I-ELC16

LED Controller / 16 channels

INEX's LED Controller is a part of the *KIOSK components* series of boards which allow kiosk designers to add functionality to their kiosks quickly and effortlessly. I-ELC16 is a solution for controlling LEDs either in the non-addressable or intelligent RGB LED strips.

Features

- 16 channels for controlling LEDs
- Flexible design: a non-addressable LED strip or a intelligent LED strip may be connected to each channel (the types of connectors have to be determined at the production stage of a certain board)
- 2x +5V and +12V power supply

- Possibility to connect a daughterboard which creates a total set of 32 channels
- May work either autonomously in accordance with a pre-programmed scenario or while being dynamically controlled from a host via USB
- Works with Windows XP / Windows 7 / Windows 8, 32 / 64 bit

Windows Integration (PC interface)

- Driver (IEdrive) provided
- Test / Demo application provided

Technical Specification

Power supply:	5V and 12V on two terminal blocks
Outputs:	16 x 4-pin Mini-Fit® Jr™ 5569 connectors 2x2-pin connectors used for RGB intelligent 1x4-pin connectors used for LED strips
Controlled through:	USB B
Max. output current:	2x 15A (5V power supply), 6,3A (12V power supply)
Size:	9.10 x 4.82 x 0.76 in

Non-addressable vs. Intelligent LED strips

Non-addressable LED Strips	Intelligent LED strips
Control each color separately	Control each separate LED
1x4-pin Molex Mini-Fit® Jr™ 5569 connectors	2x2-pin Molex Mini-Fit® Jr™ 5569 connectors
Low power supply	Require additional power supply
Basic animation effects: ON, OFF, BLINK, FLARE	All effects offered by Non-addressable LED Strips as well as: BREATH, WALL, CHASE, GROW, RAINBOW, INWARDS, OUTWARDS, HEARTBEAT

Sample design: I-ELC16(8S/8N)
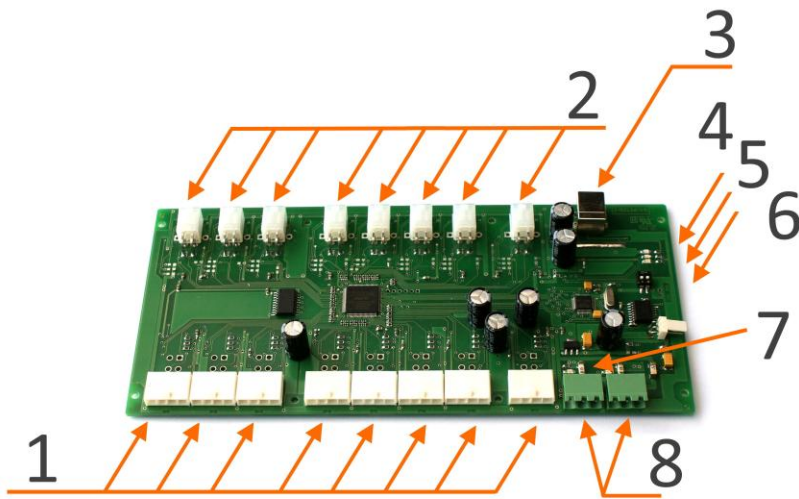
1-2: channels for controlling LEDs

1: 1x4-pin Mini-Fit® Jr™ 5569 connectors used for connecting non-addressable LED strips

2: 2x2-pin Mini-Fit® Jr™ 5569 connectors used for connecting intelligent LED strips

3: USB B used for plugging the I-ELC16 to the PC

4: Blue LED which is lit up when 12V DC is supplied

5: Red LED which blinks when the processor is working or glows with solid light when 5V DC is supplied

6: Green LED which signals data transfer between the PC and I-ELC16

7: Yellow LEDs which glow with solid light when power is supplied through terminal block(s)
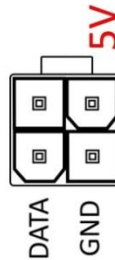
8: Terminal blocks used for power supply
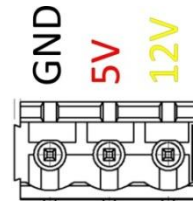
Connection diagram (board view)

The diagrams below show how to properly connect LED strips, and how to supply power to I-ELC16. Note! Make sure that power is applied correctly as failing to do so will damage the board and render it unusable.
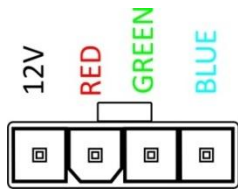
1x 4-pin Mini-Fit® Jr™ 5569   2x2-pin Mini-Fit® Jr™ 5569   Terminal block(s)

Ordering information

Each I-ELC16 has got 16 channels which may be used either for connecting the Non-addressable LED strips to the board via 1x4-pin Mini-Fit® Jr™ 5569 connectors or for connecting the Intelligent LED strips via 2x2-pin Mini-Fit® Jr™ 5569 connectors. Please specify your requirements for each board while ordering by expanding the name of the board in the following way: **I-ELC16(8S/8N)**, where the number before **S** states the number of 1x4-pin connectors for connecting the **Non-addressable LED Strips**, while the number before **N** states the number of 2x2-pin connectors for connecting the **INtelligent LED strips**. The sample name I-ELC16(8S/8N) corresponds with the design depicted in the photo above.

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