





# Feedback module (S88)

User's manual





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# 🛕 Safety warning

During the operation of the device the specified technical parameters shall always be met. At the installation the environment shall be fully taken into consideration. The device must not be exposed to moisture and direct sunshine.

A soldering tool may be necessary for the installation and/or mounting of the devices, which requires special care.

During the installation it shall be ensured that the bottom of the device should not contact with a conductive (e.g. metal) surface!

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#### Properties

- Provided with S88 RJ45 sockets
- Compatible with any S88 centre and interface
- No settings required
- The connections can be chained

## **Technical parameters**

Supply voltage: 5-12V (on the S88 socket) Idle mode current consumption: 2 mA Dimensions: 63x44 mm

## Short description

Status feedback of any input through S88 system. The S88-RJ45 socket of the module ensures quick and simple chaining possibility. It can be applied e.g. for the completion of TM-54101 XpressNet and S88 PC interface.

## Wiring

**S88-OUT (TO HOST):** Output of the module; if applied in a chain, it is directed towards the centre / interface.

**S88-IN:** To this connector further S88 module outputs (S88-OUT) can be connected (Figure 1).

No separate supply voltage is required for the operation of the module.

## Setting on the PC interface

On the PC interface and some digital centres it is required to set the number of the devices connecting to the S88.

For the TM-54101 PC interface the user's manual of the PC interface contains detailed information in respect of the setting. Web: http://www.trainmodules.hu/module\_59.html

### Inputs

The inputs are activated by the incoming pulse and their status will be reset only after the reading of the PC interface / S88 centre, whereby even very short signals – pulses (e.g. reed contact) can be transmitted towards the S88 bus system.

The input can be activated by closing to the common negative point (Common GND).

**Attention!** Since connection to the PC interface is performed via USB, the GND is sometimes identical with the protective earthing of the computer; for this reason the S88 feedback module shall not be connected directly to the rail contact.

It is proposed to use an occupation sensing module.

#### **Contact assignment**

Maerklin(R) S88 pin	Name	RJ45 pin	Color
1	DATA	2	Green
2	GND	3, 5	White/Orange, White/Blue
3	CLOCK	4	Black
4	PS (LOAD)	6	Orange
5	RESET	7	White/Brown
6	+5V/+12V	1	White/Green
-	RAILDATA	8	Brown

The contact assignment complies to that of "S88 over RJ45".

#### Guarantee and legal statement

Each parameter of the device was submitted to comprehensive testing prior to marketing. The manufacturer undertakes one year guarantee for the product. Defects occurred during this period will be repaired by the manufacturer free of charge against the presentation of the invoice.

The validity of the guarantee will cease in case of improper usage and/or treatment.

Attention! By virtue of the European EMC directive the product can be used solely with devices provided with CE marking.

The mentioned standards and branch names are the trademarks of the firms concerned.

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Figure 1

