



# TEAM DIGITAL

Improving the world of DCC

## SSS Simple Signal System

- > Control up to 8 three color signals
- > Control red and green signals
- > Control red, yellow and green signals
- > No programming required
- > Easy installation



Includes 1 SSS and 5 TSAs



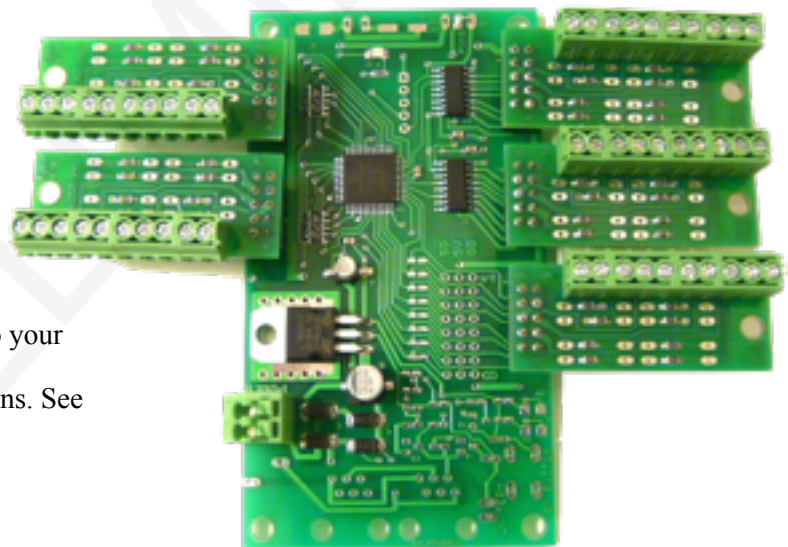
### Description

The SSS (Simple Signal System) makes it easy to add signals to your layout. No programming is required. Just by connecting block detectors to the SSS inputs and signals to the SSS outputs, up to 8 signals can be operated. Optionally the system can easily indicate turnout state by connecting turnout contacts to the SSS inputs.

TSAs (Terminal Screw Adapter) are used to easily connect wires to the SSS inputs and outputs. The TSA has built in resistors so the wires from the signal LEDs can be connected without any addition components.

Any combination of red and green signals or red, yellow and green signals can be utilized. There is no provision for flashing signals.

The SSS is designed to make adding signal to your layout very simple. This also means there are limitations on the types of signal configurations. See the Team Digital web site for examples.



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# Operation

In this simple system the signal "protects" the block ahead. If the block ahead is occupied the signal shows stop (red) and the previous signal shows caution (yellow). The signal previous to that would show clear (green).

With the SSS two inputs work together to control a signal for 3 colors. Inputs 1-8 give a red or green signal and inputs 9-16 give a yellow signal. The chart shows how signal x is controlled by input x and input x+8. For example input 2 and input 10 control signal 2.

In the example block 1 is ahead of block 2 so the output of block detector 1 is connected to SSS inputs 1 and 10. When block 1 is occupied signal 1 is red and signal 2 is yellow (assuming block 2 is not occupied).

If there were a block 3 and corresponding signal, the output of block detector 2 would be connected to input 11 in addition to input 2.

In general if an occupied block should cause a red, connect its block detector output to inputs 1-8. If it should cause a yellow connect its block detector output to inputs 9-16.

Signal Number	Signal Aspect	Input State
x	Red	Input x Low, input x+8 NA
	Yellow	Input x High, input x+8 low
	Green	Input x High, Input x+8 High

Input low means a block is occupied or a turnout thrown. A DBD22 output is low when a block is occupied. Wire a Tortoise™ contract so when the turnout is thrown the input is low. See example 2.

