G-Motion

GOELST
curtain rail systems

G-Motion manual EN

6200 electric curtain track system

English

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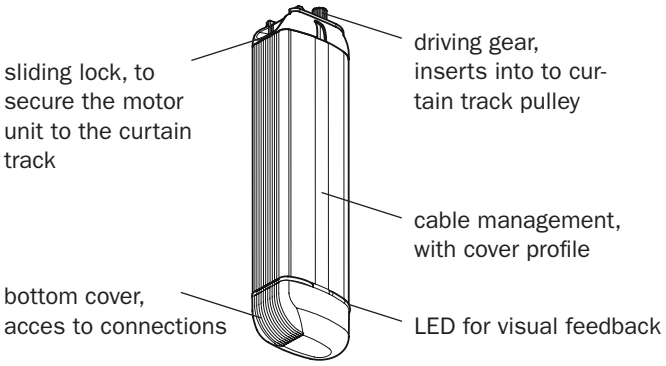
curtain rail systems

English

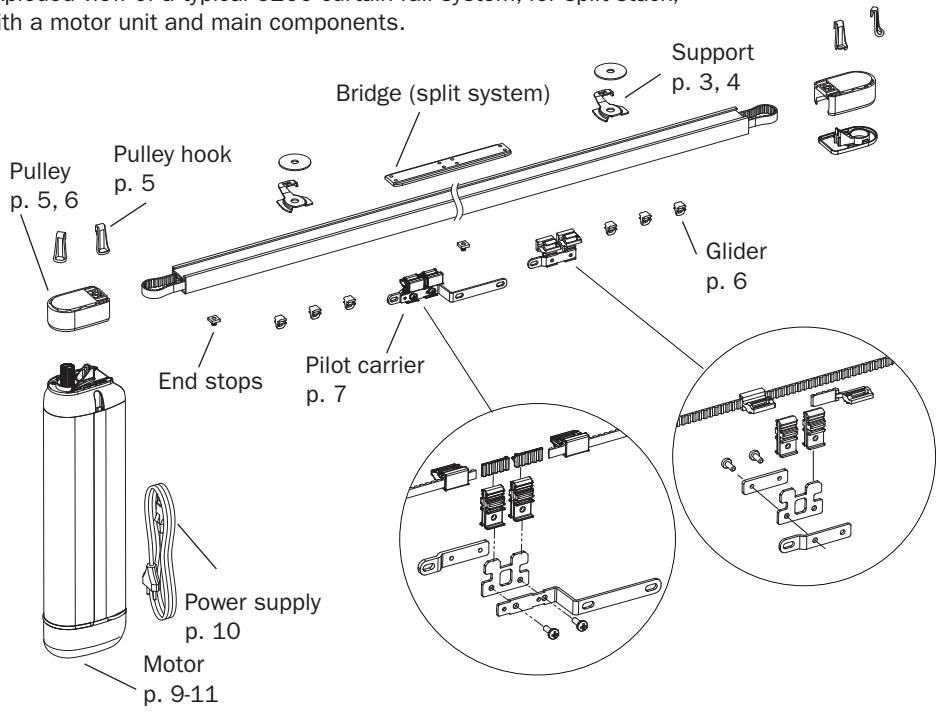
English

1.1 Product overview

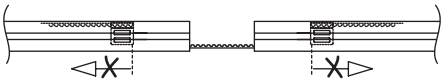
Below, a G-Motion motor unit, with its main functional components.



Exploded view of a typical 6200 curtain rail system, for split stack, with a motor unit and main components.



Attention - If the system is supplied split e.g. for transportation - do not move the elements sideways as indicated
See chapter B1 for re-assembly.



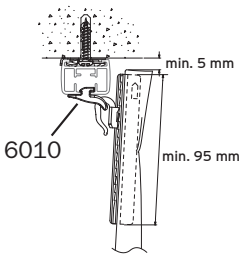
1.2 Fixing guidelines

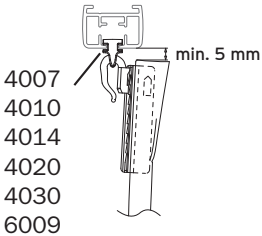
General fixing steps:
- Place ceiling- or wall brackets (p. 2 - 4)
- Place pulley hooks on the pulleys
- Mount rail and place motor unit (p. 5).

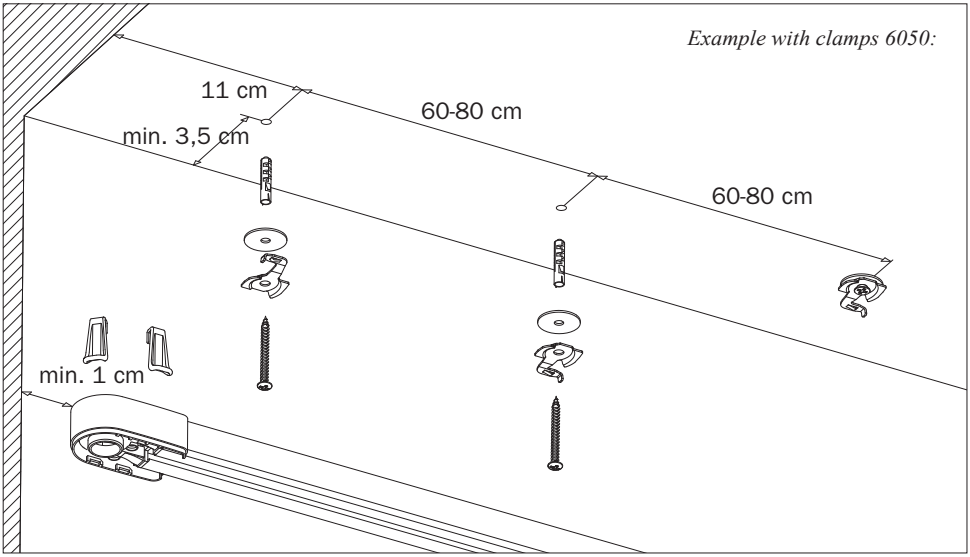
A clearance of at least 1 cm is required between the pulley and the end wall, at the side of the motor unit.

When planning the rail position and the curtain pleating, please consider: An operating clearance should be maintained between curtain and: ceiling, rail, floor finish, wall and possible coving.

Glider types and clearance:





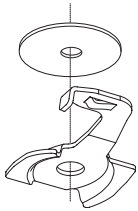


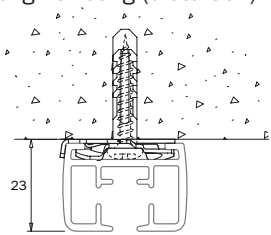
The pulley hooks should be inserted before mounting the rail.

Ceiling fixing with clamp 6050

Ceiling clamps 6050 are suitable for a maximum total curtain weight of 25 kg, (<10 kg/ bracket), otherwise it is advised use 6055-1000 ceiling supports. Fasten each clamp with a pan head screw.

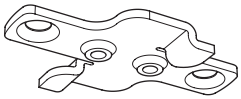
First and last clamp should be fixed at least 11 cm from the end wall to allow for the pulley and curtain fabric around the pulley. The fixing point of the first clamp should be at least 3,5 cm from the parallel wall, this allows the clamp to rotate. This is a minimum value: apply more than 3,5cm to allow the curtain fabric to move freely from the parallel wall. Generally, the clamps are placed every 60 - 80 cm. For heavier curtains (with lining material or blackout fabric), place an additional clamp on each side where a curtain stack is planned. The 6050 clamp is not suitable to re-align twisting (distortion) in the rail.

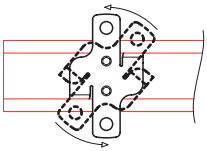


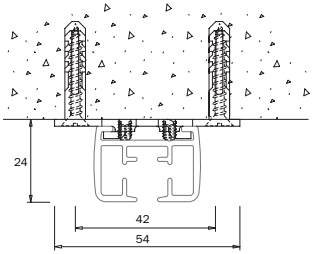


Ceiling fixing with supports 6055-1000

This support is suitable for a total curtain weight of 100 kg (max. 30 kg per bracket). The supports should be placed every 60-80 cm. For heavier curtains (with lining material or blackout fabric), place an extra support on each position (end) where the curtain stacks. Fasten each support with two (countersunk) screws (4,2 cm centre to centre distance). This bracket is suitable to re-align twisting (distortion) in the rail.



