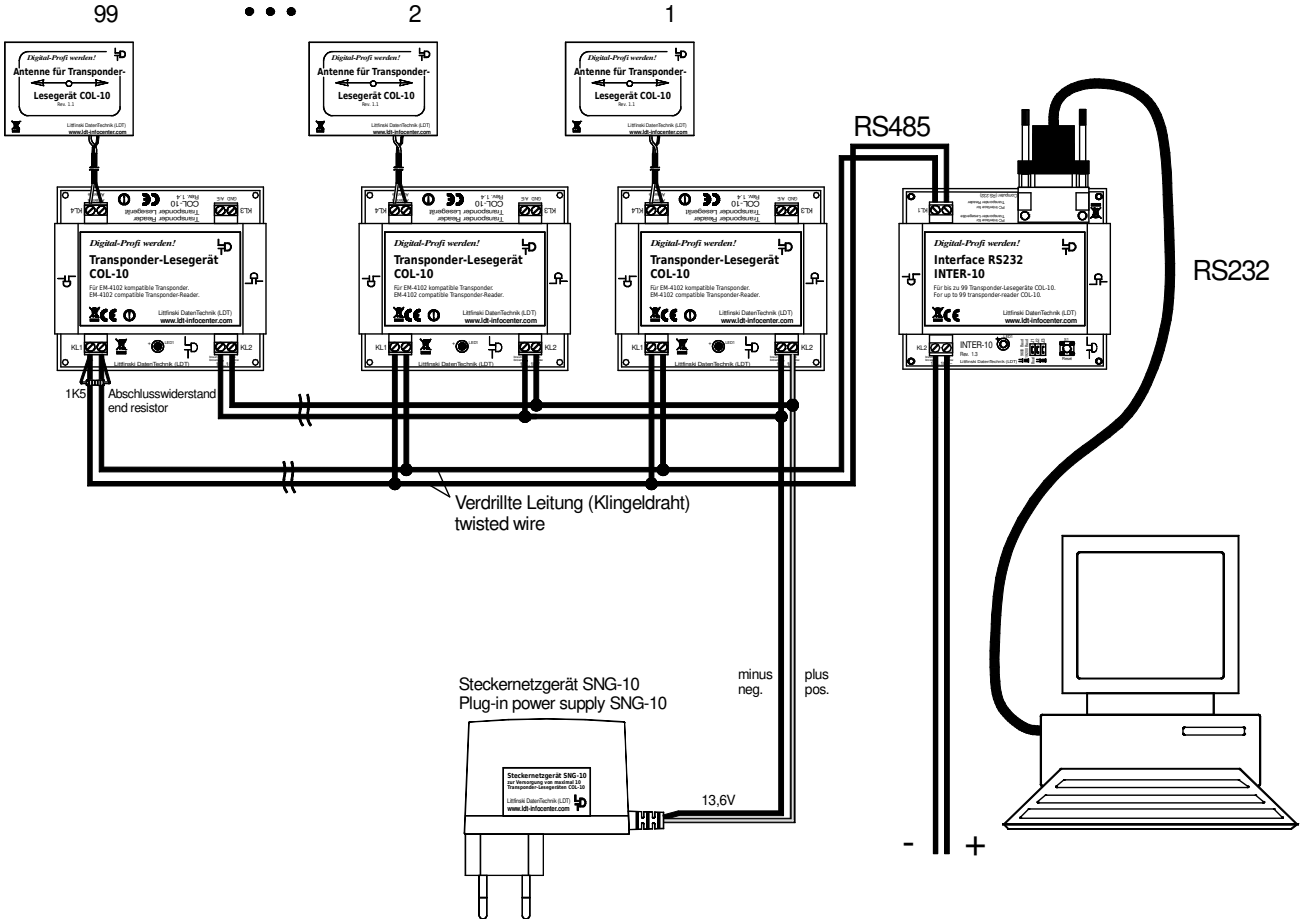
## Connecting INTER-10 to the Transponder-Reader COL-10:

The **Transponder Readers COL-10** shall be connected to **each other** and to the interface **INTER-10** by use of a **twisted 2-poles wire** (e.g. bell-wire) (clamp **KL1**). Special attention is required for the correct "**A**" and "**B**" connection between the components.

