# Instructions translated EN Instructions for installation and use controllers with radio receiver TYPE: ST

Models: ST-01R, ST-01RS, ST-01RZ



The flush-mounted controller with radio receiver mounted in a double-deep box is manufactured in three types:

ST-01R - individual controller for roller shutters

**ST-01RS** - individual light controller **ST-01RZ** - individual controller for blinds





**The ST-01R** controller (roller shutter controller) is a device intended for local or remote control of roller shutter operation.

**The ST-01RS** controller (light controller) enables the switching on and off of 230 VAC electrical appliances up to 200 W.

The **ST-01RZ** controller (controller for blinds) allows precise positioning (changing the angle of the blind slats).

## 1. Safety instructions

#### 1.1 Basic guidelines

The ST-01R controller shall be handed over in a condition for safe installation and use, provided that all instructions in the operating manual and the valid valid safety regulations have been observed and accident prevention regulations.

Only qualified and authorised persons should work on the installation and repair of electrical equipment. Alterations or changes to the ST-01R controller are not permitted. Warranty repairs may only be carried out by the manufacturer.

Only original spare parts and accessories should be used for post-warranty repairs. The operational safety of the supplied ST-01R controller is guaranteed only when used in accordance with the manufacturer's specifications. The limit values specified in the technical data must not be exceeded under any circumstances.

#### 1.2 Supplementary safety provisions

Important safety and accident prevention regulations must be observed when installing, commissioning, maintaining the control. The following regulations require special attention:

#### 1. Fire regulations

#### 2. Accident prevention regulations

# ${\bf 1.3~General~comments~on~hazards~and~safety~measures}$

The specified notes are general guidelines for the use of INEL controls in combination with other devices. These instructions must be strictly adhered to during installation and operation of the devices.



CAUTION Warning of possible damage to the control or other fixed values if appropriate precautions are not taken.



Danger - Indicates that there is a danger to the life and health of the user if appropriate precautions are not taken.

- Check the fixing of all screw connections before installing the control and setting the limit switches.
- Observe the applicable safety and accident prevention.
- Before replacing the fuses, ensure that there is a safe voltage break in the supply circuit, disconnect the supply wires from the controller, remove the controller board and then replace the fuse and reconnect the supply wires.
- For INEL equipment with a constant mains supply, a circuit breaker providing a safe voltage break (e.g. a fuse disconnector) should be used for the control in addition to the fuse protection, installed so that all connections can be easily disconnected.
- Conductors and cables should be checked regularly for insulation damage and local breaks.
- If cables are found to be damaged, the damaged cables must be replaced after the mains supply is immediately switched off.
- Before switching on, it is necessary to check that the permissible device voltage is compatible with the local supply voltage.

#### 1.4 warning - important for the safety of persons:

- do not let children play with the controls;
- keep the remote control out of the reach of children;
- keep an eye on the moving blind and keep people away until it is fully open or closed;
- the users of the roller shutter must be trained and instructed in the
  operation of the roller shutter and the risks involved in its use.
  of its use. People can be considered trained if the employer,
  administrator or owner has allowed them to operate the roller shutter
  and has instructed them on how to use it.

# 2. Installation instructions

The **ST-01R** controller is a device intended for local or remote control of roller shutters. The device is adapted for flush-mounting in a double-deep box.

Local control is by means of a manual key connected to the manual input. The controller has a hold function, i.e. any short pressing of the manual switch key results in a full cycle of opening or closing the roller shutter (factory time of applying voltage to the motor is 100 seconds).

Remote control is possible using the remote controls: PIL-02/04XB, PIL-01PT, PIL-01/04NS, PIL-01/05HN, PIL-01/05/09/19PM, PIL-19/99PMT, PIL-01/05/09/19DL, PIL19/99DLT, PIL-99TST and PIL-19/99MMT.

#### ST-01RZ (controller for blinds)

The controller allows precise positioning (changing the angle of the louvre slats). Locally by means of a hand button and remotely using remote controls: PIL-01/04NS, PIL-01/05HN,

PIL-05/09/19PM, PIL-19/99PMT, PIL-05/09/19DL, PIL-19/99DLT, PIL-99TST and PIL-19/99MMT.

The hand button works in a dual way, depending on the time it is pressed:

- less than 1 second results in start-up with hold open or close (100 seconds).
- longer than 1 second the controller performs a short motor switching setting of the slat angle "slatting".

With remote control, the controller receives commands sent from remote controls that are in normal and shutter mode. Commands from the remote control in normal mode cause a full opening or closing cycle. In louvre mode, each command causes the controller to perform a short motor switch - "lambing".

#### ST-01RS (light controller)

The controller allows the switching on and off of 230 VAC electrical loads without any time restrictions. Locally by means of a manual key and remotely by means of a remote control:

PIL-02/04XB, PIL-01PT, PIL-01/04NS, PIL-01/05HN,

PIL-01/05/09/19PM, PIL-19/99PMT, PIL-01/05/09/19DL,

PIL19/99DLT, PIL-99TST and PIL-19/99MMT.

The manual key operates in an 'on - off - on' loop.

With remote control, the controller receives commands sent from remote controls that are in normal mode. Commands from the XB series remote controls result in an "on - off - on" loop operation. On the other hand, control from other remote controls is carried out as follows:

- "up" on,
- "stop" turn off, "down" off.

#### 2.1 Connecting the ST-01R and ST-01RZ controller

L	L1 wire of installation	brown
N	N wire of installation	blue

PE PE wire of installation yellow-green

#### **MOTOR** connection

yellow-green PE PE-motor protective wire Up wire of motor brown motor neutral wire blue. Down wire of motor black

#### MANUAL connection of manual key

to the up key COM to the common pole to the down key.

