

ST-01R roller blind control unit

Instructions for installation and use

Safety guidelines

Basic guidelines

The ST-01R controller can be safely installed and used provided all of the following instructions of installation and use as well as obligatory health and safety regulations are adhered to.

The installation and repairing of electrical equipment should be carried out only by persons with appropriate legal qualifications.

Reconstructing or making changes to the ST-01R controller is forbidden. During the guarantee period repairs only the manufacturer may carry out repairs. Even after the guarantee period has expired only original parts and accessories may be used.

The guarantee is only valid when the ST-01R controller has been used in accordance with the manufacturer's instructions. The boundary values given in the technical specifications must NOT be exceeded under any circumstances.

Supplementary safety regulations

When installing, using or carrying out maintenance work all binding health and safety regulations should be followed. Particular attention should be paid to the following:

1. European Standards
2. Fire regulations
3. Accident avoidance regulations



GENERAL COMMENTS REGARDING HAZARDS AND SAFETY PRECAUTIONS



The following comments serve as general guidelines to the application of INEL drivers with other devices. These guidelines must always be adhered to when installing and operating these devices



Warning – this signal warns of possible damage to the control system or other equipment if appropriate safety measures are not taken.

- Before installing the control system and setting the end switches check all bolt connections are properly fastened.

Danger – this signal indicates danger to the user's life and health if appropriate safety measures are not taken.

- Follow all health and safety regulations relevant to the equipment (e.g. gates, roller blinds) used.
- When changing fuses the equipment must be first disconnected from the mains, the fuses changed and only then may the equipment be reconnected to the mains.
- The ST-01R controller should be installed in accordance with appropriate safety regulations and with appropriate safety devices.
- INEL equipment connected to the mains beyond a building's safety fuse system needs to be installed with its own safe disconnecting devices (e.g. safety fuses and safety switches) in such a way so as to ensure that all the units may be easily and safely cut off from the mains.
- Electric wiring and cables should be regularly checked to ensure the insulation is intact and there are no breaks in the wire.
- If any damage to the wiring is found, the unit should be immediately disconnected from the mains and the damaged wiring replaced.
- Before connecting any equipment, one should first make sure that it is adapted to be used with the local voltage in the mains.

PERSONAL SAFETY WARNING

- Do not allow children to play with any of the control devices.
- Keep all remote control devices out of the reach of children.
- Observe the opening or shutting of the blinds, shutters, awnings or gates and ensure all persons stand clear until the operation is completed.
- Control system operators need to undergo preliminary instruction and training and also be made aware of all the potential dangers that can be encountered. A person should only be authorised to use the control system only once the employer, administrator or owner is satisfied that that person has been properly instructed.

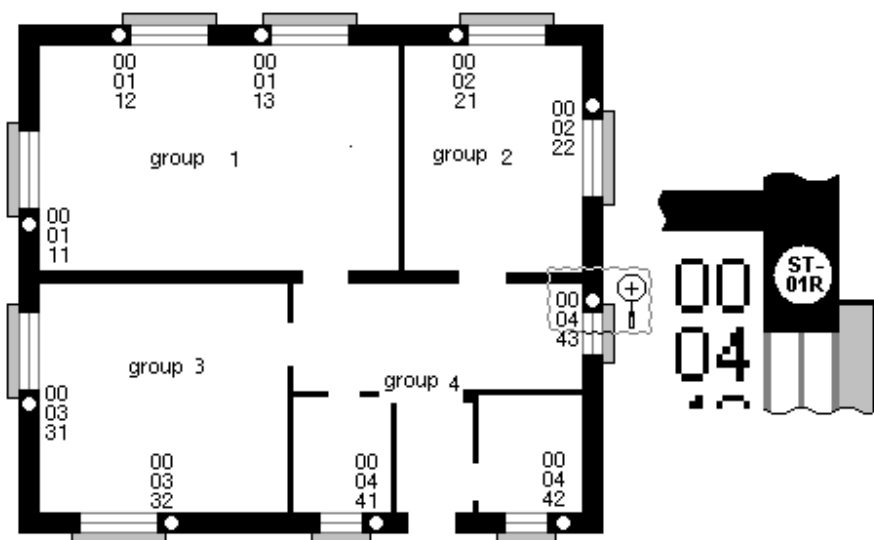
TECHNICAL DATA

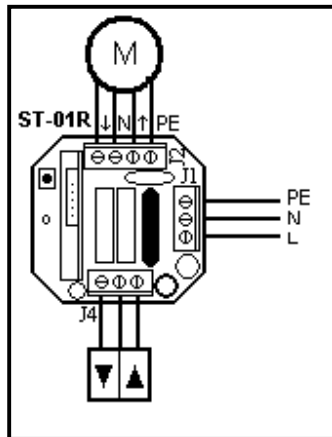
Dimensions	<i>48 x 48 x 25 mm</i>	
Supply voltage	Nominal	230 VAC
	Frequency	50 Hz
Temperature range	Working	-5°C ... +45°C
	Storage	-25°C ... +70°C
Humidity	<= 93% no condensing	
Working frequency	433,92 MHz	
Output relay	5A/230 V AC	
Output current	Nominal	2 A
Connectors	Screw	
Weight	70 g	

