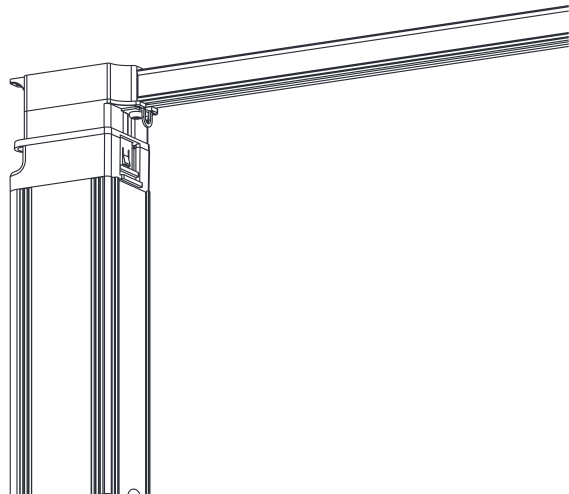




EN

INSTALLATION MANUAL
FOREST SHUTTLE® iON



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FOREST SHUTTLE® iOn

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QUICK START | ASSEMBLED TRACKS

PROGRAMMING EASYTOUCH/DIAMOND SENSE REMOTE CONTROL

It is not necessary to fix the Shuttle motor to the track for programming a channel to a Shuttle motor.

- 1 First select the desired channel
- 2 Press button 3x with a pen
- 3 LED moves from 1st ► 2nd ► 3rd led
- 4 Keep button pressed for 5 sec.
- 5 Green LED starts blinking
- 6 Within 10 sec. press open



Diamond Sense remote



EasyTouch remote



3 x



1 x 5 sec.



Diamond Sense remote



EasyTouch remote



If the motor does not respond to the remote control, set the end positions again. See page 7.



RE-ADJUSTING THE OPEN AND CLOSE END POSITION

The OPEN and CLOSE end positions are already set to the drapery track. Adding extra carriers is taken into account. When the end positions need to be changed, take next steps:



Note: Drapery should be in the open position.

- 1 Press button 4x with a pen
- 2 LED moves from 1st ► 2nd ► 3rd ► 4th led
- 3 Keep button pressed for 5 sec.
- 4 Yellow LED blinks and goes off



4 x



1 x 5 sec.



Now the end positions are reset and have to be set again:

1. Push the drape toward the CLOSE position until the motor takes over.
2. The motor will open the curtain automatically. When it is reached, the yellow LED flashes.
3. Pull the drape to the desired OPEN position, this can be done as long as the yellow LED is flashing.
4. Let the drapery hang at the desired OPEN position until the yellow LED goes off.
5. Ready for use!

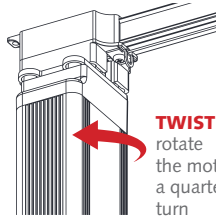
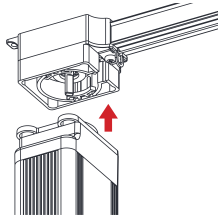
INSTALLATION

FOREST SHUTTLE® iOn

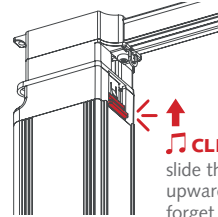


Make sure your system is fully assembled and mounted on the ceiling or wall before you start installing the Forest Shuttle. Do not hang the drapery yet.

- 1 Remove the battery from the motor. Attach the motor to the track by Twist & Click. Lock the motor on the track using the locking pin. Remove the security cap from the battery and insert into motor and push until a click is heard.



TWIST
rotate
the motor
a quarter
turn



CLICK
slide the lockingclip
upwards, do not
forget to lock

- 2 Hang the drapes on the track and slide the drapes into the open position.

- 3 For setting the end limits of the FOREST SHUTTLE® iOn see page 5

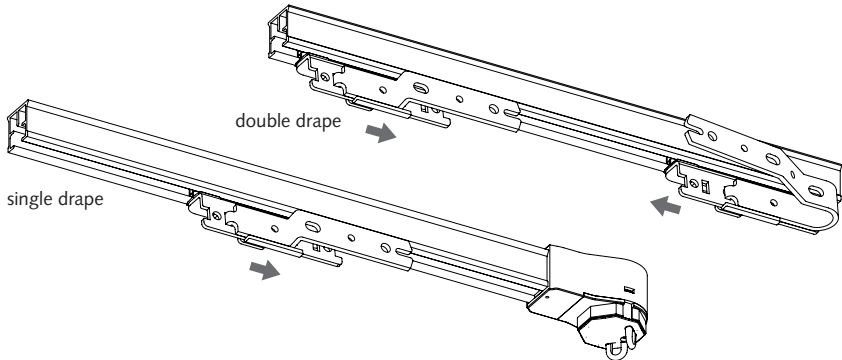


Before setting the end limits, the RF remote or IR remote channel can be programmed. The stack back (adjusted open limit) can be set by remote or switch. For programming see page 6.