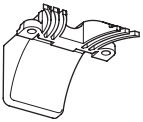


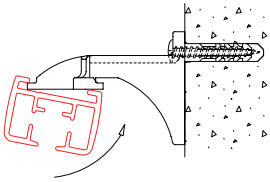


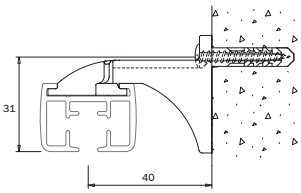
1 Fixing

Wall fixing with synthetic wall support 6051

Secure this support on the wall, with one (pan head) screw in the upper fixing hole. The max. weight per support is 10 kg. Clip the rail onto the support as shown in the diagram. Once installed, the centre of the rail will be 4 cm from the rear wall with the screw hardly visible.

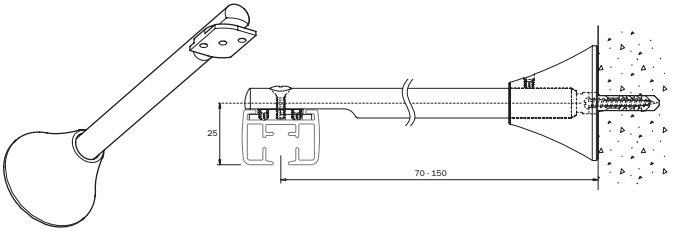




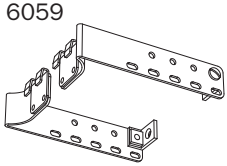


Wall fixing with adjustable bracket 6057

Wall bracket 6057 is used for wall mounting and consists of a boss and adjustable bar with a profile insert nut. The max. weight per support is 10 kg. The insert nut is fastened in to the top of the rail. The support boss is fastened with a single (round-head) screw.
The pin can be cut from 15 cm to a minimum of 7 cm. Wall bracket 6057 can be combined with the 6059 special return set, for a very compact return.

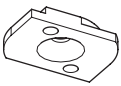


6059

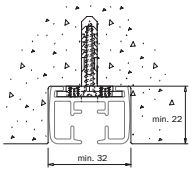


Recessed fixing with special profile nut 6055-2000

Goelst 6200 rail can be recess fixed into the ceiling. The rail must be pre-drilled by Goelst for this purpose. For recess fixing, the special screws supplied with this profile nut must be used. The max. weight per support is 30 kg.



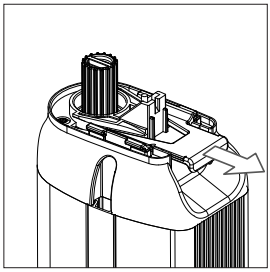
When recess curved rails, use profile as manufactured to determine arc.

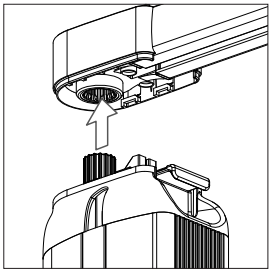


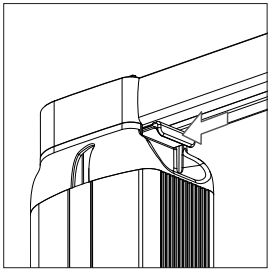
Attention! During installation ensure that the rail and the inside of the profile are not damaged by the screw and/or screwdriver.

Placing the motor-unit

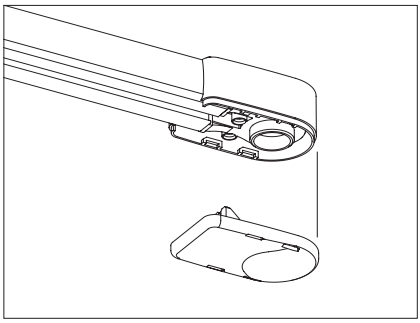
The motor-unit can be connected to the rail (left or right hand end as required) and locked into place once the rail has been fixed to the ceiling or the wall.







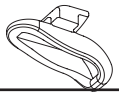
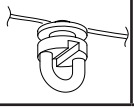
Fit the pulley cover onto the open pulley at the opposite to the motor (the motor-unit can be placed at either the left or right side of the track):



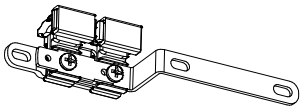
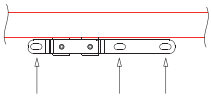
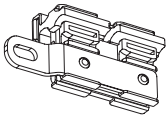
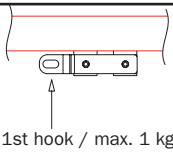
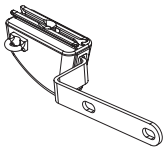
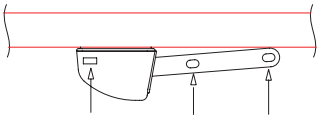
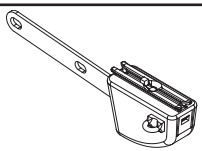
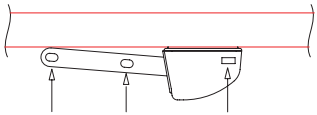
For systems with 2 motors (tandem) the second motor-unit will be placed in this location.

1.3 Glider types

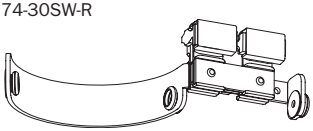
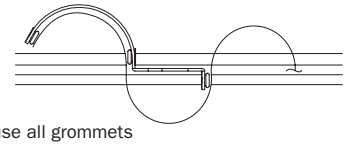
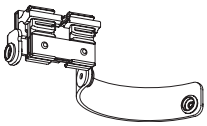
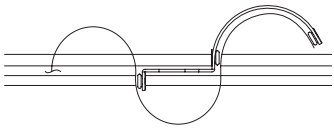
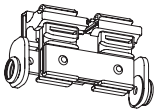
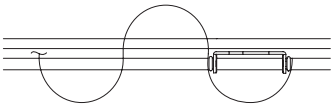
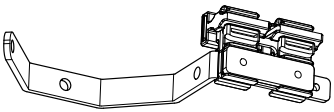
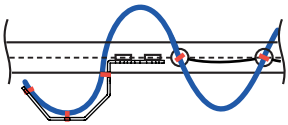
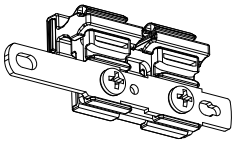
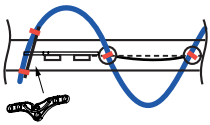
The maximum load per glider should not be exceeded:

Glidertypes		max. load	Glidertypes		
4007		2 kg 4.4 lbs	6009		2 kg 4.4 lbs
4010		3 kg 6.6 lbs	6010		1 kg 2.2 lbs
4020		8 kg 17.6 lbs	4014-10-080 4014-10-100		0,5 kg 1.1 lbs
4030		1,5 kg 3.3 lbs	4014-12-060 4014-12-080		0,5 kg 1.1 lbs

1.4 Pilot runner specifications

standard pilot runner	placing curtain hook
6274-3000 	 3rd 2nd 1st hook max. 1 kg per hook
6275-3000 	 1st hook / max. 1 kg per hook *(this is the pulling eye)*
PRS **(not in combination with CPS)**	Ensure hook/pleat centres at 10 cm minimum
6274-30PR 	 3rd 2nd 1st hook on the 1st and 2nd hook max. 0,25 kg per hook
6275-30PR 	 1st 2nd 3rd hook on the 1st and 2nd hook max. 0,25 kg per hook

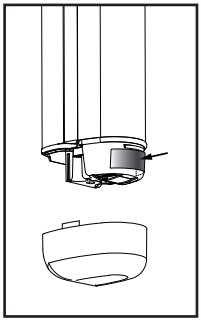
(1.4 Pilot runner specifications)

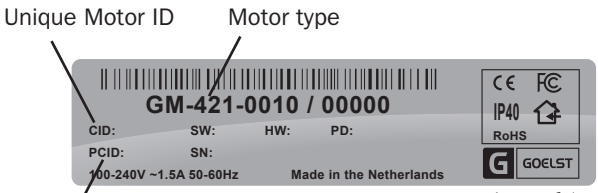
Swing	placing grommets
6274-30SW-R 	 use all grommets
6274-30SW-L 	 use all grommets
6275-30SW 	 use all grommets
Flow	**placing curtain hooks**
6274-30FL 	
6275-30FL 	

English

2.1 System identification

To identify motor unit type, see attached label as shown below:



