



INSTALLATION AND OPERATING INSTRUCTIONS

QUATTRO

QUATTRO



This manual is suitable for the following products:

- Quattro (01813400)
- Quattro ZE (01813200)
- Quattro Nero (01813110)

Documentnumber: 84100525 F1

Shutter control for manual or automatic control of electric shutters or blind controls.

Read the manual before starting the installation.
Failure to follow the instructions may result in defects that are not covered by the warranty. Errors and technical changes excepted.



Manual EN



Manual NL

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SAFETY INSTRUCTIONS

GENERAL SAFETY INFORMATION

These safety instructions are an integral part of the product and must be read and understood completely before installation, electrical connection, commissioning and operation.

- The controller is intended for the manual and automatic operation of electrically driven roller shutters and venetian blinds.
- The device may only be used for its intended purpose as described in this documentation.
- Installation, electrical connection and commissioning may only be carried out by a qualified electrician.
- The controller must be checked for damage before installation. Damaged devices must not be put into operation.
- Any modification or alteration of the device is prohibited and will void all warranty and liability claims.
- If safe operation of the controller or the connected shading system can no longer be ensured, the controller must be taken out of service immediately and secured against unintended operation.
- The system must be checked regularly for wear, damage and malfunctions.

CRITICAL SAFETY WARNINGS



ELECTRICAL HAZARDS

DANGER – Risk of fatal electric shock.

Disconnect the mains voltage completely before installation and before working on the device.



SAFETY FOR AUTOMATIC, ASTRO, TWILIGHT AND SUN PROTECTION FUNCTIONS | CAUTION

– Automatic movement commands may be triggered at any time.



HAZARDS DUE TO MOVING SHADING SYSTEMS | WARNING

Risk of injury due to crushing, shear points or uncontrolled movement.



NOTE

The complete safety instructions can be found at: www.vestamatic.com/safety



SCAN ME



SUPPORT/CONTACT

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TECHNICAL DATA

SHORT DESCRIPTION

- Control unit for manual or automatic control of electrically operated roller shutters or venetian blinds.
- Offers a wide range of convenient programming options and is manufactured to the highest quality standards.



NOTE

Pressing the display automatically activates the backlight. The illumination switches off automatically 20 seconds after the last operation. In addition, every function button press is confirmed by a short acknowledgement tone.

PARAMETER	VALUE
Power supply	230VAC, 50 Hz
Impulse voltage with stand level	2,5 kV
Rated power	2 W
Output	230VAC, 50 Hz
Maximum load	250VAC, 3A $\cos \varphi \geq 0,8$ ind.
Align switching time	3 – 120 Seconds
Tilting Time	0-30 Seconds
Software class:	A
Operating temperature	0 °C (32 °F) to +40 °C (104 °F)
IP class	IP30
Degree of pollution	2
Battery	CR 2032
Dimension (L × B × H):	50 × 50 × 46 mm (without frame)
Colour	Signal white (similar to RAL 9016)
Colour Nero	Anthracite (similar to RAL 9011)
Conformität	

INSTALLATION / WIRING DIAGRAM

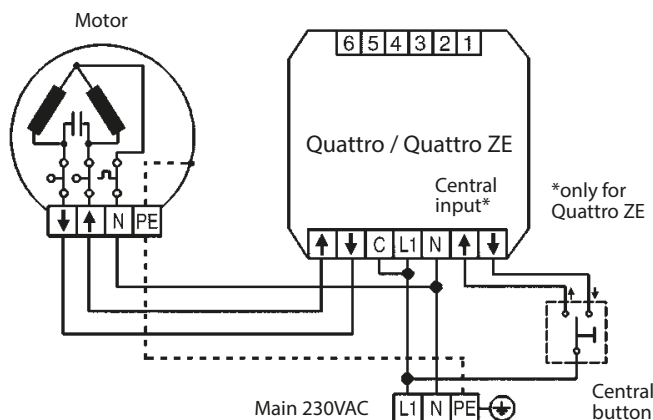
NOTES FOR QUALIFIED ELECTRICIANS

- 1. Disconnect the mains supply.
- 2. Connect the power supply unit according to the wiring diagram.
- 3. Install the power supply unit in a deep flush-mounted wall box and secure it.
- 4. Fit the cover frame.
- 5. Insert the control unit into the power supply unit by gently pressing it through the cover frame.
- 6. Switch on the mains supply.
- 7. Use the Up and Down buttons to check the travel direction of the shading system.



