KAISER NIENHAUS

Tubular Motor Favorit Easyline
Item no.: 160008
with integrated Li-ion battery

Programming and Operating Instructions

1 Wiring Diagram & Button Functions

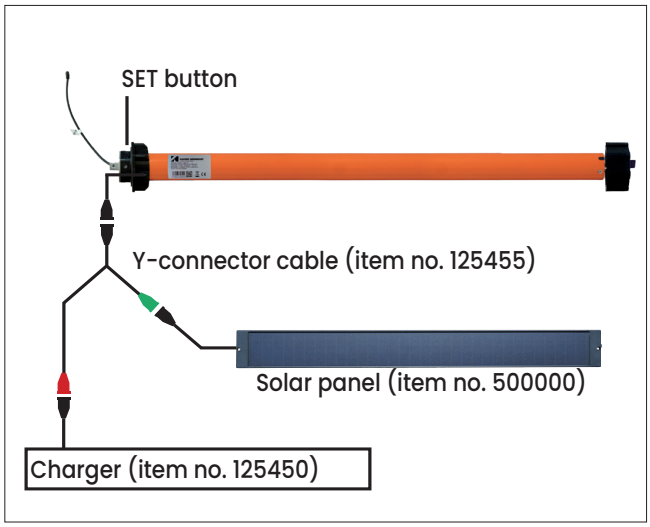

Fig. 1: Connection example Favorit Easyline

1.1 Button Functions of Hand-held Transmitter (Example)

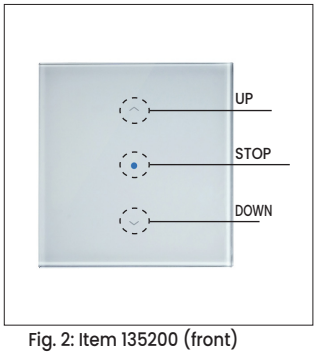

Fig. 2: Item 135200 (front)

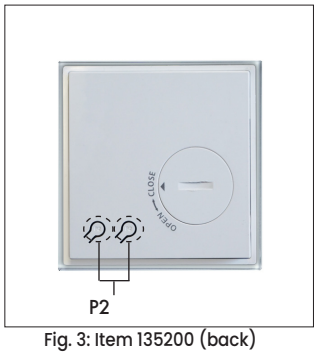

Fig. 3: Item 135200 (back)

1.2 Technical Data

Item name:	Favorit Easyline
Item number:	160008
Motor length:	666 mm
Motor diameter:	45 mm
Length of connecting cable:	200 mm
Radio frequency:	433.92 MHz
Power supply:	12V DC
Operating temperature:	-10°- 55°C
Torque:	20 Nm
Speed:	10 rpm
Max. operating time:	5 minutes
Sound pressure level (LpA):	≤ 70dB (A)
Battery capacity:	5200 mAh
Battery type:	Li-ion
Limit switch type:	Electronic

Note: The performance of Li-ion batteries is considerably affected by the ambient temperature. At colder outdoor temperatures, the function of the drive may naturally be restricted!

1.3 Routing the Connecting Cable

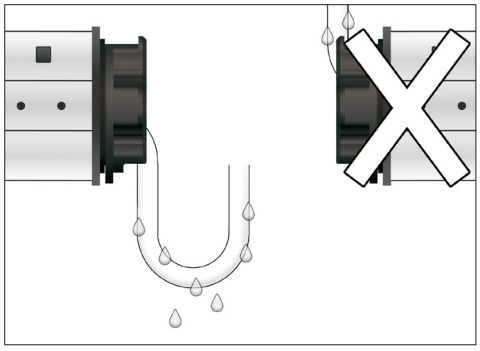

Fig. 4: Routing the connecting cable

Never route the connecting cable vertically upwards, otherwise water can run along the cable into the motor head and destroy it. Route the cable downwards in a loop so that water can collect at the lowest point and drip off.

1.4 Charging the Integrated Battery

The integrated battery of the Easyline drives can be charged either by solar panel (item no. 500000) or by plug-in power supply (item no. 125450). Using the Y-connector cable (item no. 125455), the plug-in power supply can be connected in addition to the solar panel to charge the battery when the sun does not supply the required energy for a longer period.

Note: While the plug-in power supply is connected, the solar panel should be covered to prevent the battery from being charged with too high a voltage.

