

# PIK

EN

INSTRUCTION MANUAL  
**30 CHANNEL REMOTE CONTROL**  
433,92MHz



nekos products have been manufactured in accordance with safety standards and conforms to the stipulations of current standards in force.  
When correctly assembled, installed and used according to the present instructions, they will not generate any danger for persons, animals or items.

## Symbols used in the manual



**DANGER**

*This indication draw the attention about potential dangers for safety and health of peoples and animals.*



**INFORMATION**

*This information give further suggestions.*



**ATTENTION**

*This indication draw the attention about potential dangers for the product itself.*



**WARNING**

*This indication draw the attention about potential damages to goods.*



**ENVIRONMENTAL INSTRUCTION**

*Environmental indication draw the attention about potential dangers for the environment.*

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## 1. Safety indications

### General notes



**ATTENTION:** Before installing this appliance, ensure all safety indications have been read carefully and understood in order to prevent contact with electricity, injury or any other incident. The manual should be conserved for further consultation at a later date.



**WARNING DANGER OF EXPLOSION IF THE BATTERIES ARE REPLACED WITH A DIFFERENT TYPE OF BATTERY. DISPOSE OF THE USED BATTERIES IN COMPLIANCE WITH CURRENT REGULATIONS**



The manufacturer accepts no responsibility for damage to people, animals or things incurred by improper use.



Use for any applications other than those indicated must be authorised by the manufacturer after technical review of the assembly.



Plastic bags, polystyrene, small metal parts such as nails, staples etc should be placed out of the reach of children as they constitute a potential source of risk.



The appliance is not intended for use by people (including children) whose physical, sensory and mental abilities are reduced, or in case of lack of experience or knowledge; such persons must be supervised to ensure that they do not play with the appliance.



Do not use solvents or jets of water to wash the appliance. The appliance should not be submerged in water.

### Notes for functioning and use

**PIK** is a radio transmitter – or simpler a remote control – to command devices provided of a receiver with the same code protocol or the same transmission philosophy. *For further details see chapter “Technical data”.*



This product is designed to be used with the manufacturer's original products. Use with any other products may result in damage or malfunctions.



The initial start-up of the radio remote control should be carried out by a skilled and qualified person following the manufacturer's instructions.



After removing packaging, check for any damage on the appliance.



Before using the remote control, check that installed batteries have the same nature, quality and tension as those indicated on the technical data label on the appliance.



This machine is destined exclusively for the use for which it has been designed and the manufacturer accepts no responsibility for damage incurred by improper use.



Repairs should only be performed by qualified personnel at assistance centres authorised by the manufacturer.



The product must be disposed of in compliance with local environmental regulations and not as household waste.



Run-down batteries do not belong in normal household waste. They must be disposed of properly.

For any doubts, contact your local waste collection company.



The batteries must always be replaced with suitable models corresponding to the specifications provided on the label attached inside the battery compartment door. Failure to observe this rule may compromise safety and void the warranty.

## 2. Technical data

Type	Multi-channel radio remote control with microprocessor
Number of transmission channels	30
Carrier frequency	433.92 MHz
Modulation	OOK (On-Off Kejing)
Class	1
Maximum transmitter output power	< 1mW
Band width	433,05-434,79 MHz
Duty cycle	< 1%
Power supply voltage	2 1.5V batteries - type AAA
Operating voltage	1.8V - 3.3V
Estimated lifetime of the batteries	> 2 years ( <i>assuming an average use of 1 minute per day</i> )
Display	LCD (liquid crystal display) <ul style="list-style-type: none"><li>◆ 2 digits (<i>selected channel</i>);</li><li>◆ Battery charge status indicator;</li><li>◆ Transmission status;</li><li>◆ Specific function letters</li></ul>
Visualization	
Display dimensions	18.5x13.5 mm
Encoding	HCS301
Independent codes	>18 x 10 <sup>18</sup> “rolling code” combinations
Absorption in standby	< 1 µA
Absorption in transmission	< 20 mA <ul style="list-style-type: none"><li>◆ Operational control (<b>UP</b> ARROW, <b>DOWN</b> ARROW, <b>STOP</b>);</li><li>◆ 2 Function buttons (<b>F1</b>, <b>F2</b>);</li><li>◆ 1 Memory button (<b>M</b>);</li><li>◆ 1 Channel button (<b>CH</b>);</li></ul>
Keypad	
Transmission distance	50 m – ( <i>with charged batteries</i> )
Dimensions	145x38.5x22.5
Weight	76 g

*Any information reported in this table is not binding and may be susceptible to variations without notice.*