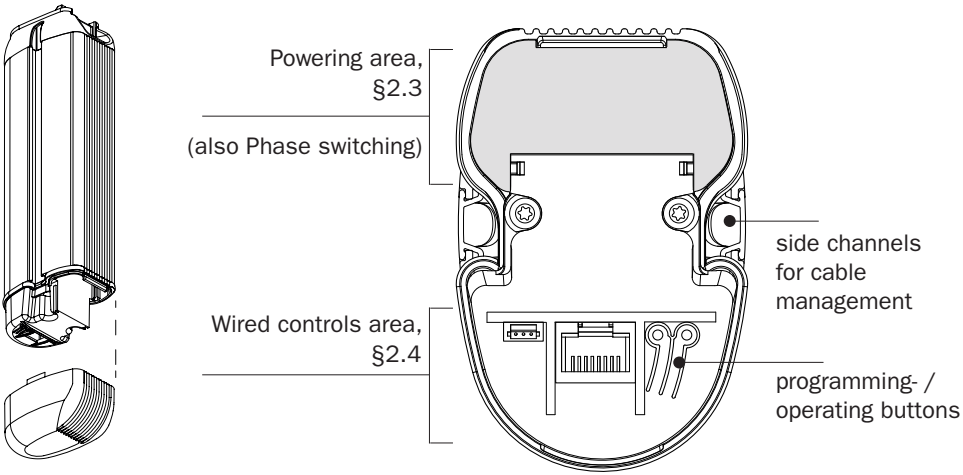


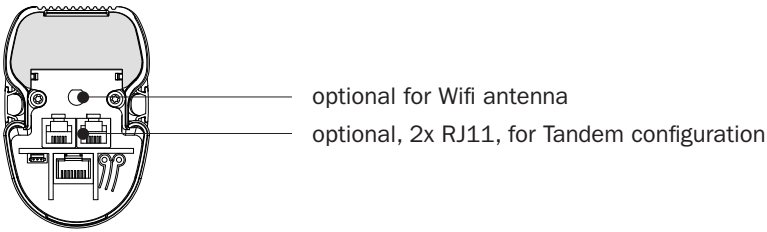
(example)

In tandem systems both motor-units carry a “partner ID” from their partner motor.

2.2 Overview of components

Underside of the motor-unit with bottom cover removed

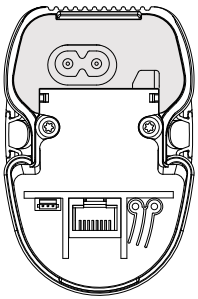




English

2.3 Power supply types

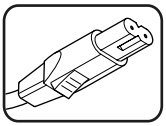
Detailed wiring diagrams are available at www.goelst.com.



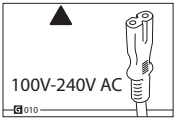
power supply : **100-240**V AC
EU, US or UK cable, C7 plug

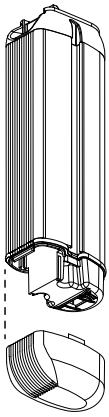
motor type : "GM-x21-xxxx-xxxxx", see label

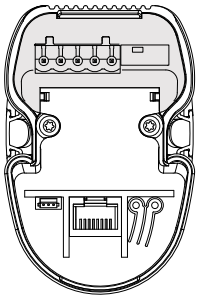
connector :



info tag :



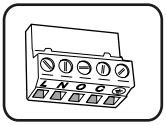




power supply : **100-240V AC , 5P connector**
Phase switched

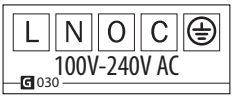
motor type : "GM-x20-xxxx-xxxxx", see label

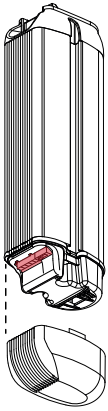
connector :

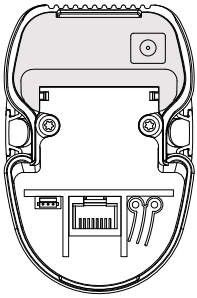


4 or 5 wires

info tag:



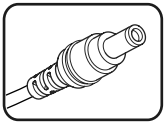




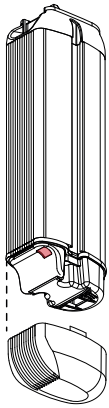
power supply : **24VDC, coaxial power plug,**
2.1 x 5.5 x 10-11mm
- standard transformer
- DIN-transformer

motor type : "GM-x10-xxxx-xxxxx", see label

connector :

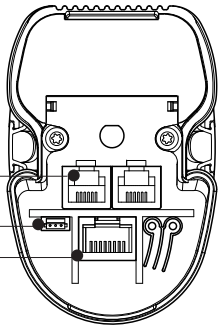


info tag:



2.4 Wired connection types

connections for wired controls, dependent on motor type :



connector	: RJ11 or RJ12 (2x)
protocol	: RS485
use	: tandem systems
connector	: 3 pins
protocol	: analog signal
use	: Dusk/Dawn sensor
connector	: RJ45
protocols	: RS232
use	: dry contact
	: infrared receiver

Detailed pin layouts for RJ11 and RJ45, refer to p. 35.

Detailed wiring diagrams are available at www.goelst.com.

After placing the motor unit on to the curtainrail system and powering the motorunit, the system is now ready for self calibration, see next chapter.

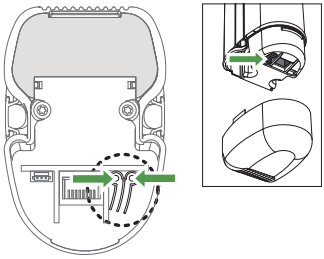
First use: Auto calibration

3.1 Auto calibration

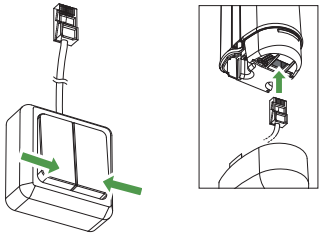
G-Motion motor units execute a self-calibrating routine when used for the first time.
For Motor types GM-x**21**-xxxx/x and GM-x**10**-xxxx/x (NOT for GM-**1**xx-xxxx/x/)

To fine tune end positions during self calibration, these buttons can be used: buttons on motor unit (1) or paddle switch buttons (2).

(1)



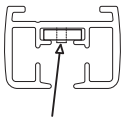
(2)



art. 6048-1001-03

1. Place the motor unit on the curtain rail system as described in Ch1.
2. Place the curtains if possible and then adjust internal endstop(s) if necessary for improved curtain pleating. (art. 6002, Allen key 2mm). These stops are pre-secured and limit the running distance of the pilot carrier. During the auto-calibration cycle below, electronically defined 'soft stops' will be set with the 6002 stops as reference.

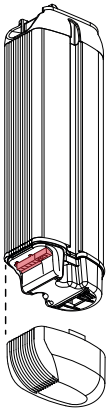
6002



3. Connect an active power source (type depends on motor unit type).
4. Shortly press one of the buttons on the underside of motor unit or the controlling device.
5. The LED on the motor unit now flashes red.
6. The system will run until it is stopped by the internal end stop.
7. The system will move ~1cm in opposite direction and then waits for 5 seconds: within 5 seconds start fine tuning this end position if necessary, using the buttons.
8. After 5 seconds without signal, the calibration cycle continues. The system now runs in opposite direction until it is stopped by the internal end stop.
9. The system will move ~5cms and then waits for 5 seconds: within 5 seconds start fine tuning this end position if necessary, using the buttons.
10. After 5 seconds without signal, the system will finally move another 20cm, the cycle stops and the red LED switches off. CPS mode is switched on automatically. The system is now ready for use.

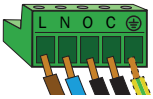
During self calibration, the cycle can be aborted at all times by pressing one of the buttons.

3.2 Auto calibration, GM-x20-xxxx with 5-core connector.



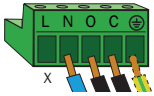
Motor types x20-xxxx.

Motor types with motor code x20-xxxx as shown in the label above, are controlled via a 5P-connector, commonly wired with 5 or 4 wires (incl. GND). To provide power to the motor unit during auto calibration, a special powering cable is needed for the connectors without 'L' connnected:



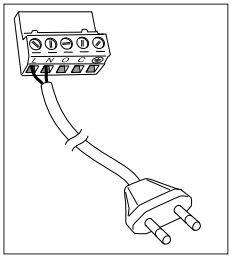
Line - in "L" connected :

G-Motion will auto calibrate normally.



