DTS Manual

DTS Handleiding:

Bezetmeldmodule DTS88n-GND

Massadetectie

Introduction

Thank you for purchasing our DTS88n-GND occupancy detection module. With this occupancy module you can create 16 occupancy sections on your layout by means of ground detection. You can also use this module in combination with switches, light locks and reed contacts. For ground detection there is also an additional print available with a diode trick called DTS88n-DT. This improves the current collection and therefore the reliability of digital operation.

For current detection we refer to the DTS88n-CS

With ground detection, a detection occurs because the wheels make a connection between the ground and the occupancy detection output, which is then reported as occupied by the module to the central unit.

The module can easily be looped through to any other S88 module, regardless of brand, by means of RJ45 patch cables. The order of the modules automatically determines the order of the detectors' addresses. For example, the first module in the bus from the digital central unit will show detector 1 to 16 and the next module will show addresses 17 to 32, and so on. You do not have to adjust anything on the modules.

The length of the S88 bus can be up to 50 metres, and you can extend it to 16 modules. The number of modules you can use depends on the central unit you are using. In combination with a LocoNet bus, so that you hang the S88 modules as a "slave" to a LocoNet module, you are able to extend up to 4098 detectors.

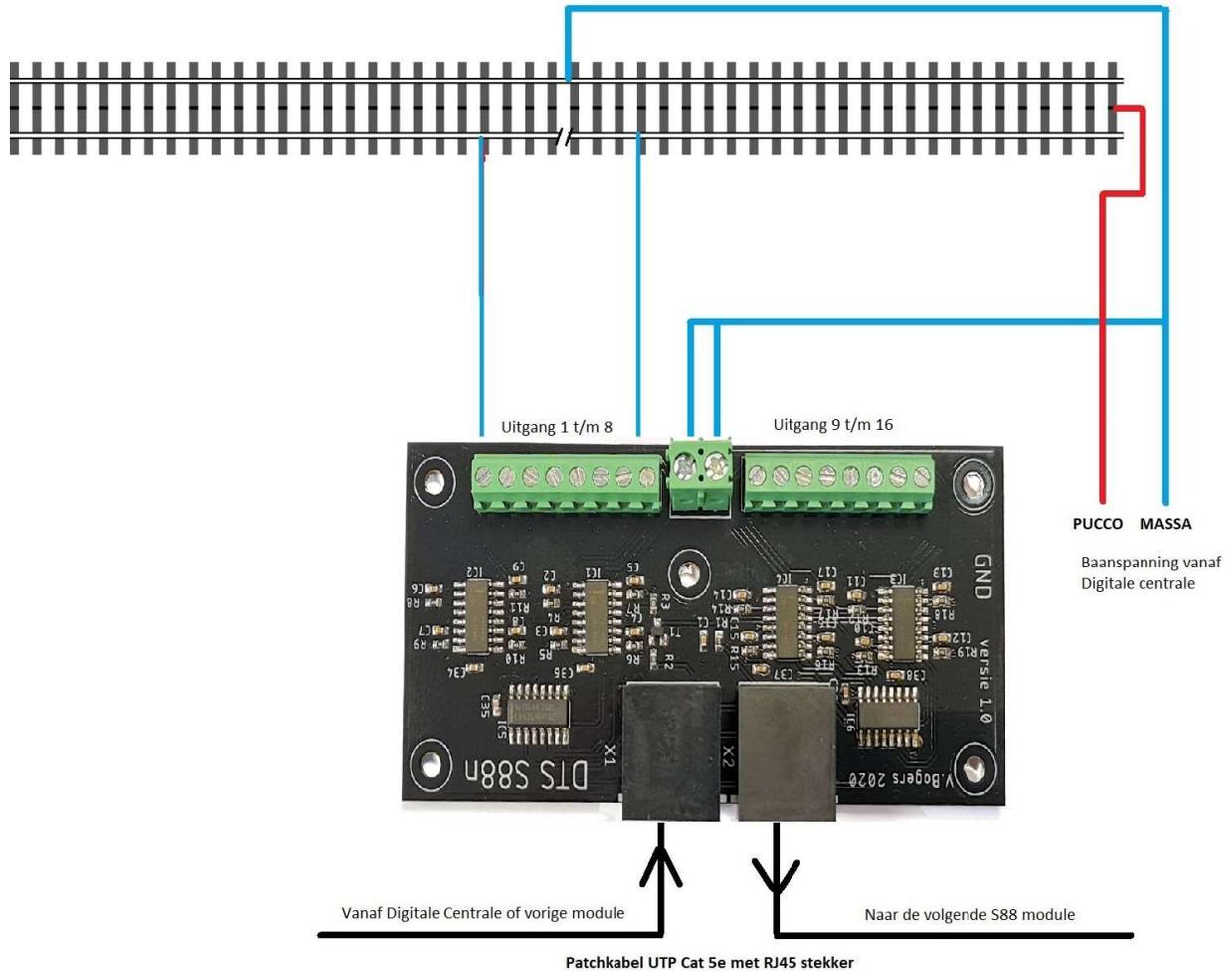On the next page you will find the diagram to connect the modules.