1.5 Behaviour at Low Battery Charge

When the battery voltage of the drive drops, the drive signals this as follows:

Battery charge 40-100%:
The drive executes radio commands as required.

Battery charge 10-40%:
The drive executes radio commands as required. However, 10 beeps sound each time it is operated.

Battery charge <10%:
The drive does not execute radio commands. Instead, 10 beeps sound each time it is operated.

Note: To prevent deep discharge, the battery should be charged at 10-40% as described in section 1.4. Avoid unnecessary radio commands until the battery is charged to >40%.

2 Guide to Initial Commissioning

For initial commissioning or after a factory reset, please follow the recommended sequence:

Note: To operate the motor, the integrated battery must be charged. On delivery, it has a charge of approx. 50%. Depending on the storage time before installation, it may, however, be necessary to charge it first. The battery must be fully charged after 18 months at the latest to prevent deep discharge.

1. Pairing the first hand-held transmitter
2. Reversing the direction of rotation (if necessary)
3. Setting the end positions
4. Pairing further hand-held transmitters (if necessary)

Important! These instructions often refer to the connected motor "jogging". This means a short up-and-down movement.

2.1 Function: SET Button

Several settings can be made with the **SET** button on the motor head. To carry out the respective action, release the **SET** button immediately after the (1st/ 2nd/ 3rd/ 4th) jog. The functions are briefly described below:

3 seconds/ 1st jog (one beep)
Learning mode & deletion mode

6 seconds/ 2nd jog (two beeps)
Deactivate radio communication

9 seconds/ 3rd jog (three beeps)
Reversing the direction of rotation

12 seconds/ 4th jog (four beeps)
Factory reset

2.2 Resetting to Factory Settings

The Favorit Easyline tubular motor can easily be reset to factory settings. To do this, press and hold the **SET** button on the motor head for approx. 12 seconds. The drive jogs once each after three, six, nine and twelve seconds. After the fourth jog, release the button and the drive confirms a successful reset with four beeps.

2.3 Pairing the First Hand-held Transmitter

To commission the tubular motor, a hand-held transmitter must first be paired. Proceed as follows:

1. Press and hold the **SET** button on the motor head (approx. 3 seconds).

The drive jogs once and, after the **SET** button is released, confirms learning mode with one beep.

2. Within 5 seconds, press and hold the **STOP** button of the hand-held transmitter to be paired.

The drive signals successful pairing by jogging twice and beeping three times.

Important! We recommend assigning a separate transmitter or channel to each receiver/drive! This allows the device to be addressed individually in the event of service. If several receivers/drives are on the same transmitter/channel, the radio dialogue may have to be deactivated on all other devices.

2.4 Reversing the Direction of Rotation

After the first hand-held transmitter has been paired, the motor initially assigns the direction of rotation automatically. To reverse it, proceed as follows:

Note: The direction of rotation can only be reversed immediately after pairing the first transmitter. No end positions may have been set yet. If necessary, reset the drive once as described in section 2.2.

Reversing via hand-held transmitter:

Press and hold the **UP** and **DOWN** buttons of the transmitter together (approx. 2 seconds) until the drive confirms the successful reversal with one jog.

Reversing via button on the motor head:

Hold down the **SET** button on the motor head for approx. nine seconds. The motor jogs once each after three, six and nine seconds. After the third jog, release the button and the motor confirms successful reversal with three beeps.

2.5 End Position Setting

After pairing the first hand-held transmitter and reversing the direction of rotation if necessary, the end positions of the motor must be taught in next. Proceed as follows:

Setting the upper end position:

1. Hold down the **UP** button until the motor starts moving "up". Stop the motor at the desired end position with the **STOP** button. Briefly pressing the **UP** and **DOWN** buttons lets you fine-adjust the motor in small steps.

2. To confirm the upper end position, press and hold the **UP** and **STOP** buttons together for approx. 3 seconds.

The motor confirms the new upper end position by jogging twice and beeping three times.

Setting the lower end position:

3. Hold down the **DOWN** button until the motor starts moving "down". Stop the motor at the desired end position with the **STOP** button. Briefly pressing the **UP** and **DOWN** buttons lets you fine-adjust the motor in small steps.

4. To confirm the lower end position, press and hold the **DOWN** and **STOP** buttons together for approx. 3 seconds.

The motor confirms the new lower end position by jogging twice and beeping three times.