NOTES:

The blind switch operates by shorting the terminals to the COM terminal.

#### DO NOT CONNECT THE MAINS!

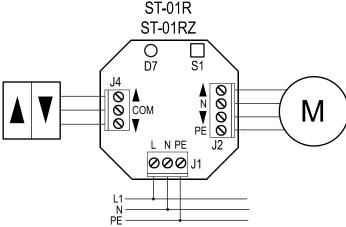


Fig.1 Connecting the ST-01R, ST-01RZ controller

#### 2.2 Connecting the ST-01RS controller

L L1 wire of the installation N wire of the installation PE protective wire

OUT L-wire of receiver N wire of the receiver

MANUAL connection of manual key

to the Up key M COM to the common pole

#### NOTE

The blind switch operates by shorting the terminals to the COM

DO NOT CONNECT THE MAINS!

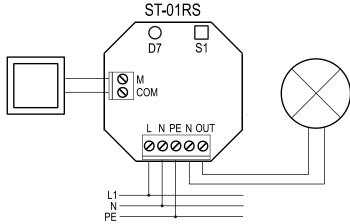


Fig.2 Connection of ST-01RS controller

# 3. Registering of remote controls

The controller is compatible with the remote controls: PIL-01/04NS, PIL-01/05HN PIL-01/05/09/19PM, PIL-19/99PMT, PIL-01/05/09/19DL.

PIL-19/99DLT, PIL-19/99MMT, PIL-02/04XB, PIL-01PT, PIL-99TST.

Type ST-01R controllers offer two ways to enter the programming option:

- 1 When the S1 button on the controller is pressed.
- 2. enter the controller into the programming state using a pre-registered remote control.

#### Activate the remote control and select the channel you wish to record.

Press button S1 on the controller, LED D7 lights up green for approximately 10 seconds, during which time:

- press ▲ button on remote control PIL-01/04NS, PIL-01/05HN, PIL-01/05/09/19DL, PIL-19/99DLT, PIL-01/05/09/19PM, PIL-19/99PMT, PIL-99TST, PIL-19/99MMT

or

- press the key of the desired channel on the remote control PIL-02XB, PIL-04XB or
- press the button of the connected blind switch on the PIL-01PT remote control

Correct registration will be signalled by the controller by short flashes of diode D7 in red in the number of registered channels. To register further channels, repeat the procedure.

## When we already have a registered remote control.

Further channels of the same or another remote control can be added to the controller by entering the programming mode:

- press ▲ and ▼ keys simultaneously on the remote control PIL-01/04NS,

PIL-01/05HN, PIL-01/05/09/19DL, PIL-19/99DLT.

PIL-01/05/09/19PM, PIL-19/99PMT, PIL-99TST, PIL-19/99MMT. The motor connected to the controller will make a short up and down movement, followed by a series of short up and down movements equal to the number of channels programmed. For the next 10 seconds, the controller remains in programming mode. To register a new channel of the same or a different remote control, please:

press ▲ on the remote control PIL-01/04NS, PIL-01/05HN, PIL-01/05/09/19DL, PIL-19/99DLT, PIL-01/05/09/19PM, PIL-19/99PMT, PIL-99TST, PIL-19/99MMT

press the key of the desired channel on the remote control PIL-02XB, PIL-04XB

or

- press the button on the PIL-01PT remote control for the blind switch

Correct registration is signalled by a series of short up and down movements of the motor to which it is connected.

NOTE in this way you can programme a controller that operates from this remote control which you will use for registration.

#### Deleting memorised channels.

If it is necessary to "delete" all channels already memorised, press and hold (approx.  $10~\rm s$ ) switch S1 until LED D7 changes from green to red. At this point, release switch S1.

NOTE it is not possible to delete individual channels.

# Channel deletion is also possible when the controller is not accessible (e.g. built-in).

The deletion procedure is used from the remote control: PIL-01/04NS, PIL-01/05/09/19DL, PIL-19/99DLT, PIL-01/05/09/19PM, PIL-19/99PMT, PIL-99TST, PIL19/99MMT. All channels will be erased except for the channel of the remote we used for the erasure procedure. The channel that is not deleted will act as a process channel for the procedure to register other pilots. In order to erase the channels press simultaneously ▲ and  $\blacktriangledown$  buttons, the controller shall make several up and down movements with the roller shutter and then press again simultaneously  $\blacktriangle$  and  $\blacktriangledown$  buttons. The controller will erase all channels except the technology channel.



#### NOTE



Both for safety reasons and due to the possibility of damaging the device with static electricity, the programming of the controller as well as the deletion of the memorised remote controls must be carried out on a workbench, observing all safety and protection measures against shock and static electricity.

# 4. Handling of waste equipment



It is forbidden to place used equipment together with other waste. Dispose of in a specially designated place. The household plays an important role in the waste equipment recycling system. Through proper segregation of waste,

including waste equipment and batteries, households ensure that waste equipment does not end up in municipal waste but in a specially designated place and, after recycling, can be used as raw material for reuse.



Przedsiębiorstwo Informatyczno-Elektroniczne INEL Sp. z o.o. , ul. Mostowa 1, 80-778 Gdańsk, as manufacturer of the product, hereby declares that the drive described in this manual and used in the manner specified herein complies with the essential

requirements of the relevant EU directives, in particular Directive 2006/42/EC and Directive 2014/53/EU.

The full text of the EU declaration of conformity is available at the www.inel.gda.pl.

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