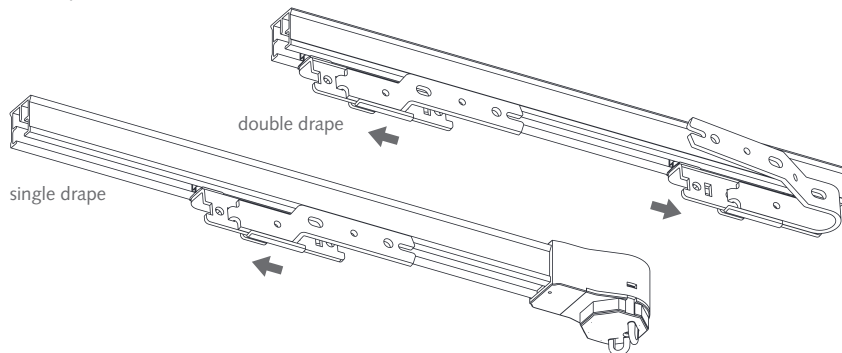
SETTING MOTOR DIRECTION AND CLOSE LIMIT:

The Shuttle® detects automatically the motor direction. By pulling the master carrier(s) towards closed position first, the Shuttle® will automatically learn that motor direction. The master carrier will travel automatically towards the closed position.

- 1 Pull the drapes towards the CLOSE position until the motor takes over, this automatically sets the motor direction and determines the end position.



- 2 After the motor has determined the end position, the curtain will automatically return to the OPEN position.



- 3 When the drapery has reached the OPEN position, it will stop automatically (yellow LED4 is on). Do you still want to adjust the stack back? Then adjust it by hand or by remote control. You have to do this within 10 seconds. If the drapery is not moved for 10 seconds, the yellow LED4 goes off and this OPEN end position is stored.



If you are not satisfied with programmed end limits, then re-set the end limits. For resetting see page 3, adjusting open and close end positions.

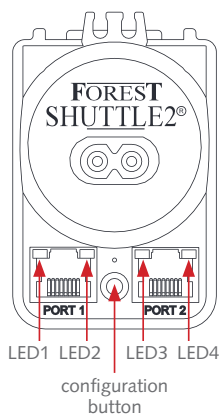


CONFIGURATION

FOREST SHUTTLE® iOn



Use a pin to change settings in the configuration menu. Choose the setting you want to change (table below) and press the button that many times (corresponding with setting). Confirm the desired setting by pressing the button for 4 seconds until the led blinks 3 times and goes OFF. These settings can also be done when finishing the installation.



Number of times to press	LEDs 1 2 3 4 □ □ □ □	function	factory default
1	■ □ □ □	speed low	●
2	□ ■ □ □	speed high	
3	□ □ ■ □	RF (433)	
4	□ □ □ ■	reset endlimits	
5	■ □ □ □	dry-contact pulse	●
6	□ ■ □ □	dry-contact continuous	
7	□ □ ■ □	dry-contact single switch	
8	□ □ □ ■	touch impulse sensitive high	●
9	■ □ □ □	touch impulse sensitive low	
10	□ ■ □ □	touch impulse off	
11	□ □ ■ □	IR channel 1	●
12	□ □ □ ■	IR channel 2	
13	■ □ □ □	IR channel 3	
14	□ ■ □ □	IR channel 4	
15	□ □ ■ □	IR channel 5	
16	□ □ □ ■	factory default	
17	■ □ □ □	master mode	
18	□ ■ □ □	slave mode on one curtain track	
19	□ □ ■ □	slave mode for FSS system (skylight system)	
30	□ ■ □ □	Extend closed position +0cm	●
31	□ □ ■ □	Extend closed position +1cm	
32	□ □ □ ■	Extend closed position +2cm	

SPEED (1 & 2):

Standard speed is 14cm/s. For faster speed, 17cm/s, press 2x button. To confirm, press and hold once more for 4 seconds until the led blinks 3 times and goes OFF.

