



**ALTEBURGER**

ELECTRONIC GMBH

## **Manual for auditorium dimming control type NS 2 SX**

### **Function**

The NS2-SX is suitable for the control of electronic ballast for fluorescent lamps with an interface of 1-10V or electronic transformers for low-voltage halogen lamp with 1-10V interface as well. It is operated with customary pushbuttons (normally open contacts). The number of pushbutton panels to be switched in parallel is not limited.

**With the NS2-SX the following functions can be performed:**

- BRIGHTER/DARKER dimming
- Minimum maximum limitation
- Adjustment of fade times into the brighter or darker function
- ON/OFF function with integrated voltage free relay contact.

### **BRIGHTER/DARKER function**

With the pushbuttons BRIGHTER or DARKER lighting goes into its brightest or darkest position. When releasing the button during the transfer lighting stops at this level. This level is being kept constant. It is achieved again after a switch OFF – switch ON operation or after a power failure.

### **Minimum/maximum limitation**

With the potentiometers min. or max. the values are adjusted between which the range of the lighting control shall be limited (Begrenzung).

### **Fade time adjustment**

With the 2 potentiometers ‚Delay time / Brighter‘ (Verzögerungszeit Heller) and ‚Delay time / Darker‘ (Verzögerungszeit Dunkler) the transfer times into the brighter or darker directions can be adjusted. They can be set individually between 1 and 60 secs.

### **ON/OFF functions**

The latching relay being integrated in the module provides for voltage free contacts. This contact allows the connection of additional relays or contactors. The switching of different circuits or higher loads. Smaller lighting systems (max. 10A) can directly be switched.

By pressing the button ON/OFF the latching relays are activated and the lighting can be switched ON and OFF. When switching the lighting ON the last set light level will be achieved again. If the pushbutton however is operated during the OFF state of the module this respective light level will be achieved after switching ON.

### Technical data:

Designation:	Electronic auditorium dimming control Type NS2-SX, Order-no.: 50.13.130
Dimensions (WxHxD):	105 x 85,5 x 65,5 for DIN rail systems
Weight:	320 gr
Ambient temperature:	0°C... + 45°C (at vertical mounting position)
Terminals:	0,5 mm <sup>2</sup> - 2,5 mm <sup>2</sup> for solid wires or litz wires with sleeve
Max. cable length:	100 m (control wire 0,5 mm <sup>2</sup> , load and supply wires 1,5 mm <sup>2</sup> )
Nominal load:	210 V~ ... 240 V~, 50 ..60 Hz, DC not permitted (destruction)
Own consumption:	3 W
Protection:	external with 10 A MCB
Fade time:	adjustable between 3 and 60 secs. (from min to maximum and vice versa)
Range of control voltage:	< 24 VDC (no protective isolation) Basis isolation according to IEC 664,10/92
Max. load at the control exit:	max. 200 mA (= approx. 200 electronic ballasts or transformers – see manufacturers data)
Make contact:	10 A, 240 V/50..60 Hz, mini-contact opening
Supply:	L (1), N (3)
Control and load terminals:	see wiring diagrams
Protective class, protective type:	II (protective isolated), IP 20
Contamination grade:	2 (dry, non-conductive according to IEC 664,10/92)
Requirements:	EMC met according to EN 50082-1 03/93 Low-voltage complied according to IEC 669-2-1 11/94