Line - in "L" NOT connected :

To enable the Auto calibration step, a special power cable is required:
(art no 1348-GM04)

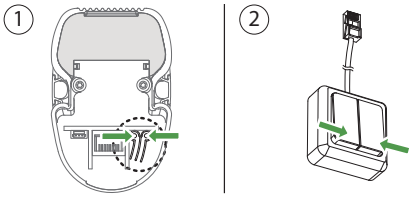


1348-GM04 (EU version)

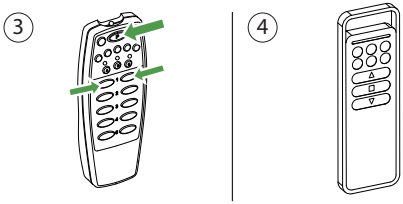
After completing the auto calibration cycle, the power cable (1348-GM04) must be replaced by the 5-P-connector intended for controlling the G-Motion motor unit. Keep the power cable 1348-GM04 cable for future changes in settings.

4.1 Programming Goelst G-Motion motor units

Goelst G-Motion motor units offer a wide range of features for optimal use in many situations. Feature options can be changed and stored using the buttons on the motor unit itself or other controllers. Programming is done with visual feedback from the multicolour LED in the motor unit.



Use this manual to Program and control the G-Motion motor units via buttons on motor unit (1) or switch (2).



To program and control via Radio Frequent signals: Refer to RF Manual

4.2 Overview Programming menus

		LED mode	LED colour
1	Menu 1	ON	White
1.1	End positions	ON	Red
1.2 *)	Set infrared Channels (IR)	ON	Green
1.3 *)	RF	ON	Yellow
	(reserved)		

		LED mode	LED colour
2	Menu 2	blinks slowly	White
2.1	Speed	ON	Red
2.2	DryC. IntermediatePos.	ON	Green
2.3	Light sensor		
2.3.1	Sun sensor	ON	Yellow
2.3.2	Dawn/Dusk sensor	ON	Blue
2.3.3	Sensor mode	ON	Purple
2.4	CPS		
2.4.1	Touch and Go	ON	Orange
2.4.2	Touch and Stop	ON	Light blue

		LED mode	LED colour
3	Menu 3	blinks fast	White
3.1	Control mode	ON	Red
3.2	CW/CCW Inverted input	ON	Green
3.3	Timer	ON	Yellow
	(reserved)		
3.7	Factory settings	ON	Light blue

*) *If you have IR or RF control, see the IR or RF manual for further control and programming options.*

4.3 Programming options

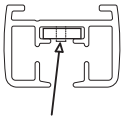
MENU 1

motor LED colour red:

1.1 Set end positions

Note: After 15s. without input, the motor unit quits programming mode.Please read the steps of this feature first before starting.

1. Place the curtains if possible and then adjust internal endstop(s) if necessary for improved curtain pleating. (art. 6002, Allen key 2mm). These stops are pre-secured and limit the running distance of the pilot carrier. During the auto-calibration cycle below, electronically defined 'soft stops' will be set with the 6002 stops as reference.



2. Press and hold both ***OPEN*** and ***CLOSE*** buttons until the LED on the motor unit turns white (~4s.).
3. Repeatedly press ***OPEN*** or ***CLOSE*** until the LED on the motor unit is red.
4. Shortly press both ***OPEN*** and ***CLOSE*** button to enter the feature menu, the LED on the motor unit now flashes red.
5. The system will run until it is stopped by the internal end stop.
6. The system will move ~1cm in opposite direction and then waits for 5 seconds: within 5 seconds start fine tuning this end position if necessary, using the buttons.
7. After 5 seconds without signal, the calibration cycle continues. The system now runs in opposite direction until it is stopped by the internal end stop.
8. The system will move ~5cms and then waits for 5 seconds: within 5 seconds start fine tuning this end position if necessary, using the buttons.
9. After 5 seconds without signal, the system will move 20cm in Open direction.This completes calibration and the red LED on the motor unit switches off. CPS mode is switched on automatically. The system is now ready for use.

1.2 Set IR channels

motor LED colour green:

(See IR manual)

1.3 Set RF channels

motor LED colour yellow:

(See RF manual)

English

MENU 2

2.1 Opening and Closing Speed

motor LED colour red:

Option to select 1 of 4 pre-defined speed settings. Default setting is „Normal“.

Note: After 15s. without input, the motor unit quits programming mode.
Please read the steps of this feature first before starting.

1. Press and hold the ***OPEN***+***CLOSE*** buttons until the LED on the motor unit slowly flashes white (after ~8s.) (First the LED will turn white continuously, keep the button(s) pressed)
2. Repeatedly press ***OPEN*** or ***CLOSE*** until the LED on the motor unit is red.
3. Shortly press the ***OPEN***+***CLOSE*** buttons to enter the feature menu,
4. The LED on the motor unit now flashes red, at the current setting:
5. Cycle through the options below using ***OPEN*** or ***CLOSE:***

   1x flash = Normal speed (Default)
   2x flash = High speed
   3x flash = Low speed
   4x flash = Open at low speed - Close at high speed / Custom speed.
6. Confirm and store setting by shortly pressing ***OPEN***+***CLOSE*** buttons.
7. The LED on the motor unit slowly flashes white again for 15 seconds: using the ***OPEN*** or ***CLOSE*** buttons another MENU 2 feature can be selected.
8. Otherwise, wait for 15 seconds or shortly press the ***OPEN***+***CLOSE*** buttons to quit programming.

The LED on the motor unit switches off, the system is ready to use.

To quit programming at any time, repeatedly press the ***OPEN***+***CLOSE*** *buttons or wait for 15s.*
Changes made at 5 will only be saved if confirmed by pressing the ***OPEN***+***CLOSE*** buttons.

2.2 Intermediate positions

motor LED colour green:

Define up to 5 intermediate curtain stopping positions, in between the systems end positions. Default is setting is none. Described below for Dry contact.

Intermediate positions can quickly be recalled by pressing 2x ***OPEN*** or 2x ***CLOSE,*** within 2s. The system moves in indicated direction until it reaches next intermediate position.

It is required that at feature 3.1 (p.28) „control mode 1“ is active (default is active).
Note: After 15s. without input, the motor unit quits programming mode.
Please read the steps of this feature first before starting.

SET / ERASE intermediate positions

1. Using ***OPEN*** or ***CLOSE*** buttons, move the curtain in a desired position, to set a new intermediate position or to erase an existing one.
2. Press and hold the ***OPEN***+***CLOSE*** buttons until the LED on the motor unit slowly flashes white (after ~8s.) (First the LED will turn white continuously, keep the button(s) pressed)
3. Repeatedly press ***OPEN*** or ***CLOSE*** until the LED on the motor unit is green.
4. Shortly press the ***OPEN***+***CLOSE*** buttons to enter the feature menu.
5. The LED on the motor unit now flashes green, at setting 1 (1x flash):
6. Cycle through the options below using ***OPEN*** or ***CLOSE:***

   1x flash = intermediate position 1 (Default)
   2x flash = intermediate position 2
   3x flash = intermediate position 3
   4x flash = intermediate position 4
   5x flash = intermediate position 5

7. Confirm and store setting by shortly pressing ***OPEN***+***CLOSE*** buttons: The position is stored as new ***OR*** as replacement in case of an existing position setting.
8. The LED on the motor unit slowly flashes white again for 15 seconds: using the ***OPEN*** or ***CLOSE*** buttons another MENU 2 feature can be selected.
9. Otherwise, wait for 15 seconds or shortly press the ***OPEN***+***CLOSE*** buttons to quit programming.

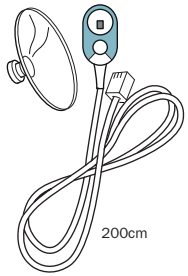
The LED on the motor unit switches off, the system is ready to use.

To store another intermediate position, repeat § 2.2 entirely.
To quit programming at any time, repeatedly press the ***OPEN+CLOSE*** *buttons or wait for 15s.*
Changes made at 6 will only be saved if confirmed by pressing the ***OPEN***+***CLOSE*** *buttons.*

2.3 Light sensor

The advanced Goelst Light sensor offers

1) **Sun light** related sensitivity
2) **Dawn/Dusk** related sensitivity
3) detailed **behaviour** settings



Default setting for both Sun and Dawn/Dusk sensitivity is „Standard“
see § 2.3.1 and § 2.3.2

Default setting for overall behaviour is „Close at Dusk“.
see § 2.3.3.

2.3.1 Sun light sensitivity

motor LED colour yellow:

To use the Sun sensor, define its sensitivity (see below) AND its behaviour (§ 2.3.3).

Connect the Goelst light sensor to the underside of the motor unit via the RJ45 plug.
Make sure that the sensor is properly placed and oriënted correctly towards the light source.

If light intensity exceeds set intensity for more than 5 mins. uninterrupted the sensor generates a close signal.
If light intensity stays below set intensitiy for more than 15 mins. uninterrupted the sensor generates an open signal.
The response to these signals can be defined in § 2.3.3.