CAUTION

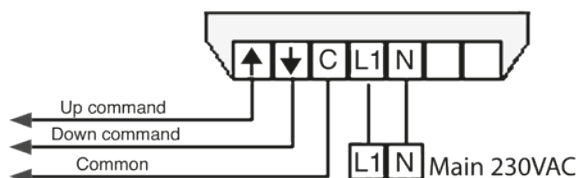
When controlling multiple drives with mechanical limit switches, isolation relays or suitable control units must be used.



*NOTE ON THE CENTRAL INPUT

The central input is available only on Quattro ZE. While a travel command is active via the central push button, no Stop or reverse command can be issued via the Quattro ZE control unit. The central input is active in both manual and automatic operating modes.

CONNECTION OF CENTRAL CONTROL SYSTEMS



NOTE

When using external control systems, the jumper (C-L1) must be removed.

When controlling decentralised controls such as MC P2 or MC P4, for example

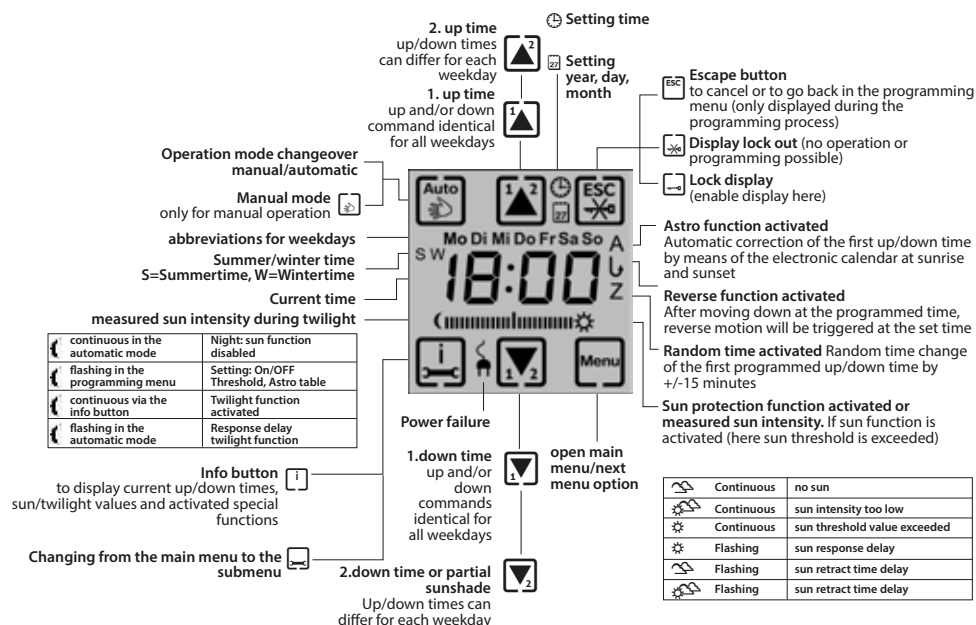
INSTALLATION / WIRING DIAGRAM

INITIAL START-UP

- The control unit is ready for operation immediately after installation and switching on the power supply and starts in manual mode.
- All automatic functions are initially disabled. However, the shading system can still be operated using the Up and Down buttons. On the Quattro ZE, operation is also possible via the central input.
- The current time, date, daily standard opening and closing times, and other basic settings are already preset (see table „Factory Settings“) and only need to be adjusted to your individual requirements if necessary.

SETTING / PROGRAMMING

DISPLAY INDICATORS AND CONTROLS



INFO BUTTON

Using the Info button (available only in automatic mode), you can display the actual opening and closing times for the current day as well as all activated special functions, including Random, Astro, Tilting, Sun Protection, and Twilight. When the Sun Protection or Twilight function is active, the currently measured brightness value is also displayed as a bar graph.

