#### Littfinski DatenTechnik (LDT)

#### **Assembly Instruction**



## **Data switch**

from the Digital-Professional-Series! DSW-88-B Part-No.: 040011

# >> kit << suitable for the s88 feedback bus

The data switch enables to ramify the s88-feedback line.

The data switch DSW-88 is suitable for all devices using the s88 feedback bus (Märklin-Memory, Märklin-Interface, Intellibox, TWIN-CENTER or High-Speed Interface HSI-88).

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 years of age! Improper use will imply danger or injuring due to sharp edges and tips! Please store this instruction carefully.





#### Introduction:

You have purchased a kit for your model railway that is supplied within the assortment of Littfinski DatenTechnik (LDT).

• These kits are easy to assemble and they are a product of high quality.

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

#### General:

#### Tools required for the assembly

Please assure that the following tools are available:

- · a small side cutter
- · a mini soldering iron with a small tip
- solder tin (if possible 0,5mm diameter)

#### **Safety Instructions**

- All electrical and electronic components included in this kit shall be used on low voltage only by using a tested and approved voltage transducer (transformer). All components are sensitive to heat. During soldering the heat shall be applied for a very short period only.
- The soldering iron develops a heat up to 400°C. Please keep continual attention to this tool. Keep sufficient distance to combustible material. Use a heat resistant pad for this work.
- This kit consist of small parts which can possibly be swallowed from children. Children (especially under 3 years) shall not participate on the assembly without supervision.

#### Set-Up:

For the board assembly please follow exact the sequence of the below **assembly list**. Cross each line off as **done** after completing the insertion and the soldering of the respective part.

For the **tantal-capacitors** please keep special attention to the connection marked "+". This has to correspond to the mark on the pc-board.

**Resistor networks** are marked at the one side with a printed circle or a square for Pin 1. Please insert the part that way that the marking of the part corresponds with the thick marked connection 1 on the board.

The **rotary code switch** is either marked on one side with a printed dot or a tapered side for the correct mounting position. Assemble this part that the marking corresponds to the tapered marking on the board.

**Integrated circuits (IC`s)** are either marked with a half round notch on one end or a printed point for the correct mounting position. Push the IC`s into the correct socket assuring that the notch or the printed point is corresponding to the half-rounded marking on the pc-board.

Please attend to the sensitivity of the ICs to **electrostatic discharge**, which will cause immediate damage of the IC. Before touching those components please discharge yourself by contacting an earthed metal (e.g. earthed radiator) or work with an electrostatic safety pad.

### Assembly list:

Pos.	Qty.	Component	Remarks	Ref.	Done
1	1	PC-Board			
2	3	IC-Sockets 16poles	Attend to the polarity!	IC13	
3	3	IC-Sockets 14poles	Attend to the polarity!	IC46	
4	1	Network 4*10kOhm	Attend to the polarity!	RN1	
5	3	Capacitors 100nF		C13	
6	1	Tantal-cap. 1uF/35V	Attend to the polarity!	C4	
7	1	Rotary code switch	Attend to the polarity!	S1	
8	2	Pin plug bars 6poles		ST2, 3	
9	1	Connection cable 6poles	Attend to the color code!	ST1	
10	1	IC: 4027	Attend to the polarity!	IC1	
11	2	IC: 4526	Attend to the polarity!	IC2, 3	
12	1	IC: 4081	Attend to the polarity!	IC4	
13	2	IC: 4011	Attend to the polarity!	IC5, 6	
14			Final control		

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