If a Sun light induced event is overruled by another controlling signal (manual operation, time controlled, remote control), the sensors Sun signal will be ignored for 4 hrs.
The Sun sensor signal is effective again after these 4 hrs. or after a power cut.

Note: Dawn/Dusk events are not affected by an overruled Sun sensor event.
After 15s. without input, the motor unit quits programming mode.
Please read the steps of this feature first before starting.

SET Sun light sensitivity

1. Press and hold the ***OPEN***+***CLOSE*** buttons until the LED on the motor unit slowly flashes white (after ~8s.) (First the LED will turn white continuously, keep the button(s) pressed)
2. Repeatedly press ***OPEN*** or ***CLOSE*** until the LED on the motor unit is yellow.
3. Shortly press the ***OPEN***+***CLOSE*** buttons to enter the feature menu,
4. The LED on the motor unit now flashes yellow at the current setting:
5. Cycle through the options below using ***OPEN*** or ***CLOSE:***

   1x flash = Normal sun intensity (Default)
   2x flash = Low sun intensity
   3x flash = High sun intensity
   4x flash = current sun intensity
6. Confirm and store setting by shortly pressing ***OPEN***+***CLOSE*** buttons.
7. The LED on the motor unit slowly flashes white again for 15 seconds: using the ***OPEN*** or ***CLOSE*** buttons another MENU 2 feature can be selected.
8. Otherwise, wait for 15 seconds or shortly press the ***OPEN***+***CLOSE*** buttons to quit programming.

The LED on the motor unit switches off, the system is ready to use.

To quit programming at any time, repeatedly press the ***OPEN***+***CLOSE*** *buttons or wait for 15s.*
Changes made at 5 will only be saved if confirmed by pressing the ***OPEN***+***CLOSE*** *buttons.*

2.3.2 Dawn/Dusk light sensitivity

motor LED colour blue:

To use the Dawn/Dusk sensor, define its sentibility (see below) AND its behaviour (§ 2.3.3).

Connect the Goelst light sensor to the underside of the motor unit via the RJ45 plug.
Make sure that the sensor is properly placed and oriënted correctly towards the light source.

If light intensity exceeds set intensity for more than 5 mins. uninterrupted the sensor generates an open signal (Dawn).
If light intensity stays below set intensitiy for more than 5 mins. uninterrupted the sensor generates a close signal (Dusk).
The response to these signals can be defined in § 2.3.3.

If a Dawn/Dusk light induced event is overruled by another controlling signal (manual operation, time controlled, remote control), the sensors Dawn/Dusk signal will be ignored for 4 hrs. The Dawn/Dusk sensor signal is effective again after these 4 hrs. or after a power cut.

Note: Sun light events are not affected by an overruled Dawn/Dusk sensor event.
After 15s. without input, the motor unit quits programming mode.
Please read the steps of this feature first before starting.

SET Dawn/Dusk sensitivity

1. Press and hold the ***OPEN***+***CLOSE*** buttons until the LED on the motor unit slowly flashes white (after ~8s.) (First the LED will turn white continuously, keep the button(s) pressed)
2. Repeatedly press ***OPEN*** or ***CLOSE*** until the LED on the motor unit is blue.
3. Shortly press the ***OPEN***+***CLOSE*** buttons to enter the feature menu,
4. The LED on the motor unit now flashes blue at the current setting:
5. Cycle through the options below using ***OPEN*** or ***CLOSE:***

   1x flash = average light intensity (Default)
   2x flash = below average light intensity
   3x flash = above average light intensity
   4x flash = current light intensity
6. Confirm and store setting by shortly pressing ***OPEN***+***CLOSE*** buttons.
7. The LED on the motor unit slowly flashes white again for 15 seconds: using the ***OPEN*** or ***CLOSE*** buttons another MENU 2 feature can be selected.
8. Otherwise, wait for 15 seconds or shortly press the ***OPEN***+***CLOSE*** buttons to quit programming.

The LED on the motor unit switches off, the system is ready to use.

*To quit programming at any time, repeatedly press the **OPEN**+**CLOSE** buttons or wait for 15s.*
*Changes made at 5 will only be saved if confirmed by pressing the **OPEN**+**CLOSE** buttons.*

English

2.3.3 Light Sensor behaviour

motor LED colour purple:

To make use of the light sensor, define its response to Sun light signals and Dawn/Dusk light signals. There are 8 preset patterns available.

Note: After 15s. without input, the motor unit quits programming mode.
Please read the steps of this feature first before starting.

SET Light sensor behaviour

1. Press and hold the ***OPEN***+***CLOSE*** buttons until the LED on the motor unit slowly flashes white (after ~8s.) (First the LED will turn white continuously, keep the button(s) pressed)
2. Repeatedly press ***OPEN*** or ***CLOSE*** until the LED on the motor unit is purple.
3. Shortly press the ***OPEN***+***CLOSE*** buttons to enter the feature menu,
4. The LED on the motor unit now flashes purple at the current setting:
5. Cycle through the options below using ***OPEN*** or ***CLOSE:***

LED	Dawn/Dusk		Sun	
	OPEN	CLOSE	OPEN	CLOSE
1x flash *)	**Off**	**On**	**Off**	**Off**
2x flash	**On**	**On**	**On**	**On**
3x flash	**Off**	**Off**	**On**	**On**
4x flash	**On**	**On**	**Off**	**Off**
5x flash	**Off**	**On**	**On**	**On**
6x flash	**On**	**On**	**Off**	**On**
7x flash	**Off**	**Off**	**Off**	**On**
8x flash	**Off**	**Off**	**Off**	**Off**

*) Default setting

6. Confirm and store setting by shortly pressing ***OPEN***+***CLOSE*** buttons.
7. The LED on the motor unit slowly flashes white again for 15 seconds: using the ***OPEN*** or ***CLOSE*** buttons another MENU 2 feature can be selected.
8. Otherwise, wait for 15 seconds or shortly press the ***OPEN***+***CLOSE*** buttons to quit programming.

The LED on the motor unit switches off, the system is ready to use.

*To quit programming at any time, repeatedly press the **OPEN**+**CLOSE** buttons or wait for 15s.*
*Changes made at 5 will only be saved if confirmed by pressing the **OPEN**+**CLOSE** buttons.*

2.4 CPS: Curtain Protection System

(only GM-**4**xx-xxxx Series)

CPS is an intelligent declutching mechanism, it allows to manually operate the curtains.
Touch and go: If a stationary hanging curtain is pulled sideways along the system, CPS will detect movement and the curtain will automatically open or close depending on the pulling direction.
Touch and Stop: Similarly, if a curtain is already moving, the movement can be stopped by pulling the curtain in opposite direction from which it is moving.
Manual override: CPS also allows manual operation of the curtains of G-Motion electric curtain rail systems in case of a power cut. When power returns *and* the curtain has been moved during the power cut, the system starts recalibrating after the first controlling signal. Touch and Go or Touch and Stop are set independently in § 2.4.1 and § 2.4.2 below.

Note: CPS response is subject to curtain weight, system layout and chosen treshold values.
CPS is meant as a manual overruling possibility or for occasional use in case the user is unaware that the system is electrically operated; CPS is not suitable as standard controlling option.
Disclaimer: Though risk of damage is reduced by CPS, CPS cannot entirely prevent curtains or curtain rail systems from being damaged. CPS is not advised for use in sloped systems.

2.4.1 Touch and Go

motor LED colour orange:

Touch and Go sensitivity is adjustable. For example at higher sensitivity, the motor unit will pick up de manual operation sooner than at average sensitivity. At lower sensitivity setting, a larger manual move of the curtain is needed before the motor unit takes over.
This function can also be switched off.

Note: After 15s. without input, the motor unit quits programming mode.
Please read the steps of this feature first before starting.

1. Press and hold the ***OPEN***+***CLOSE*** buttons until the LED on the motor unit slowly flashes white (after ~8s.) (First the LED will turn white continuously, keep the button(s) pressed)
2. Repeatedly press ***OPEN*** or ***CLOSE*** until the LED on the motor unit is orange.
3. Shortly press the ***OPEN***+***CLOSE*** buttons to enter the feature menu,
4. The LED on the motor unit now flashes orange at the current setting:
5. Cycle through the options below using ***OPEN*** or ***CLOSE:***

   1x flash = average sensitivity (Default)
   2x flash = lower sensitivity
   3x flash = higher sensitivity
   4x flash = Off
6. Confirm and store setting by shortly pressing ***OPEN***+***CLOSE*** buttons.