General operating description

ST-01R (230VAC tubular motor) control can be operated from local manual switch or by means of remote control unit (RCU). PIL-99(multi channel RCU) or PIL-06/04/02 (6/4/2 channels RCU) can be used. Each key of PIL-04/02 RCU can be programmed to a different ST-01R control and operates the unit in round-robin mode (up-stop-down-stop). With PIL-99 and/or PIL-06 RCU any channel number in the range from 00 to 99/0-6 can be programmed to a different ST-01R control. With PIL-99/06 RCU separate: up, down or stop keys are used to operate the ST-01R control. The same key of PIL-04/02 RCU or the same channel number of PIL-99/06 RCU can be programmed to more than one ST-01R controls. Up to 15 channels (from one or more remote control units) can be programmed to one ST-01R. As a result one or more roller blinds can be controlled by means of single RCU signal. Channel 00 of the PIL-99 RCU is a special function channel. Channel 00 signal from a RCU will be accepted by every control unit to which any single channel from this RCU is programmed.

The figure shows how comfortable roller blinds controlling can be. To control group of roller blinds (one room) all ST-01R units have to be programmed to the same single channel. As a result all roller blinds from this one room will react to pushing one single key on the remote control unit. By registering to control units channel numbers shown in the figure we get the possibility to control single rollers, groups of rollers or all rollers simultaneously. New groups can be created by registering single channel of a RCU to selected control units. By registering, for example, channel 05 to all units of the group 01 and the group 02 we get new group 05 which covers all group 01 and group 02 units. As previously said, channel 00 need not be programmed to the unit if any other channel of same RCU is already programmed.





1. Wiring of **J1** terminal block :

L1 (230VAC mains) connect to **L** terminal
 N (230VAC mains) connect to **N** terminal
 PE (protective earth) connect to **PE** terminal

2. Wiring of **J2** terminal block :

Motor PE wire connect to terminal **PE**
 Motor UP wire connect to terminal **↑**
 Motor COM wire connect to terminal **N**
 Motor DOWN wire connect to terminal **↓**

3. Wiring of **J4** terminal block (local control) :

Up wire connect to terminal **↑**
 Common wire connect to terminal **COM**
 Down wire connect to terminal **↓**

ST-01R programming.

Up to 15 different RCU codes can be programmed to a single ST-01R control unit. The code is a single key of the PIL-04/02 RCU or a single channel of PIL-99/06 RCU. To enter programming mode switch S1 must be pressed. Programming mode is indicated by lighting of green LED for about 10 seconds. With the PIL-04/02 RCU the key to be programmed should be pressed. With the PIL-99/06 RCU key **up** or **down** should be pressed with the required channel number selected. The number of codes programmed will be indicated by blinks of red LED at the beginning and at the end of programming period. The ST-01R returns to normal mode of operation after receiving a code from a RCU or after about 10 seconds if no code was received.

By means of PIL-99/06 programming:

To switch PIL-99 to programming mode push the **up** and **down** at the same time for a moment. **Prog** will appear on LCD. Control unit will make number of short moves of the roller just indicating the number of registered channels. Now (by 10 seconds) ST-01R is ready to register new channel or new RCU. Simply press the function key on selected channel or RCU. Only registered PIL-99 can be used to program ST-01R. In case of PIL-06 after pressing keys **up** and **down** LEDs will blink indicating programming mode.

Clearing all programmed codes.

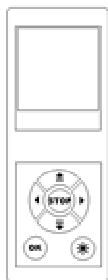
To clear all programmed codes switch S1 should be pressed and held for about 10 seconds until D7 diode changes the color from green to red. After releasing the switch all registered codes will be cleared.

By means of PIL-99/06 clearing all codes:

To switch PIL-99 to clearing mode push the **up** and **down** at the same time for a moment. **Prog** will appear on LCD. Once again push the **up** and **down** at the same time for a moment. All codes will be erased but one indicated on LCD during the procedure. The same with PIL-06.

PIL-99 A RCU operating

PIL-99 can work in two modes of operation:



1. Full mode. Each channel number 00 to 99 can be selected. By using key **left** or **right** the digit to be changed can be selected and by using keys **up** or **down** the value of this digit can be changed. The selected digit is displayed. To enter selected digit press key left or right once again.
2. Short mode. The number of channels is limited. With highest channel number set in full mode as described key **stop** should be pressed. To finish procedure press **left** and **right** keys at the same time. On display character S: and selected digit will appear indicating short mode.