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#### Guarantee, service, repairs and maintenance

The JUUKO products are covered by a guarantee/warranty against material, construction and manufacturing faults. During the guarantee/warranty period, JUUKO may replace the product or faulty parts. Work under guarantee/warranty must be carried out by JUUKO or by an authorized service centre specified by JUUKO.

#### This is not covered by the guarantee/ warranty:

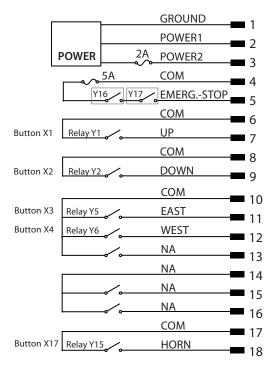
- Faults resulting from normal wear and tear
- Parts of a consumable nature
- •Products that have been subject to unauthorized modifications
- Faults resulting from incorrect installation and use
- Damp and water damage

#### **Maintenance:**

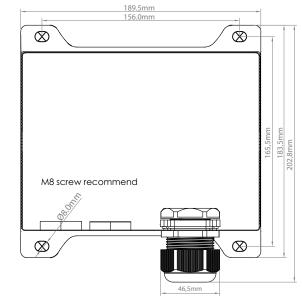
- $\boldsymbol{\cdot}$  Repairs and maintenance must be carried out by qualified personnel
- Use spare parts from JUUKO only
- •Contact your representative if you require service or other assistance
- Keep the product in a dry, clean place
- •Keep contacts and antennas clean
- •Wipe off dust using a slightly damp, clean cloth

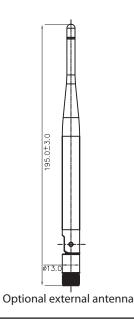


#### Wiring diagram



## **Mounting Dimensions**







## Troubleshooting

#### Transmitter

| LED Signa | SHOR    |           | Failure Analysis              | Solution                              |
|-----------|---------|-----------|-------------------------------|---------------------------------------|
| STATUS    | LED red | LED green | -Stain on the battery spings. | -Clean the stains on battery springs. |
| <u> </u>  | •••••   |           | -Low batteryDamage batteries. | -Replace brand new batteries.         |
|           | LED red | LED green | -Transmitter is not           | -Check the power supply               |
| STATUS    |         | •••••     | communicating with receiver.  | of receiverCheck receiver's fuse.     |
|           | LED red | LED green | -Push button damaged.         | -Contact the dealers.                 |
| STATUS    |         | •••••     |                               |                                       |
|           |         |           |                               |                                       |
| <u> </u>  |         |           |                               |                                       |

#### Receiver

Should an error occur, LED of the receiver unit will indicate the cause of the error.

| LED Signal SHORT LONG |         | Failure Analysis | Solution                  |  |
|-----------------------|---------|------------------|---------------------------|--|
| STATUS                | LED red | LED Green        | -RF error                 | -Check the antenna and make sure it is not looseContact dealer |
|                       |         |                  |                           |  |
|                       | LED red | LED Green        | -Receiver is not powered. | -Change the fuseCheck the power supply.                        |
| STATUS                |         |                  |                           |  |
|                       |         |                  |                           |  |

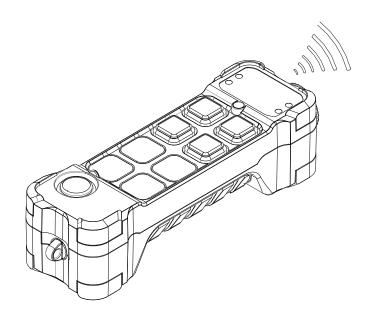
| STATUS | LED red | LED Green |
|--------|---------|-----------|
|        |         |           |
|        |         |           |

Valid data or Invalid data (from a different transmitter) received.

# **HS-K400** series

Radio remote control system

## **BASIC INSTALLATION INSTRUCTIONS**

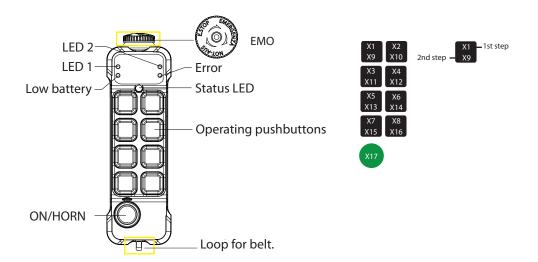


(English) Standard settings





The K series teansmitter comes in different visions, featuring 2, 4, 6, or 8 pushbuttons. The transmitter also features 2-step pushbuttons. Both steps of each pushbutton can operate different functions like controlling the speed of a movement, step 1: slow, step 2: fast.



