Matronics 762212 – Beam Controller - 4x2 Channels

Data

8 outputs (Positive / high side)	Voltage 12V-30V
Max. current per channel 3A	Short-circuit protection on outputs
	Overload protection (thermal)

Description

Controller for high beams and greeting flash / warning flash (WIG-WAG), developed primarily for trucks, but also suitable for passenger vehicles. The system is designed with 4 zones, each zone having 2 groups, allowing the lighting functions to be controlled flexibly and divided logically according to the vehicle's requirements. **The controller is designed to be connected to power relays capable of switching the auxiliary lights.**

The controller handles both normal high-beam operation and dynamic flashing patterns, with high beam having the highest priority to ensure safe and predictable operation. When the warning function is activated, the pattern and speed are selected using DIP switches, and the system can operate synchronously across the groups for a clear and professional warning signal.

The functions are activated using the 4 inputs:

- In1: High beam group 1 (outputs 1+2)
- In2: High beam group 2 (outputs 3+4)
- In3: Strobe/WIG-WAG group 1 (outputs 1+2+3+4)
- In4: Strobe/WIG-WAG group 2 (outputs 5+6+7+8)

Options

DIP switches on the controller allow selection of:

- 1: Strobe pattern (DIP5-DIP7): 8 different patterns
- 2: Speed/timing (DIP1-DIP3): adjustment of flash and pause time
- DIP4 is not used

Mønstre der kan vælges:

DIP5	DIP6	DIP7	Strobe pattern
0	0	0	Double WIG-WAG
1	0	0	Single WIG-WAG
0	1	0	Quad WIG-WAG
1	1	0	Penta WIG-WAG
0	0	1	Running forward(1→4 / 5→8)
1	0	1	Running backwards(4→1 / 8→5)
0	1	1	From center to outer
1	1	1	From outer to center

The controller is not designed for direct connection of high-beam lights, as they typically have very high inrush and operating current. The controller must instead be connected to power relays rated for the load.

Connect the power supply to SUPPLY, positive and negative.

The 4 inputs IN1, IN2, IN3 and IN4 are activated by applying positive voltage.

Outputs OUT1-OUT8 switch the positive supply and share a common ground connected to the input. The ground connection can therefore be omitted if a common ground is used throughout the installation.

A 15A SMD 2410 fuse is fitted on the PCB and can be replaced if it blows (Matronics item no. 515090).

Suggested installation

The controller can be installed in many different ways, depending largely on the desired functions and strobe pattern. A typical installation would be as follows:

Channel 1	Auxiliary roof-mounted high beam, left
Channel 2	Auxiliary roof-mounted high beam, right
Channel 3	Auxiliary hood-mounted high beam, left
Channel 4	Auxiliary hood-mounted high beam, right
Channel 5	Original upper high beam, left
Channel 6	Original upper high beam, right
Channel 7	Original high beam, left
Channel 8	Original high beam, right