7. The LED on the motor unit slowly flashes white again for 15 seconds: using the ***OPEN*** or ***CLOSE*** buttons another MENU 2 feature can be selected.
8. Otherwise, wait for 15 seconds or shortly press the ***OPEN***+***CLOSE*** buttons to quit programming.

The LED on the motor unit switches off, the system is ready to use.

*To quit programming at any time, repeatedly press the **OPEN**+**CLOSE** buttons or wait for 15s.*
*Changes made at 5 will only be saved if confirmed by pressing the **OPEN**+**CLOSE** buttons.*

2.4.2 Touch and Stop

motor LED colour light blue:

Touch and Stop self-calibrates during the first 3 completed runs of the system, after resetting (new) end postitions, changes in speed settings or after reactivating the feature.
Touch and Stop feacture has 2 settings: On or Off.
In some cases the Touch and Stop feature might not function as expected: this is the case when curtain fabric causes friction with floor, walls or the curtain track itself.
Or in case of any other source of resistance, causing the Touch and Stop function to be activated.
Touch and Stop auto-calibrates at regular intervals, but in cases it can be advised to start self calibration by switching this feature off and on again. If unexpected stopping of the system remains, it is advised to switch off this feature.

Note: After 15s. without input, the motor unit quits programming mode.
Please read the steps of this feature first before starting.

1. Press and hold the ***OPEN***+***CLOSE*** buttons until the LED on the motor unit slowly flashes white (after ~8s.) (First the LED will turn white continuously, keep the button(s) pressed)
2. Repeatedly press ***OPEN*** or ***CLOSE*** until the LED on the motor unit is light blue.
3. Shortly press the ***OPEN***+***CLOSE*** buttons to enter the feature menu,
4. The LED on the motor unit now flashes light blue at the current setting:
5. Cycle through the options below using ***OPEN*** or ***CLOSE:***

   1x flash = On (Default)
   2x flash = Off
6. Confirm and store setting by shortly pressing ***OPEN***+***CLOSE*** buttons.
7. The LED on the motor unit slowly flashes white again for 15 seconds: using the ***OPEN*** or ***CLOSE*** buttons another MENU 2 feature can be selected.
8. Otherwise, wait for 15 seconds or shortly press the ***OPEN***+***CLOSE*** buttons to quit programming.

The LED on the motor unit switches off, the system is ready to use.

*To quit programming at any time, repeatedly press the **OPEN**+**CLOSE** buttons or wait for 15s.*
*Changes made at 5 will only be saved if confirmed by pressing the **OPEN**+**CLOSE** buttons.*

MENU 3

3.1 Operation mode

3 different operation modes are available, defining how the motor unit responds to ***OPEN*** and ***CLOSE*** commands from 1- or 2-button controls.
Settings:

Mode 1 : Standard 2-button operation (default setting)
button press < 1s.: system moves to end postition
button press > 1s.: system moves for the duration of the connection or button press

Mode 2 : Inverted 2-button operation ('vertical blinds' setting)
button press < 3s.: system moves for the duration of the connection or button press
button press > 3s.: system moves to end postition

Note: recalling intermediate positions or programming end positions for the first time is not possible when mode 2 is active.

Mode 3 : 1-button operation
button press < 1s. : system closes, opens or stops

1. When the system is in one of its end positions:
   - > move to opposite end position.
2. When the system is moving:
   - > STOP
3. After a stop, press button again within 2s:
   - > move in opposite direction
4. After a stop, press button again after 2s:
   - > continue in same direction

Note: recalling intermediate positions is not possible when this feature setting is active.
After 15s. without input, the motor unit quits programming mode.
Please read the steps of this feature first before starting.

SET Operation mode motor LED colour red:

1. Press and hold the ***OPEN***+***CLOSE*** buttons until the LED on the motor unit flashes white at high speed (after ~12s.)

(First the LED will turn white continuously, then flashes white slowly, keep pressed until the LED flashes white at high speed)

2. Repeatedly press ***OPEN*** or ***CLOSE*** until the LED on the motor unit is red.
3. Shortly press the ***OPEN***+***CLOSE*** buttons to enter the feature menu,
4. The LED on the motor unit now flashes red at the current setting:
5. Cycle through the options below using ***OPEN*** or ***CLOSE:***

1x flash = Standard 2-button operation (Default)

English

2x flash = Inverted 2-button operation

3x flash = 1-button operation

6. Confirm and store setting by shortly pressing ***OPEN***+***CLOSE*** buttons.
7. The LED on the motor unit flashes white at high speed again for 15 seconds: using the ***OPEN*** or ***CLOSE*** buttons another MENU 3 feature can be selected.
8. Otherwise, wait for 15 seconds or shortly press the ***OPEN***+***CLOSE*** buttons to quit programming.

The LED on the motor unit switches off, the system is ready to use.

*To quit programming at any time, repeatedly press the **OPEN**+**CLOSE** buttons or wait for 15s.*
*Changes made at 5 will only be saved if confirmed by pressing the **OPEN**+**CLOSE** buttons.*

3.2 Inverted input

Reverse the rotation of the motor unit: ***OPEN*** becomes ***CLOSE*** and vice versa.

After 15s. without input, the motor unit quits programming mode.
Please read the steps of this feature first before starting.

SET Inverted input motor LED colour green:

1. Press and hold the ***OPEN***+***CLOSE*** buttons until the LED on the motor unit flashes white at high speed (after ~12s.)

(First the LED will turn white continuously, then flashes white slowly, keep pressed until the LED flashes white at high speed)

2. Repeatedly press ***OPEN*** or ***CLOSE*** until the LED on the motor unit is green.
3. Shortly press the ***OPEN***+***CLOSE*** buttons to enter the feature menu,
4. The LED on the motor unit now flashes green at the current setting:
5. Cycle through the options below using ***OPEN*** or ***CLOSE:***

1x flash = Normal input (Default)

2x flash = Inverted input

6. Confirm and store setting by shortly pressing ***OPEN***+***CLOSE*** buttons.
7. The LED on the motor unit flashes white at high speed again for 15 seconds: using the ***OPEN*** or ***CLOSE*** buttons another MENU 3 feature can be selected.
8. Otherwise, wait for 15 seconds or shortly press the ***OPEN***+***CLOSE*** buttons to quit programming.

The LED on the motor unit switches off, the system is ready to use.

*To quit programming at any time, repeatedly press the **OPEN**+**CLOSE** buttons or wait for 15s.*
*Changes made at 5 will only be saved if confirmed by pressing the **OPEN**+**CLOSE** buttons.*

3.3 Timer

motor LED colour yellow:

The built-in timer offers a 24hr function and a showroom function.
With the 24hr function a usage pattern can be recorded, which then will repeat and operate the system automatically every 24hrs.
The Showroom setting (option 5 in menu) is a demo setting for showrooms, fairs and shop displays.
With the Showroom setting active, the system moves at 15s intervals from end position to end position, to attract attention. The LED will show a colour palette.

24hrs Timer
The built-in 24hrs timer is a self learning timer, that can record up to 4 events which will be replayed every 24 hrs.

1. **24hrs Timer: Erase**
   Reset the 24hrs Timer with option 1 in the menu, this erases recorded events and switches the timer off. The LED on the motor unit is off.

2. **24hrs Timer: On**
   After learning mode, the timer is automatically set to 'ON' and recorded events will be replayed every 24hrs. While 24hrs Timer is 'ON', the LED on the motor unit displays a short yellow signal every 20s.
   The 24hrs TImer can only be 'ON' if events have been recorded.

3. **24hrs Timer: Pause**
   The 24hrs Timer can be paused without losing the recorded events.
   While 24hrs Timer is 'Paused', the LED on the motor unit displays 2 short yellow signals every 20s.
   By selecting 24hrs Timer 'ON'. the timer will restart recorded events at their originally recorded time of day.

4. **24hrs Timer: Learning mode**
   By acivating the learing mode (option 4 in menu) the timer wil record max. 4 events during max. 24hrs. Until recording mode ends, the LED on the motor unit slowly flashes yellow. Note: By activating the learing mode (option 4 in menu), previous recordings will be erased.

After 15s. without input, the motor unit quits programming mode.
Please read the steps of this feature first before starting.
In case of a Power Cut the timer will be reset, unless the motor unit is provided with an accu pack.

SET 24hrs Timer

1. Press and hold the ***OPEN***+***CLOSE*** buttons until the LED on the motor unit flashes white at high speed (after ~12s.)