SETTING / PROGRAMMING

Factory Settings

Main menu functions press  to continue	Submenu / Function press  to continue	Factory Setting	Adjustment Range
1ST UP TIME		Daily 06:00	00:00 - 23:59
 ↓ 	2. Up time Mo to Su	OFF, --:--	00:00 - 23:59
1ST DOWN TIME		Daily 20:00	00:00 - 23:59
	2. Down time Mo to Su	OFF, --:--	00:00 - 23:59
	2. Motor run time	120 seconds	3 to 120 seconds
 ↓ 	2. Tilting time	0.0 seconds	0 to 30 seconds
RANDOM FUNCTION		OFF	ON / OFF
ASTRO FUNCTION		OFF	ON / OFF
	Astro table code	CO 3	CO 1 to CO 16
	Astro correction time UP	0 minutes	-59 min. to +59 min.
 ↓ 	Astro correction time DOWN	0 minutes	-59 min. to +59 min.
TWILIGHT FUNCTION		OFF	ON / OFF
	Threshold setting	0	-50 to +50
 ↓ 	Astro table code	CO 3	CO 1 to CO 16
SUN FUNCTION		OFF	ON / OFF
	Threshold setting	0	-50 to +50
	Response delay	1 minute	00:30 to 02:00 min.
 ↓ 	Reset delay	16 minutes	01:00 to 60:00 min.
1ST MOTOR RUN TIME		120 seconds	3 to 120 seconds
	1. Tilting time	0 seconds	0 to 30 seconds
 ↓ 	Inching mode	OFF	ON / OFF
TIME / DATE		Current	0:00 - 23:59
	Year	Current	2003 - 2099
	Day and Month	Current	01.01 - 31.12
	Automatic Daylight Saving Time	ON	ON / OFF
 ↓ END 	Manual Daylight Saving Time	W	S / W

BASIC SETTINGS / MAIN MENU / SUBMENU

The control unit offers a wide range of functions that can be individually configured to suit your requirements.

SETTING / PROGRAMMING

BASIC SETTINGS / MAIN MENU / SUBMENU

Entering the main menu:

 x 3S



Selecting another main menu item:

 x 1(+)



Entering a submenu:

 x 1



Selecting another submenu item:

 x 1(+)



Returning to the main menu/sub-menu:

 x 1(+)



Exit automatic storage

 x 5S



Adjusting values within a menu:

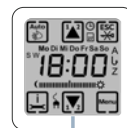
  x 1(+)



oder

Fast adjustment:

  x2S



BASIC SETTINGS / MANUAL AND AUTOMATIC OPERATING MODES

- In manual mode, all automatic functions are disabled. Only the twilight function or an activated multifunction input FA3 remains active and monitored.
- The shading system can be operated using the arrow buttons in both manual and automatic mode.
- To stop the shading system during travel, press the opposite direction button.

Switching to Auto-
matic Mode:

 x 1



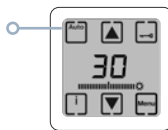
The shading system operates according to the measured sensor values or the programmed switching times.

The Automatic Mode symbol appears.



Switching to Manual
Mode:

 x 1



The Manual Mode symbol appears.



SETTING / PROGRAMMING

1 SETTING THE DAILY UP AND DOWN TIMES

UP AND DOWN TIMES

The control unit offers three options for using the daily switching times:

1.) Daily Programm:  	2.) Weekly Programm:  	3.) Combined Daily and Weekly Programm:     = 4 commands
The switching times are identical for every day of the week (Mon–Sun)..	Allows different switching times for each day of the week.	1st up time: identical every day of the week. 2nd up time: different for each day of the week. The second switching time can also be used for partial shading without a sensor.
Programming in Main  1st up time and 1st down time.	Programming in Submenu  2nd up time and 2nd down times (Mon–Sun).	Programming in  and  1st up time, 1st down time, 2nd up time and 2nd down time.
Make sure that the 2nd up time and 2nd down time are disabled (factory setting). Disabled times are indicated by „--:--“.	Delete the 1st up time and 1st down time in the main menu. Disabled times are indicated by „--:--“.	Ensure that the 1st up time, 1st down time, 2nd up time and 2nd down time are programmed. To use the 2nd down time for partial shading, the motor running time for the 2nd down time must be adjusted so that the shading system closes only partially (see below).
	A combination with Astro, Random and Twilight functions is not possible. Switching commands are always executed exactly at the programmed time.	