## START/ Horn switch

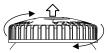
The K series transmitter has an Start/Horn switch on the button-left side. The Start/Horn switch has 2 modes:

- 1. Press to start
- 2. Press for horn while operating



## Start the transmitter in operating mode

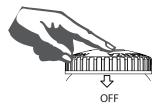
- 1. Turn to release the emergency button.
- 2. Press" START" button.



## Turning the transmitter off

Turn the transmitter off by completely pressing the STOPbutton.

The transmitter turns off. All relays deactivate.





## Change the batteries

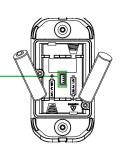
BATTERY TYPE: 2 x 1.5V(LR6 AA)

## Program the transmitters

1. Remove the battery cover

2. Remove both batteries.

The programming connector is placed behind the battery



#### **Technical data**

#### TRANSMITTER

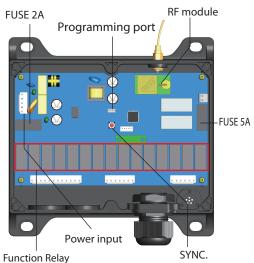
| Frequency range                                     | 433.0525~434.7775MHz              |
|---|-----------------------------------|
| Modulation method                                   | 4GFSK                             |
| Typical operating range                             | 100M                              |
| Control system                                      | PLL                               |
| Antenna impedance                                   | 50Ω                               |
| Typical response time for Stop command and commands | 50mS~100mS                        |
| Power supply  | LR6(AA)1.5V x2                    |
| Antenna   | Internal                          |
| Average power consumption                           | 16mA@DC3V (default setting)       |
| Radio-frequency power                               | <10dBm (default setting)          |
| Operating and storage temperature                   | (-20°C)~(+55°C) / (-40°C)~(+65°C) |
| Protection degree                                   | IP65                              |
| Dimensions  | 193×57×51mm(2-8 buttons)          |
| Weight (including battery)                          | approx.325g (2-8 buttons)         |
| Housing materia                                     | PA6(30% GF)                       |

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#### Receiver

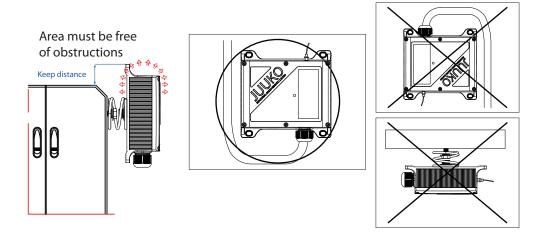
WARNING! The receiver must NOT be opened by any other than a qualified installer. Make sure to turn the electricity off before opening the receiver.



#### Technical data

| Frequency   | 433.0525~434.7775MHz            |
|---|---------------------------------|
| Modulation method                                   | 4GFSK                           |
| Sensitivity   | -112dBm@baud1.2K bps            |
| Control system                                      | PLL                             |
| Antenna impedance                                   | 50Ω                             |
| Typical response time for Stop command and commands | 50mS~100mS                      |
| Power supply  | 24~264V AC/DC                   |
| Antenna   | Internal                        |
| Standby power                                       | 16mA@AC220V                     |
| Operating and storage temperature                   | (-20°C)~(+55°C)/(-40°C)~(+65°C) |
| Protection degree                                   | IP65                            |
| Dimensions  | 190×184×64 (mm)                 |
| Weight  | 1795g                           |
| Housing materia                                     | PA6(30% GF)                     |

## Instruction guide



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#### Thank you for purchasing a JUUKO product.

READ ALL INSTRUCTIONS CAREFULLY BEFORE MOUNTING, INSTALLING AND CONFIGURATING THE PRODUCT.

This manual includes general information concerning the operation of the radio remote control transmitter K series.

#### **General Information on Safety**

•Persons under the influence of drugs and/or alcohol and/or other medicine that impairs their reaction may not assemble, disassemble, install, put into operation, repair or operate the product.

•All conversions and modifications of an installation/system must conform to the relevant safety requirements. Work on the electrical equipment must be performed only by qualified, authorized personnel and in accordance with the relevant safety requirements.

•In the event of malfunctioning and visible defects or irregularities, the product must be stopped, switched off and the relevant master switches must be switched off.

| Used Symbols and Definitions for Warnings |          |                                     |
|---|----------|-------------------------------------|
|   | <u>^</u> | Warning against hazardous situation |
|   | 4        | Warning against electrical voltage  |

#### FCC Part 15

- \* This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference and (2) this device must accept any interference received, including interference that may cause undesired operation
- \* You are cautioned that changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

#### IC Statement

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

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