(First the LED will turn white continuously, then flashes white slowly, keep pressed until the LED flashes white at high speed)

2. Repeatedly press ***OPEN*** or ***CLOSE*** until the LED on the motor unit is yellow.
3. Shortly press the ***OPEN***+***CLOSE*** buttons to enter the feature menu,
4. The LED on the motor unit now flashes yellow at the current setting:
5. Cycle through the options below using ***OPEN*** or ***CLOSE:***

1x flash	= Off / Reset all recorded events (Default)
2x flash	= 24hrs Timer ON
3x flash	= Pause all recorded events
4x flash	= Learning mode
5x flash	= Showroom Timer ON

6. Confirm and store setting by shortly pressing ***OPEN***+***CLOSE*** buttons.
7. The LED on the motor unit flashes white at high speed again for 15 seconds: using the ***OPEN*** or ***CLOSE*** buttons another MENU 3 feature can be selected.
8. Otherwise, wait for 15 seconds or shortly press the ***OPEN***+***CLOSE*** buttons to quit programming.

The LED on the motor unit switches off, the system is ready to use.

*To quit programming at any time, repeatedly press the **OPEN**+**CLOSE** buttons or wait for 15s.*
*Changes made at 5 will only be saved if confirmed by pressing the **OPEN**+**CLOSE** buttons.*

3.4 - 3.6 (Reserved)

3.7 Factory settings

Switch to Factory settings, recalling all default settings, being option 1 in every settings menu. This erases all changes made. When making settings after choosing this feature, the motor unit behaves as a new motor unit.

After 15s. without input, the motor unit quits programming mode.
Please read the steps of this feature first before starting.

SET Factory settings motor LED colour light blue:

1. Press and hold the ***OPEN***+***CLOSE*** buttons until the LED on the motor unit flashes white at high speed (after ~12s.)

(First the LED will turn white continuously, then flashes white slowly, keep pressed until the LED flashes white at high speed)

2. Repeatedly press ***OPEN*** or ***CLOSE*** until the LED on the motor unit is light blue.
3. Shortly press the ***OPEN***+***CLOSE*** buttons to enter the feature menu,
4. The LED on the motor unit now flashes light blue.

ATTENTION: IN THE NEXT STEP, ALL SAVED CHANGES WILL BE ERASED AND THE MOTOR UNIT IS PUT BACK TO IS FACTORY SETTINGS. TO SKIP, WAIT 15S. UNTIL THE LED ON THE MOTOR UNIT SWITCHES OFF.

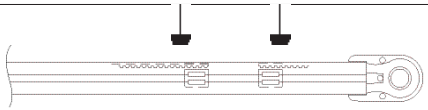
5. Confirm by shortly pressing ***OPEN***+***CLOSE*** buttons: the motor unit has been put back in its factory settings.
6. The LED on the motor unit flashes white at high speed again for 15 seconds: using the ***OPEN*** or ***CLOSE*** buttons another MENU 3 feature can be selected.
7. Otherwise, wait for 15 seconds or shortly press the ***OPEN***+***CLOSE*** buttons to quit programming.

The LED on the motor unit switches off, the system is ready to use.

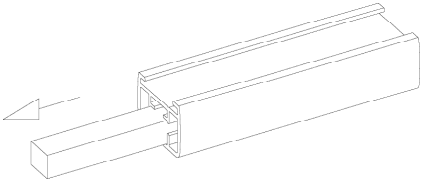
To quit programming at any time, repeatedly press the ***OPEN***+***CLOSE*** *buttons or wait for 15s.*
Changes made at 5 will only be saved if confirmed by pressing the ***OPEN***+***CLOSE*** *buttons*.

English

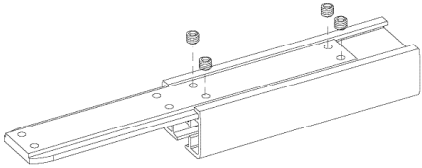
During the next steps these components should not move away from each other.



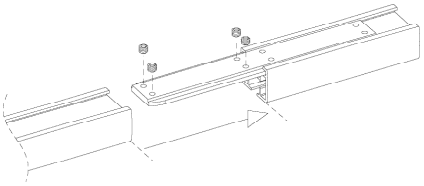
1. Remove transit packaging.



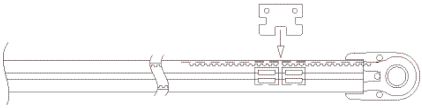
2. Connecting bridge pre-mounted with screws in one rail-end.
   Do not over tighten the grub screws as this will deform the rail.



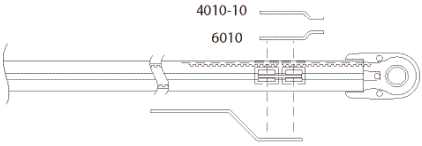
3. Connect to the other rail.
   Do not over tighten the grub screws as this will deform the rail.



4. Connect the pilot-elements with the U-shaped bridge.



5. Place the overlap carrier.



6. To test the rail, first slide the pilot runner along the entire rail before placing the motor-unit.

7. Install and commission rail.
   (chapter 2-4)

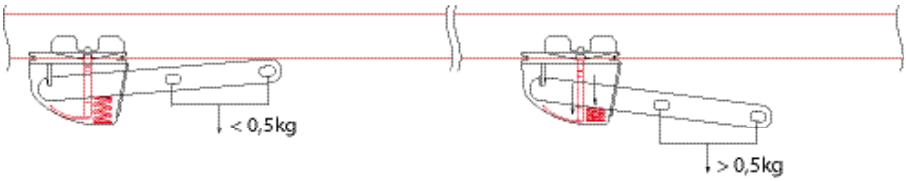
Pilot Release System, mechanical. (not in combination with CPS)
Pilot Release System, allows curtains to be operated by hand in the event of emergency, power failure and/or product unfamilarity. For 6200, 6200-T and 6300. Maximum curtain weight on the metal carrier-arm: 0,5 kg.

curtain height	weight
3 m	500 gr/m²
4 m	400 gr/m²
5,5 m	300 gr/m²

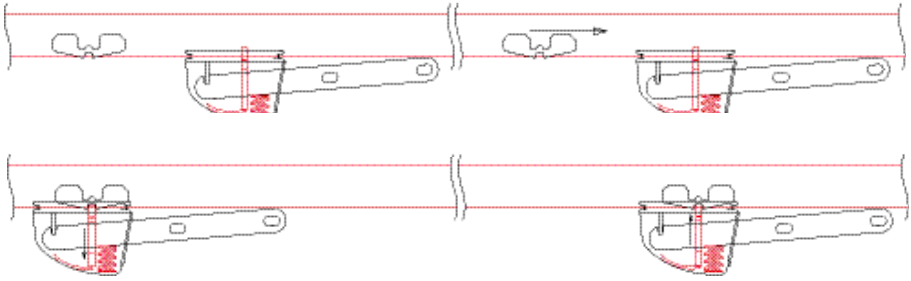
guidelines for curtain weight by different curtain height
minimum hanging height: 2,5m

For specifications of the pilot runner PRS see chapter 1

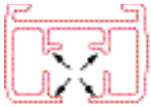
Function
Disconnect: The PRS device has a weight hanging maximum of 0.5 kg. When this weight is exceeded, the system automatically disconnects and the system will no longer work. In order to disconnect the PRS a force greater than 1.5 kg is required. The system can disconnect in the open and close direction. In a split stacked system also one stack can be disconnected.

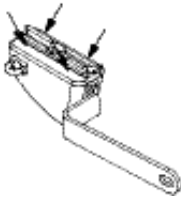


Operation: When the PRS is disconnected it can be re-connected electrically or by hand. The left image shows how the system is connected by hand. The right image shows how the system is connected electrically.



Lubricate
Using silicone spray - lubricate rail and faces of PRS-housing sparingly where shown. See also chapter B7.