PROGRAMMING RF REMOTE CONTROL / CHANNEL (3):

To program a RF remote to a Shuttle®, press configuration button 3 times. LED3 is ON. Press and hold once more for 4 seconds, LED will start blinking for 10 seconds. In these 10 seconds press OPEN button on remote to program the channel to the Shuttle®. Same procedure, but press CLOSE instead of OPEN, will erase the programmed channel. Adding another channel, or another remote, can be done by pressing the P button 2 times, switch to new channel/remote and press the OPEN button once. Now the new channel/remote will also control the Shuttle®.

COPYING OF PROGRAMMED RF REMOTE CONTROL:

Use this function to pair multiple remote controls with the same motor(s). Select the desired channel on the new remote control, then press the P-button on the back of the current remote control twice, with a one-second interval. Next, press the OPEN-button on the new remote control. The channel settings are now copied.

RESET END LIMITS (4):

For resetting only the end limits: press button 4x. To confirm, press and hold once more for 4 seconds until the led blinks 3 times and goes OFF. When a Forest remote is programmed to the Shuttle®, the end limits can also be reset by pressing 5 times the P button and 5 times the STOP button on the remote. End limits of all Shuttles® in range on this channel will reset end limits.

DRY CONTACT INPUTS (5, 6 & 7):

Standard input is pulse contact. To set to continuous or single switch, press button 6 or 7 times respectively. To confirm, press and hold once more for 4 seconds until the led blinks 3 times and goes OFF. Please see page 10 for detailed explanation. Make sure the contact is free of potential.

TOUCH IMPULSE (8, 9 & 10):

The Shuttle® recognizes when the curtain is pulled by hand to open or close. The Shuttle® will then open or close the curtain all the way. Default setting is high sensitive. Touch Impulse can be set to less sensitive or off, with 9 or 10 presses respectively. To confirm, press and hold once more for 4 seconds until the led blinks 3 times and goes OFF.

IR CHANNEL SETTING (11, 12, 13, 14 & 15):


For Infra Red control an IR remote and an IR receiver is required, connected to port 1. Place the eye of the receiver cord in view of the IR remote. Standard the Shuttle® is set to channel 1 and 'ALL'. To change to channel 2, 3, 4 or 5, press resp. 12x, 13x, 14x or 15x button. Press and hold once more for 4 seconds until the led blinks 3 times and goes OFF.

FACTORY DEFAULT (16):

To reset all settings, press button 16x. To confirm, press and hold once more for 4 seconds until the led blinks 3 times and goes OFF.

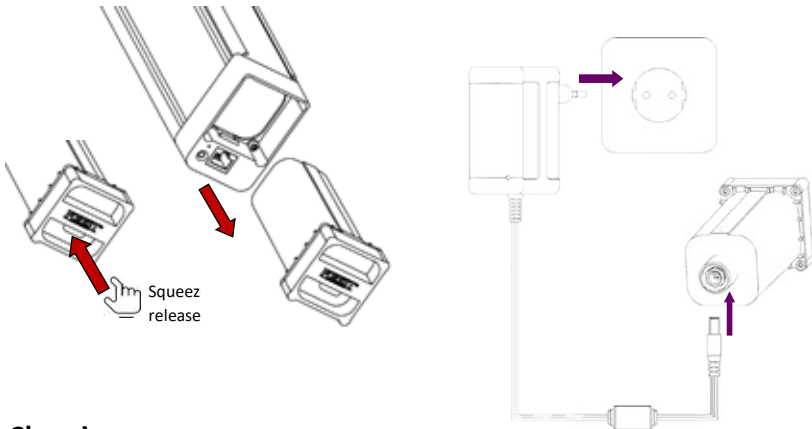
EXTEND CLOSE POSITION (30, 31 & 32):

The close position can be extended by 1 or 2 cm when the curtain does not close completely. To extend by 1 or 2 cm, press the button 31 or 32 times respectively. To confirm, press the button once more for 4 seconds until the LED blinks 3x and goes off.

 **When the battery is getting low, the Shuttle® iOn motor will begin to operate more slowly, (6 cm/s – 2,36"/s), this is an indication to re-charge the battery.**

Charging the battery:

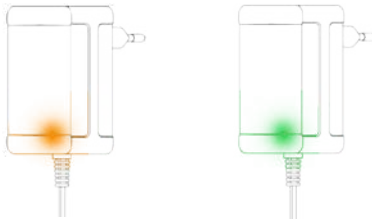
Take out the battery from the Shuttle® iOn motor and connect the charger to the battery as pictured below:



Charging:

The charger is equipped with a LED indicator on the front side, this LED indicates the actual charging status.