## 3. Technical and constructional information

- The **PIK** radio remote control transmits radio waves at the frequency of 433.92 MHz. It has a protocol that changes its code at each transmission (*rolling code*) according to a predetermined algorithm with a total of over 18 x 10<sup>18</sup> possible combinations.
- 30 Direct transmission channels (*from 01 to 30*). With the F1 and F2 functions implemented, there can be as many as 90 control outputs for specific transmission processes.
- The command issued can be received by an electrical appliance equipped with a receiver of the same nature which has already been set up for reception.
- The casing is constructed in recyclable thermoplastic material (PC-ABS - (*Polycarbonate-Acrylonitrile Butadiene Styrene*)) which is particularly shock resistant.
- The batteries are enclosed by a snap door with the product's technical data label attached to it.

- Powered by 2 AAA 1.5V<sub>---</sub> batteries. (The radio remote control works with voltages from 1.8V<sub>---</sub> to 3.3V<sub>---</sub>).
- Provided with a liquid crystal display and silicone control keypad.
- The “free-field” transmission distance covers a sphere with a radius of 50 m.

#### 4. ID plate and marking data

The Machine Directive classifies actuators as “partly completed machinery” and they are supplied with a Declaration of Incorporation, attached to this booklet; with regard to the electrical side, they bear **CE** marking and come under the LVD and CEM Directives and the other Regulations listed in the attached Declaration of Conformity. With this marking, the actuators can be sold and used throughout the European Union with no further requirements. The plate data is displayed on an adhesive label placed on the outside of the container, printed in black on a grey background.



#### 5. Instructions for start-up

**THESE INSTRUCTIONS ARE INTENDED FOR TECHNICAL AND SPECIALIZED PERSONNEL.  
THUS BASIC SAFETY AND WORKING TECHNIQUES ARE NOT DISCUSSED.**

##### Standby state

When the batteries are inserted, the radio remote control goes into a standby state; the display is off and the microprocessor is in the power down state, so the entire device is in a state of very low consumption.

The radio remote control returns to this state whenever 30 seconds have passed since the last button was pressed.

##### Wait state

If any of the 7 buttons is pressed when the radio remote control is in standby, it awakens and enters the wait state. The display shows the channel (*one of the 30*) selected before the radio remote control went into standby state.

##### Selection of the channel

To select a (new) channel, press the **CH** button; the displayed channel starts flashing. Use the **▲(UP)** arrow or **▼(DOWN)** arrow buttons to select the desired channel, which flashes. By pressing the **CH** button again, the channel display becomes steady-on.

If the newly selected channel is not activated by pressing the **CH** button, after a standby or the next time the radio remote control passes to the wait state, the last channel that was previously activated will appear on the display.

##### Storage of the M1 and M2 memory groups

The “sequence storage” state (**M** button) provides the possibility to assign two distinct “memory groups”, i.e., two memories. The storage is carried out as follows.

##### **Memory M1**

- ♦ Press the **M** button for 5 seconds to store the memory 1; the icon **M1** appears flashing on the display.
- ♦ Scroll through the channels using the **▲▼** arrows, and the various channels will flash. To enter the channel in the memory, press the **STOP** button, the channel stops flashing and becomes steady-on; carry out this operation for all the channels you would like to store, up to a maximum of 10 channels.
- ♦ To exit the channel storing mode, press the **M** button again for at least 1 second.
- ♦ To erase the memory, go to the channel **00** and press the **STOP** button. After the memory has been erased, all the channels start flashing. To exit, press the **M** button again for 1 second.

##### **Memory M2**

- ♦ Press the **M** button for 5 seconds, and the flashing icon **M1** appears. Now press the **CH** button and the icon **M2** will appear flashing on the display.
- ♦ Scroll through the channels using the **▲▼** arrows, and the various channels will flash. To enter the channel in the memory, press the **STOP** button, the channel stops flashing and becomes steady-on; carry out this operation for all the channels you would like to store, up to a maximum of 10 channels.
- ♦ To exit the channel storing mode, press the **M** button again for at least 1 second.
- ♦ To erase the memory, go to the channel **00** and press the **STOP** button. After the memory has been erased, all the channels start flashing. To exit, press the **M** button again for 1 second.

##### **Checking the composition of a memory sequence**

- ♦ From the wait state, press the **M** button; the **M1** icon will be activated.
- ♦ The stored sequence of channels appears on the display (e.g.: 1-2-3-4-pause, 1-2-3-4-pause, etc.).

##### **Control of a stored sequence - M1 and M2 Memories.**

Starting from the wait state, press the **M** button and the steady-on **M1** icon will appear on the display; using the **▲▼** buttons activates the function, transmitting the command to the channels of the **M1** sequence. The stored channels scroll cyclically and continuously on the display.