1ST UP TIME

Enter main menu:

 x 3S

Select up time:

 x 1(+)

  x 1(+)

  x 1(+)



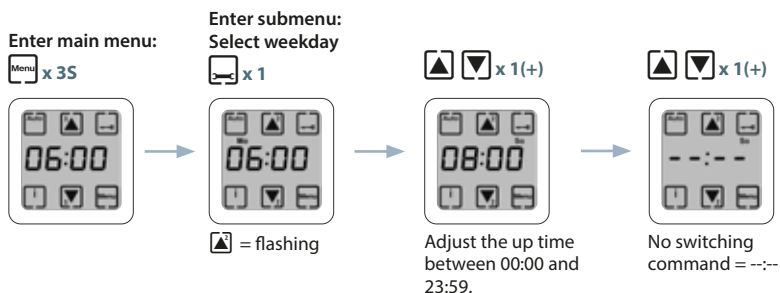
 = Flashing

Adjust the up time between 00:00 and 23:59.

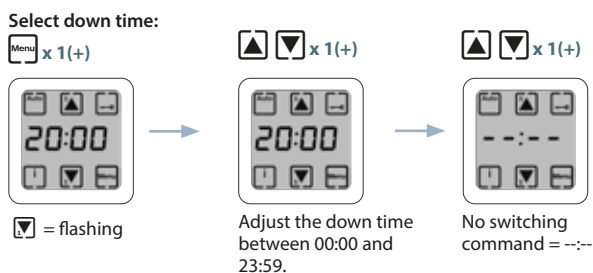
No switching command = --:--

SETTING / PROGRAMMING

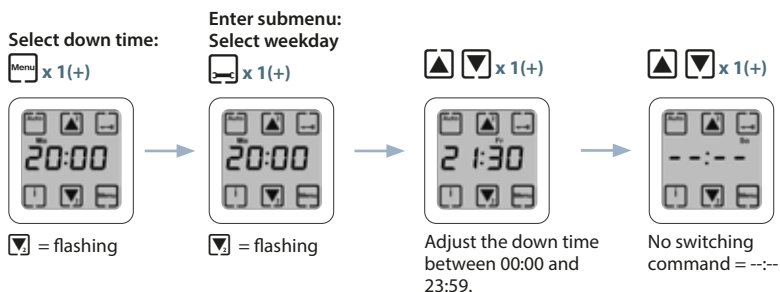
2ND UP TIME



1ST DOWN TIME

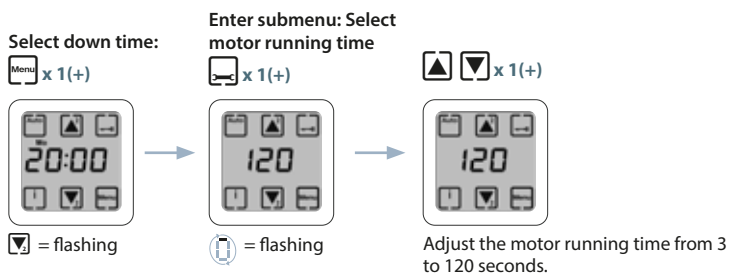


2ND DOWN TIME



2ND MOTOR RUNNING TIME

- The motor running time applied to the shading system can be adjusted only for the 2nd down time. (120 sec. = full travel, approx. 15 sec. for intermediate position – the motor moves the shading system to the intermediate position when no lux sensor is connected.)

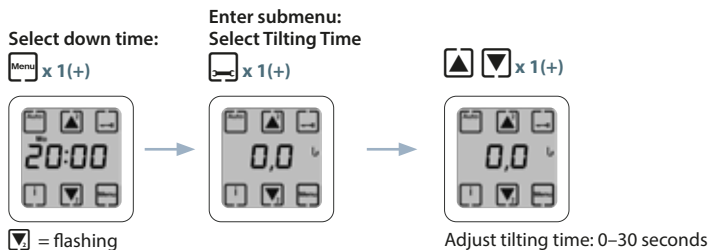


SETTING / PROGRAMMING

1 SETTING THE DAILY UP AND DOWN TIMES

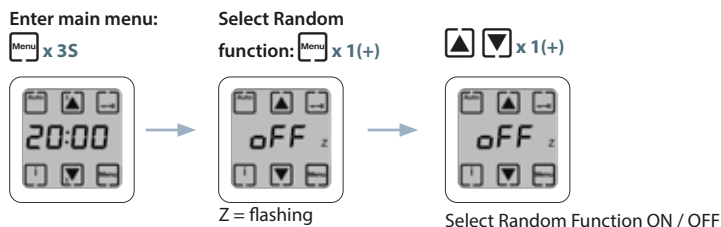
2ND TILTING FUNCTION / TILTING TIME

- Tilting function as described in section 6, however only after completion of the 2nd motor running time.