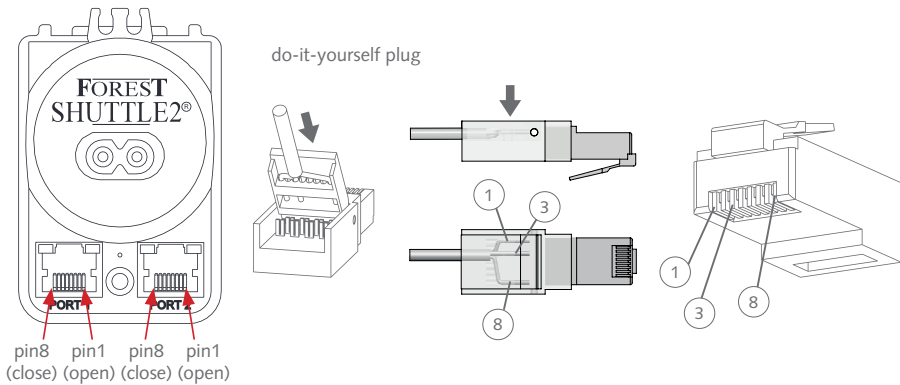
LED Orange:	LED Green:
Battery is charging	Battery is fully charged



- Charging time battery is 5 hours;
- Do not use third party battery chargers;
- Do not attempt to repair the charger if damaged; replace the charger in this case;
- Do not charge the battery in humid conditions;
- Replace charger if damaged;
- Do not expose the battery pack to direct sunlight while charging;
- Do not repair the battery pack if damaged;
- Replace the battery pack if damaged;
- Do not charge the battery in ambient conditions below 10°C (50°F);
- Dispose properly.



CONNECTING TO HOME AUTOMATION SYSTEM



MANUAL SWITCH CONNECTED TO DRY CONTACT INPUTS

A manual switch or a relay output of a Home Automation System can easily be connected to the Shuttle®.



Make sure that the switch/relay contact is de-energised.

OPEN : when pin 1 is connected to pin 3 (COMMON) the Shuttle® will open the curtain.

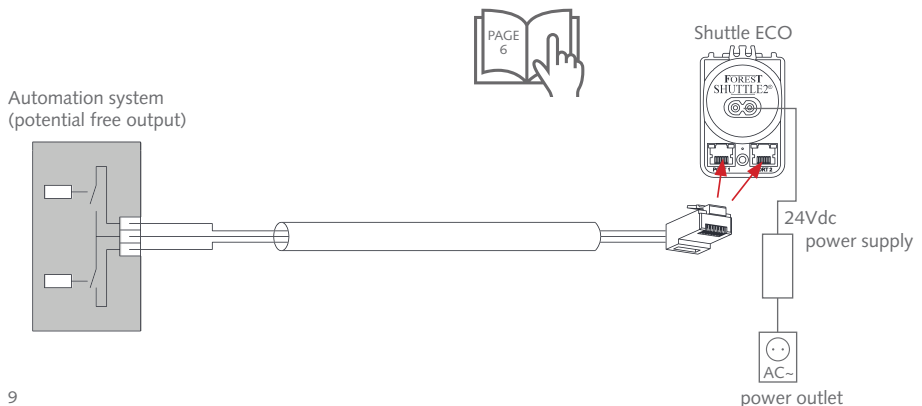
CLOSE : when pin 8 is connected to pin 3 (COMMON) the Shuttle® will close the curtain.

STOP : when pin 1 and 8 are connected to pin 3 (COMMON) the Shuttle® will stop moving the curtain.

MODES:

- Pulse: when short contact is made the drape will open or close fully (default setting)
- Continuous: the drape will move as long as the contact is made (mostly used for Home Automation Systems)
- Single button switch (door bell principle): either one of the four inputs will act as following:
open ► stop ► close ► stop ► open ► stop ► close ► stop etc.

To change this setting see page 6.



