

TM-73726

**TRAINMODULES**®



## Servo controller

User's manual



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CE

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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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## Features and properties

- DC and AC supply
- Two servo independent controlling
- External control inputs
- Fast and easy end-position setting
- Adjustable moving speed

## Technical parameters

Input supply voltage: 7-24V

Stand-by current consumption: 20 mA

Maximal current consumption: 1000 mA

Control input max. voltage: 3-24V

Dimensions: 62x58 mm

## Short description

Two servo can be controlled independently with this module. The external inputs switch the servos position's to the desired position.

## External power supply

The device can be supplied from separate power supply or from the DCC signal. The advantage of separate power is that the module does not load the DCC system, so no unnecessary extra load occurs in the DCC booster.

Please remember the maximum current drain during switching (moving servo) when you choosing a power supply.

## Possibility of external control

The device can be controlled through the DCC accessory decoder or an external manual switch input (IN1, IN2). You may connect DC or AC voltage between 3 and 24 V to this input. This input is galvanically separated.

The module has a mode selector jumper (MODE). Two modes are available: Toggle, and continuous mode.

For external control, connect the IN1 / IN2 input as the light bulb, or other load. These inputs are polarity insensitive, and need to be supplied from external source. See Figure 1.

## **Connection of servo**

The servo must be connected to the terminal pins as indicated in the drawing. BLACK/BROWN output is the common zero (ground) point. By standard the RED cable is the power supply of the servo, which is always 5 V. The WHITE/ORANGE output is the control signal of the output.

## **End positions and moving speed adjust**

1. Power up the module and check the proper servo connection
2. Press the "PROG" button at least 1 second
3. The "LED1" indicates the programming is applied to "Servo 1"
4. With UP/DOWN buttons, set the desired servo position as the first position
5. Press the "PROG" button shortly
6. With UP/DOWN buttons, set the desired servo position as the second position
7. Press the "PROG" button shortly
8. With UP/DOWN buttons, set the moving speed on the selected servo (Servo 1 or 2)
9. Press the "PROG" button shortly
10. The "LED2" indicates the programming will be applied to "Servo 2"
11. Repeat the steps from 4 to 8 for the second servo
12. Press shortly the "PROG" button to exit from programming mode

## Guarantee and legal statement

Each parameter of the device will be 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 directives 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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Made in Hungary.

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Figure 1.