Little tip:

Because we wanted to keep the incoming delay of the detectors as low as possible, it can happen that a detector can generate a short message when changing wheels. This does not cause any problems in automating, but we can imagine that it can be annoying. This depends on the central unit used, the software and the size of the section separations.

This is easily remedied by setting an incoming delay of 200 ms for the detectors in the software. The software then ignores the activation of a detector during this time.

Kind regards,
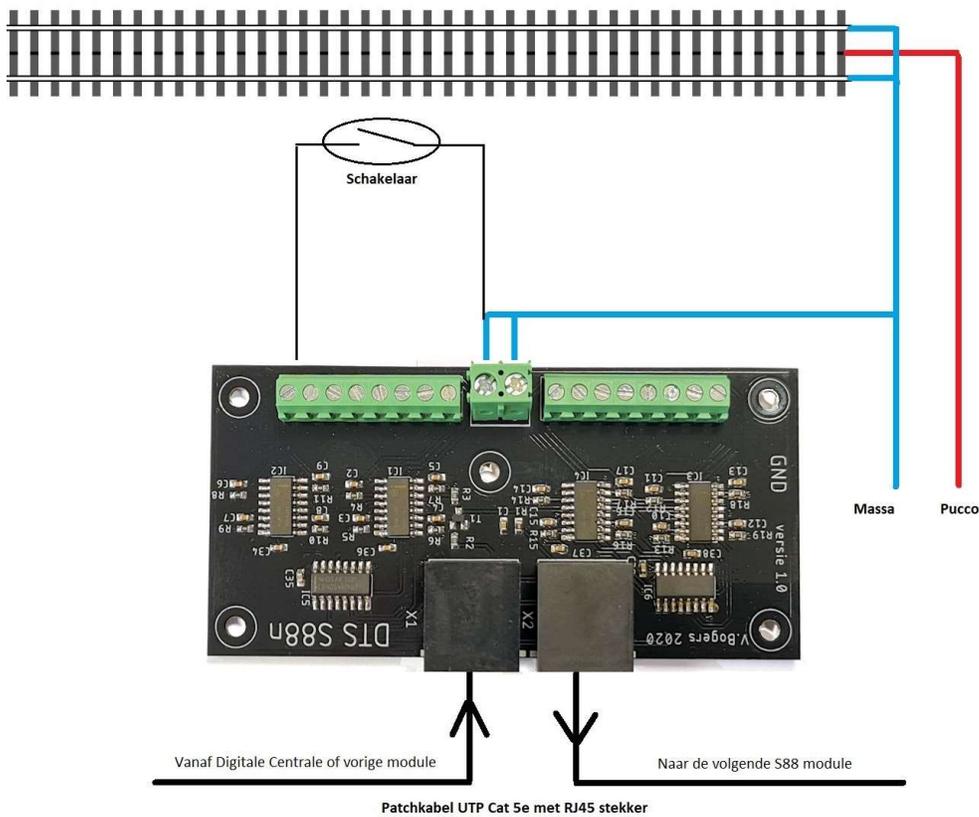
Martin Domburg
Domburg Train Support

Connecting the DTS88n-GND for ground detection

Uitgang 1 t/m 8

Uitgang 9 t/m 16

PUCCO **MASSA**

Baanspanning vanaf
Digitale centrale

Vanaf Digitale Centrale of vorige module

Naar de volgende S88 module

Patchkabel UTP Cat 5e met RJ45 stekker

The DTS88n is divided into 2 groups of 8 outputs. In the middle you can see a two-pole screw terminal to which the blue MASSA track voltage is connected. The name of this terminal varies from one central unit to another. In the manual of your central unit you can see which terminal is Ground and which terminal can be used for the PUCCO. This is the middle conductor of the track, the pimple in the track.

We recommend that each power supply connection is separately routed to a central distribution point, to efficiently distribute the currents occurring. Another advantage of working with central distribution points is that there is less chance of voltage losses. We recommend using at least 0.5 mm2 as the diameter for the power supply to busy signal modules.

Connecting the DTS88n-GND with switches

The DTS88n is divided into 2 groups of 8 outputs. In the middle you can see a two-pole screw terminal to which the blue MASSA track voltage is connected. The name of this terminal varies from one central unit to another. In the manual of your central unit you can see which terminal is Ground and which terminal can be used for the PUCCO. This is the middle conductor of the track, the pimple in the track.

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