TECHNICAL SPECIFICATIONS

FOREST SHUTTLE® iOn

Shuttle® iOn Motor

Article Number:	White: 52926-25 (incl battery)
Voltage Shuttle® iOn:	14.4Vdc
Max. power:	30W
Torque:	1Nm
Frequency:	433.92 MHz
Speed 1: Normal	14 cm/s (5.51"/s)
Speed 2: High	17 cm/s (6.69"/s)
Speed 3: Battery low	6 cm/s (2.36"/s)
Max. curtain weight:	25kg (straight track)
Max. track length:	8 meter (33ft) 1 bend 5 meter (16ft) 2 bends
Shuttle® iOn dimensions:	74 x 50 x 317mm (2.91 x 1.97 x 12.48")
Net weight motor:	1160 grams
Protection degree:	IP20
Max. running time (in one direction):	150 sec
Sound level:	< 41dB
Ambient temperature:	0 - 40°C (32 - 104°F)
Relative humidity:	10 – 80%
Maximum useable altitude above sea level:	2000m (6561ft.)
Certification & Marking:	CE

	H	B1	B2
Shuttle iOn	317mm	73.7mm	50.5mm

Technical specification BATTERY CHARGER:

Battery charger	EU	UK	US	AUS
Forest article number:	5234000002	5234000003	52924-59	5234000005
Model:	KS39DU-1680100CE	KS39DU-1680100CB	KS39DU-1680100CU	KS39DU-1680100CA
Input:	100 - 240V~ 50 - 60Hz - 2.0A	100 - 240V~ 50 - 60Hz - 2.0A	100 - 240V~ 50 - 60Hz - 2.0A	100 - 240V~ 50 - 60Hz - 2.0A
Output:	16.8 V DC - 1.0A	16.8 V DC - 1.0A	16.8 V DC - 1.0A	16.8 V DC - 1.0A
Insulation Class:	II	II	II	II
Certification & Marking	CE	CE	UL	SAA
Efficiency Level	VI	VI	VI	VI

Technical specification BATTERY PACK:

Battery pack	White
Forest article number:	52949-25
Battery type:	4-Cell Lithium iOn
Nominal Voltage:	14.4V
Capacity:	3.35Ah
Certification & Marking:	CE
Operation temperature:	0°C to +40°C (32°F to 104°F)
Net weight battery pack:	250 gr. (0.55 lbs)

MAINTENANCE INSTRUCTIONS FOR FOREST FMS MOTORIZED TRACK SYSTEM WITH FOREST SHUTTLE® ION MOTOR

Ensure the tracks and motors have been installed according to the product manual, and have at all times been protected from dust and humidity, prior to and after installation, before and after the project handover. The motors must be connected to a 230V mains at all time; power to the motor may not be cut via the building management system or hotel room key card slot. If this is the case, the warranty will not be valid.

Drapery made with the Forest Easyfold® system must have been manufactured in such a way that the top heading doesn't slide against the track profile itself, which would act as a brake and increase friction and strain the motor.

The motorized systems should be inspected by housekeeping services on a regular basis, at least once every 3 months, to ensure a smooth operation of the curtains. A full operating cycle of opening/closing/opening is sufficient for this.

The Forest® motorized track systems require an annual re-lubrication with the patented Forest® dry lubricant spray, article 1502-00. If Forest Lubricant is not available, you may use WD-40 Specialist® Dry Lube. Important: only use the Dry Lube variant with UPC code 0 79567 30005 2 (<https://www.wd40.com/products/dry-lube/>). Do not use a different type of lubricant like regular WD-40 or grease, as these react with the factory applied lubricant. Apply the lubricant spray on the inside of the track profile, with the drapes fully open. After lubrication, wait a few minutes for the lubricant to settle, then initiate a complete cycle, by closing and opening the drapes fully. Repeat this procedure on annual basis. No further maintenance procedures are required.



Follow the instructions in this document to ensure safe operation of the Forest Shuttle iOn. Keep this document close to the product at all times. Use the product only as intended. This product is not suitable for use in humid spaces such as bathrooms or outdoors. In order for the Forest Shuttle motor to function correctly and safely, the complete drapery track system must be assembled with original & undamaged parts and devices of Forest Group Netherlands B.V.

This product is not suitable for use by children, it is not a toy. Keep (the remote control) out of the reach of children at all times. Frequently examine the installation for imbalance and signs of wear or damage.

In case of ESD pulse (static discharge), when a person touches the Shuttle motor, the motor might stop working. When this happens, disconnect and connect the power plug, and the motor will work as normal again.

Forest Group does not assume liability for resulting damages to persons, animals and/or property, defects, labour on location, service calls, re-installation or expenses involved such as shipping, packing or returning goods, if the product has been abused/modified in any way or damaged by improper use or failure to observe these operating instructions. In this situation, the right to any form of warranty, service and reimbursement of expenses shall cease.