2.6 Resetting the End Positions

If an end position is to be changed later, this can be done individually. Proceed as follows:

1. Delete the old end position by holding down the **UP** and **STOP** buttons (for the upper end position) or the **DOWN** and **STOP** buttons (for the lower end position) together for approx. 6 seconds.

The motor confirms deletion of the old end position with one jog and one long beep.

2. To move to and confirm the new end position, now follow the description in section 2.5 (steps 1 and 2 for the upper end position; steps 3 and 4 for the lower end position).

2.7 Pairing Further Hand-held Transmitters

Up to 10 transmitters can be paired with each Easyline series drive. If an eleventh transmitter is paired, the drive forgets the previous tenth transmitter. To pair further hand-held transmitters, proceed as follows:

1. Briefly press the **P2** button of an already paired transmitter.

The drive jogs once and one beep sounds.

2. Briefly press **P2** on the same transmitter again.

The drive jogs once and one beep sounds.

3. Press and hold the **STOP** button of the transmitter to be paired.

The drive signals successful pairing by jogging twice and beeping three times.

2.8 Deleting a Transmitter (Part 1)

Paired transmitters can be deleted individually from the drive. Proceed as follows:

Deleting via another hand-held transmitter:

1. Briefly press the **P2** button of a paired transmitter that is not to be deleted.

The drive jogs once and one beep sounds.

2. Briefly press **P2** on the same transmitter again.

The drive jogs once and one beep sounds.

3. Briefly press the **P2** button of the transmitter to be deleted.

The drive signals successful deletion by jogging twice and beeping three times.

2.8 Deleting a Transmitter (Part 2)

Deleting via the SET button on the drive:

1. Press and hold the SET button on the motor head (approx. 3 seconds)

The drive jogs once and, after the **SET** button is released, confirms deletion mode with one beep.

2. Within 5 seconds, press and hold the **STOP** button of the hand-held transmitter to be deleted.

The drive signals successful deletion by jogging twice and beeping three times.

3 Blind Function

For special roller shutters with tiltable slats, motors of the Easyline series have a blind function. With a short button command from the transmitter, the motor only moves a short distance to adjust the slats. With a longer command (>2 seconds), the motor runs in self-holding mode to the corresponding end position or until it is stopped by a transmitter command. To activate/deactivate the blind function, proceed as follows:

1. Press and hold the **UP** and **DOWN** buttons of a paired transmitter together for approx. 5 seconds.

The motor jogs once and a beep sounds.

2. Briefly press the **STOP** button of the same transmitter.

The motor signals activation/deactivation as follows:

Activation:
one jog and one beep
Deactivation:
two jogs and three beeps

3.1 Deactivating Radio Communication of the Drive

The radio communication of the drive can be deactivated temporarily, e.g. to make settings on motors that cannot be addressed individually by a transmitter (>1 receiver per transmitter/channel). To do this, press and hold the **SET** button on the motor head until the drive jogs a second time after approx. 6 seconds. Release the **SET** button and the drive confirms with two beeps that it will no longer process radio commands. To make it ready to receive again, simply press the **SET** button briefly.

3.2 Learning & Approaching the Intermediate Position

With drives of the Easyline series, an individual intermediate position can be learned and approached at the press of a button. To learn the intermediate position, proceed as follows:

1. Move the motor to the desired intermediate position and stop it there with the **STOP** button.

2. Briefly press the **P2** button of the transmitter.

The motor jogs once and one beep sounds.

3. Briefly press the **STOP** button of the same transmitter.

The motor jogs once and one beep sounds.

4. Briefly press the **STOP** button of the transmitter again.

The motor confirms the new intermediate position by jogging twice and beeping three times.

To approach the learned intermediate position, press and hold the **STOP** button of the transmitter for approx. 2 seconds until the motor starts moving.

3.3 Deleting the Intermediate Position

To delete a set intermediate position, proceed exactly as when teaching it (section 3.2, steps 2-4). After the fourth step, the motor confirms deletion with one jog and one long beep.

3.4 Control via KN Connect

Motors of the Easyline series can also be controlled with the KN Connect app. For this, however, a Smart-Stick (item no. 137550) must be used, which is first connected to the desired home network. All further steps, such as adding the device to the app, are described step by step in the app.

KN Connect app
The free KN Connect app is available both in the Apple App Store for iOS devices and on Google Play for Android devices.