Starting from the wait state, press the **M+CH** button and the steady-on **M2** icon will appear on the display; using the **▲▼** buttons activates the function, transmitting the command to the channels of the **M2** sequence. The stored channels scroll cyclically and continuously on the display.

The **STOP** button stops the command.

Press the **M** button once to exit from the memory sequence control state, and the **M1** or **M2** icon disappears; now it is possible to activate the commands of all the individual channels.

##### **F1 and F2 Function buttons**



The **F1** and **F2** function buttons are dedicated to manage special functions if foreseen in the dedicated motor; they are described inside its own manual.



### WARNING:

For all the other "normal" applications – i.e., those not supported by the devices described above - where the radio remote control is used, regardless of the channel number on which it is set, if the steady-on F1 or F2 icon appears on the display, **NOTHING MOVES** when the ▲▼ buttons are pressed because these functions are not associated with any type of command.

**IN THIS CASE, THE F1 AND F2 ICONS SHOULD NEVER APPEAR ON THE DISPLAY DURING USE.**

## 6. Battery status indication

The level of the battery charge is measured at each passage from the standby state to the wait state. The level is shown on the display using the battery indicator:

Level above 2,6V <sub>---</sub> :	3 bars lit
Level between 2,4V <sub>---</sub> and 2,6V <sub>---</sub>	2 bars lit
Level between 2,2V <sub>---</sub> and 2,4V <sub>---</sub>	1 bar lit
Level below 2,2V <sub>---</sub> :	0 bars lit – all off

## 7. Environmental protection



All materials used in the manufacture of this appliance are recyclable.

We recommend that the device itself, and any accessories, packaging, etc. be sent to a centre for ecological recycling as established from laws in force on recycling.

The device is mainly made from the following materials:

Iron  Aluminium  Cuprum  Zinc  Silicon  Plastic of various type

Dispose materials in conformity with local regulations about removal.

To disassemble device, after removing battery cover, unscrew 2 screws fixing shells.

## 8. Recall to main principles of warranty certificate

The manufacturer will guarantee good function of the appliance. The manufacturer shall undertake to replace defective parts due to poor quality materials or manufacturing defects.

The guarantee covers products and individual parts for 2 years from the date of purchase. The latter is valid as long as the purchaser possesses proof of purchase and completion of all agreed conditions of payment.

Guarantee of good function of appliances agreed by the manufacturer implies that the latter undertakes to repair or replace free of charge and in the shortest period possible any parts that break while under warranty. The purchaser is not entitled to any reimbursement for eventual direct or indirect damage or other expenses incurred. Attempt to repair by personnel unauthorised by the manufacture shall render the warranty null and invalid.

The warranty does not cover fragile parts or parts subject to natural wear and tear or corrosion, overload, however temporary etc. The manufacturer will accept no responsibility for eventual damage incurred by erroneous assembly, manoeuvre or insertion, excessive stress or inexpert use.

Repairs performed under guarantee are always "ex-factory of the manufacturer". Respective transport expenses (out/back) are the responsibility of the purchaser.

## 9. DECLARATION OF CONFORMITY

The undersigned,  
Company name: **NEKOS S.r.l**  
Postal address: **Via Capitoni, 7/5**  
Postcode and city:  
**36064 Mason Vicentino VI**  
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E-mail address: **info@nekos.it**

declare that the document is issued under our sole responsibility and belongs to the following product:

Apparatus model / Product: **30 channel remote control PIK**  
Trademark: **NEKOS**  
Model/Type: **PIK**  
Batch: *see data label*  
Serial number: *see data label*

The object of the declaration described above is in conformity with the relevant Union harmonisation legislation:

- 2014/53/EU Radio Equipment (RED)
- 2011/65/EU Restriction of the use of certain hazardous substances Directive (RoHS Directive)

The following harmonised standards and/or technical specifications have been applied:

**EMC:**  
**EN 61000-6-3:2007 + A1:2011**  
**EN 61000-6-2:2005 + AC:2005**

**LVD**  
**EN 60335-1:2012 + EN 60335-1/A11:2014**

**RED**  
**ETSI EN 300 220-1 V3.1.1 – ETSI EN 300 220-2 V3.1.1**  
**ETSI EN 301 489-1 V2.1.1 – ETSI EN 301 489-3 V2.1.1**

**RoHS**  
**EN 50581:2012**

Place: **Mason Vicentino**  
Date: **13/06/2017**  
Signature: **Giuliano Galliazzo (A.D. – President)**



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