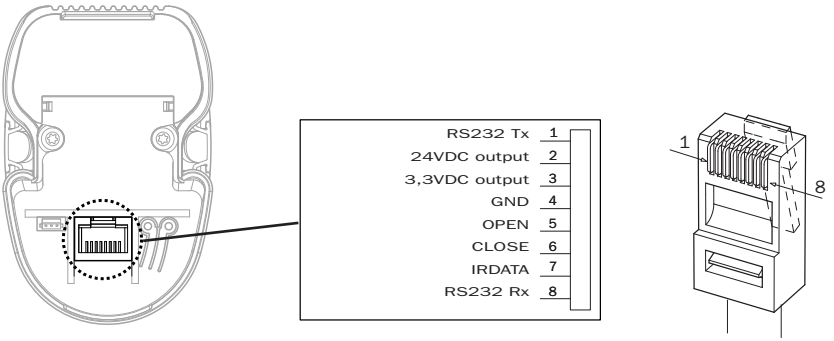
Programmeer principes (En)

Basic principles for programming

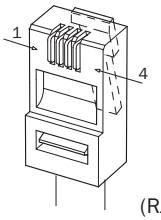
		Enter Programming mode
1.		Enter Programming menu's by pressing both ***OPEN*** + ***CLOSE***: release after 4 [s] for menu 1, when LED switches on (white) release after 8 [s] for menu 2, when LED blinks slowly (white) release after 12 [s] for menu 3, when LED blinks fast (white)
		Making changes
2.		Within the menu, cycle forward or backwards through the coloured features using ***OPEN*** or ***CLOSE*** button. Only available options (colours) will be shown.
3.		To enter the desired feature, shortly press both ***OPEN*** + ***CLOSE***: coloured LED starts flashing:
	3.A	The number of flashes shows the current feature-setting. Cycle forward or backwards through the settings using ***OPEN*** or ***CLOSE***. Each setting is represented by a certain flash count.
		or
	3.B	The unit is ready to communicate with a secondary device, like Remote Control to set channels or to pair with Bluetooth. - When data is received and stored the LED is ON GREEN shortly; - When previous data is deleted the LED is ON RED shortly; The LED starts blinking again in order to process new information.
4.		Confirm feature-setting by shortly pressing both ***OPEN*** + ***CLOSE*** (< 2 [s]) Program returns to previous white menu.
		Switch between Programming menus 1, 2 and 3
5.		At any moment during programming, press and hold both ***OPEN*** + ***CLOSE***: release after 4 [s] : current Programming menu (white LED); release per 4 [s] interval : next Programming menu appears (white LED). A round-robin approach is used: after Programming menu 3, Programming menu 1 is reached again.
		Quit Programming
6.		To quit programming menus 1, 2 and 3 without entering a feature menu: - press both ***OPEN*** + ***CLOSE*** shortly or - wait for >15 [s] To quit programming from within the feature menu (no changes): - wait for >15 [s]
7.		When the user does not press a button > 15 [s] AND no changes are made and stored, the unit quits programming without any changes. The User mode is activated.

connector : RJ45
protocols : RS232
use : Dry contact
: infrared receiver

pin layout RJ45:

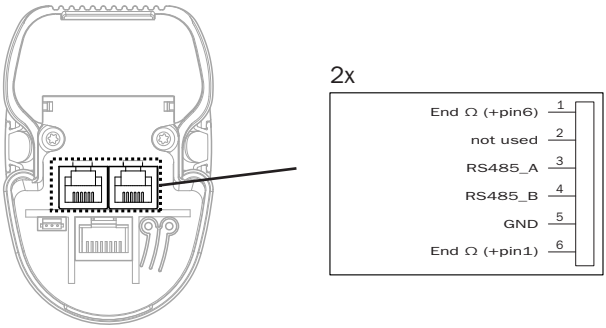


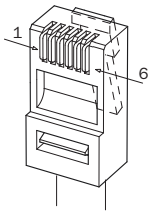
connector : RJ11 - 4 pins.
RJ12 - 6 pins, for End motor setting.
protocols : RS485
use : Tandem systems



(RJ11)

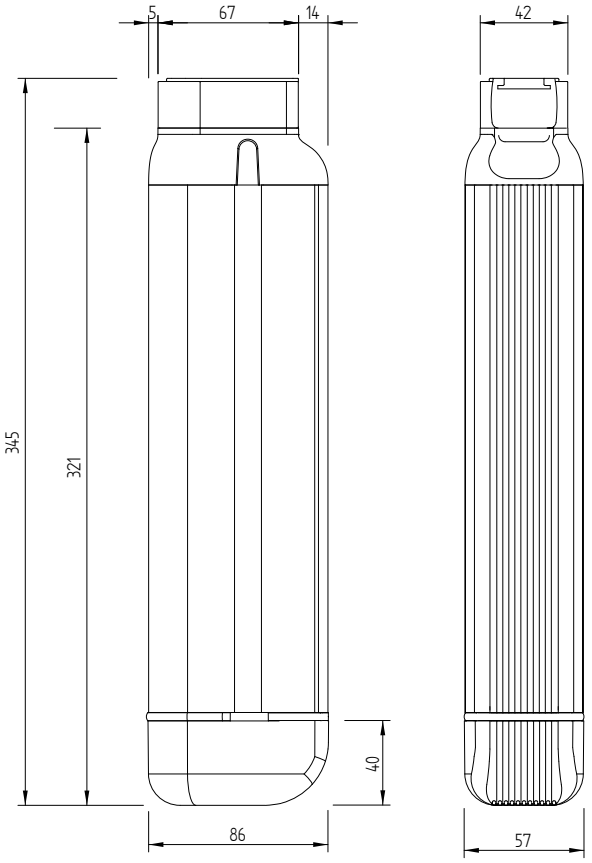
pin layout RJ11/ RJ12:





(RJ12)

Technical specifications



Load table - 6200 system

maximum curtain weight

motor type example 'GM-4' : all motors with product code starting with GM-4		GM-4	GM-6	Tandem GMT-6	Tandem GMT-6	GM-1		Tandem GMT-1	
Curvature	**Glider**	**< 10 m / 33 ft**	**< 12 m / 39 ft**	**< 12 m / 39 ft**	**< 18 m / 59 ft**	**< 24 m / 79 ft**		**< 30 m / 98 ft**	
						single	split	single	split
Straight	4010, 4020, 4030	40 kg / 88 lbs	60 kg / 132 lbs	100 kg / 220 lbs	80 kg / 176 lbs	80 kg / 176 lbs	100 kg / 220 lbs	100 kg / 220 lbs	180 kg / 396 lbs
	6010		40 kg / 88 lbs	60 kg / 132 lbs	-	-	-	-	-
1 curve or multiple curves ≤ 90° in total	4010, 4020, 4030	30 kg / 66 lbs	50 kg / 110 lbs	90 kg / 198 lbs	70 kg / 154 lbs	70 kg / 154 lbs	90 kg / 198 lbs	90 kg / 198 lbs	170 kg / 374 lbs
	6010		30 kg / 66 lbs	50 kg / 110 lbs	-	-	-	-	-
2 curves 90° - 180° in total or large curve/oval	4010, 4020, 4030	20 kg / 44 lbs	40 kg / 88 lbs	80 kg / 176 lbs	60 kg / 132 lbs	60 kg / 132 lbs	80 kg / 176 lbs	80 kg / 176 lbs	160 kg / 352 lbs
	6010		20 kg / 44 lbs	40 kg / 88 lbs	-	-	-	-	-

LED signals

Normally LED signals stop after 15 s.

1. **LED colors :** green, red, yellow, blue purple orange or light blue - continous or blinking:
   - *normal programming mode colors.*
2. **LED flashes yellow** - and keeps flashing for more than 15 s.
   - *the 24hrs timer is recording*
3. **LED flashes yellow** once every 20 s.
   - *the 24hrs timer is active*
4. **LED flashes yellow** twice every 20 s.
   - *the 24hrs timer is paused*
5. **LED displays rainbow colors** continuously.
   - *the showroom timer is active*

System failure

1. **No response to IR remote control.**
   - *check batteries of IR remote control*
   - *make sure channel A1 is selected on the IR transmitter or that other IR channels have been set.*
   - *check if RJ45 plug is correctly placed in the underside of the motornut.*
   - *check if the receiver can receive IR signals emitted from the IR transmitter*

2. **Curtain stops at unexpected positions along the track**
   - *recalibrate Touch and Stop feature or turn this feature off.*

3. **Curtain moves in opposite direction, compared to controls.**
   - *go through § 3.2 : inverted input from controls*

Power cut: Smart start-up.

A power cut generally causes no problem for G-Motion. The system will detect the event of a power cut. After power has returned AND the curtain was displaced manually, the system will recalibrate itself, using electronically stored end positions values and using the internal end stops as a reference.

In case of a power cut during the self-calibrating cycle: no settings will be stored. Ensure power has been restored, then restart the cycle by shortly pressing ***OPEN*** or ***CLOSE***.

General

Once yearly lubrication
- running channel
- the pulleys
  - motor side: remove motor unit to lubricate pulley
  - return side: temporarily remove the pulley-cover (click from the round side)
- pilot runners by overlap carrier

> Goelst Curtain rail silicone spray:
art.no. 1251-250

Use the spray sparingly. Excessive spray may run and stain the curtains. Too much spray may have a negative effect on the performance of the system and may even result in damage.

Notes

GOELST
curtain rail systems

191008003GM6200