The attached **1.5 kOhm end-resistor** shall be connected to the **reader COL-10** which has been assembled to the end of the reader bus-line. Please attend to the **sample connections** at the rear side of this instruction.

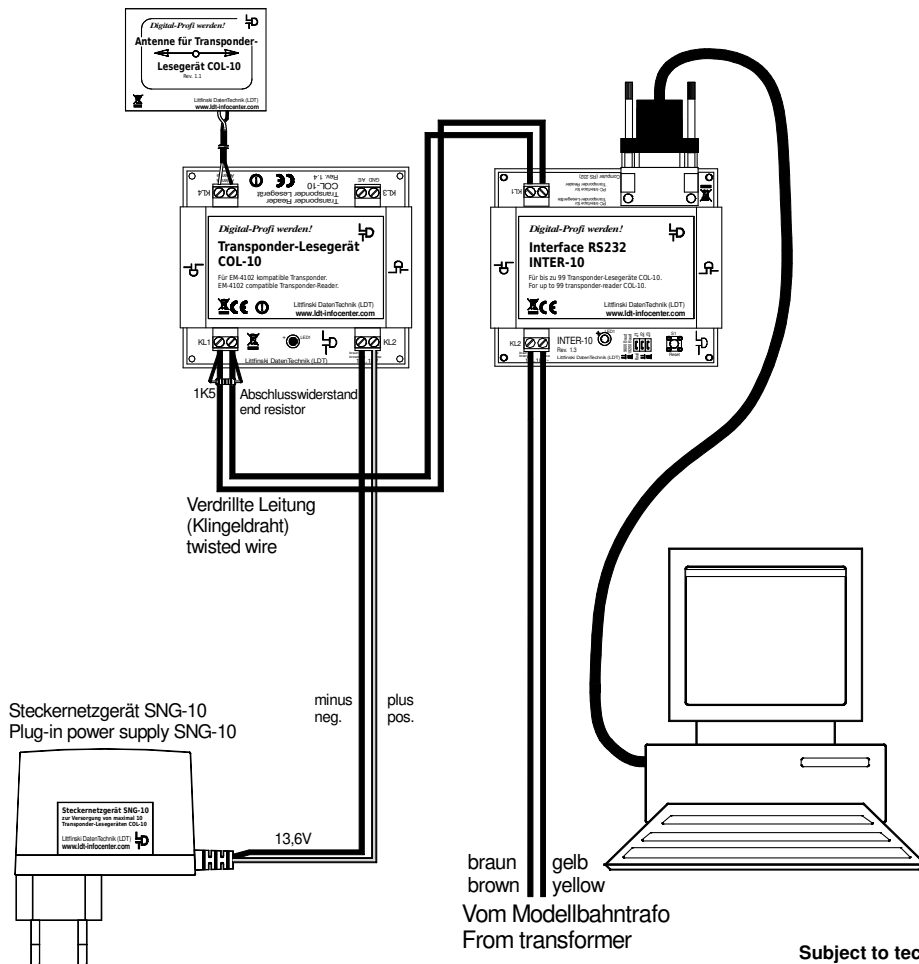
At our Web-Site ([www.ldt-infocenter.com](http://www.ldt-infocenter.com)) are various colored wiring samples at the sections "**Downloads**" and "**Sample Connections**" for downloading available.

**Picture 1: The Interface INTER-10 supports up to 99 Transponder-Reader COL-10 and transmits the transponder data to the PC via the serial interface RS-232. The Interface INTER-10 shall get (as per sample) a DC-current of 12 to 24 Volt. Up to 10 Transponder-Readers COL-10 can be supplied from one plug-in power supply unit SNG-10.**



**Picture 2: The Interface INTER-10 with a Transponder-Reader COL-10 for train identification.**

The INTER-10 will be supplied e.g. from a model railway transformer with an AC-voltage of 14 to 18 Volt. The Reader COL-10 will get the supply from the Plug-In Power Supply SNG-10 with a direct current of 13.6 Volt.



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