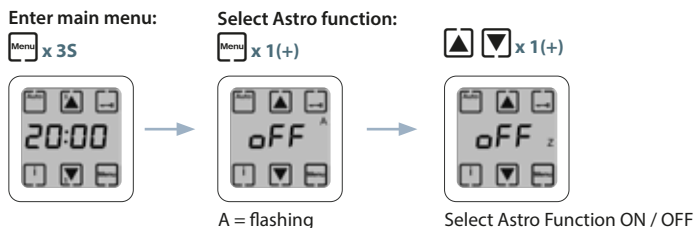
2 SETTING THE RANDOM FUNCTION

- The Random function shifts the programmed 1st up time and 1st down time by ± 15 minutes, creating the impression that the building is occupied.



3 ASTRO FUNCTION (available only for the 1st up and down times)

- The Astro function is based on an electronic calendar. Depending on the stored sunrise and sunset times and the geographical location of your site (see Astro table), the up and down times are adjusted automatically.



SETTING / PROGRAMMING

ASTRO FUNCTION OVERVIEW

Programmed Up Time	before	morning Astro time	Shading system moves up at the Astro time	Always the <u>later time</u> applies
Programmed Up Time	after	morning Astro time	Shading system moves up at the programmed up time	
Programmed Down Time	before	evening Astro time	Shading system moves down at the Astro time	Always the <u>earlier time</u> applies
Programmed Down Time	after	evening Astro time	Shading system moves down at the programmed down time	

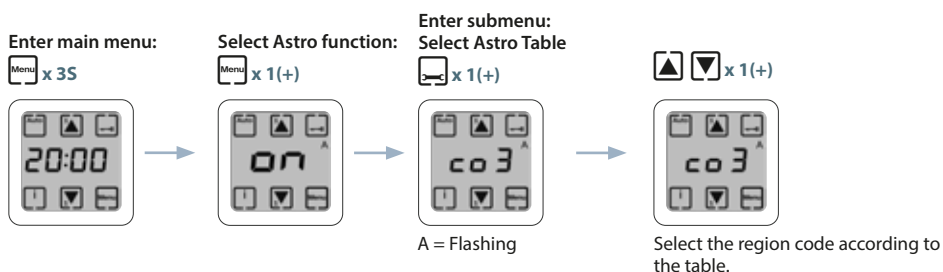


INFO BUTTON

Press the Info button (only in automatic mode) at any time to display the actual up and down times for the current day.

SELECTING THE REGION / ASTRO TABLE

Code	Section	Code	Section	Code	Section	Code	Section
1	Schleswig-Holstein, Northern Lower Saxony	5	Rhineland-Palatinate, Saarland, Hesse	9	Scandinavia	13	Southern France
2	Mecklenburg-Western Pomerania	6	Saxony, Thuringia	10	Great Britain	14	Switzerland, Austria, Northern Italy
3	North Rhine-Westphalia, Southern Lower Saxony	7	Baden-Württemberg	11	Northern France, Benelux	15	Spain
4	Brandenburg, Saxony-Anhalt	8	Bavaria	12	Germany	16	Southern Italy, Sicily, Corsica, Sardinia



ASTRO CORRECTION TIME – UP / DOWN

Select Astro function:

 x 1(+)

Enter submenu:

Select Astro Correction Time – Up

 x 1(+)

  x 1(+)



 = Flashing

Adjust the Astro correction time by ± 59 minutes.

Select Astro function:

 x 1(+)

Enter submenu:

Select Astro Correction Time – Down

 x 1(+)

  x 1(+)



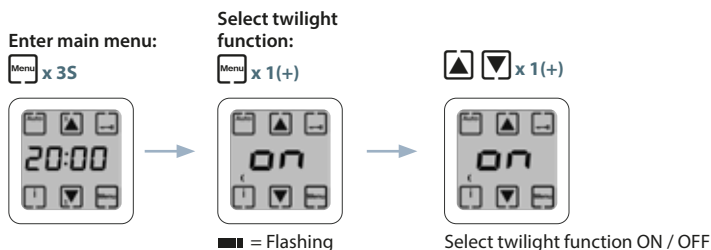
 = Flashing

Adjust the Astro correction time by ± 59 minutes.

SETTING / PROGRAMMING

4 TWILIGHT FUNCTION (with connected Lux/Twilight sensor)

- When the twilight function is activated (ON), the shading system automatically moves down as soon as the individually adjusted twilight threshold or the preset light intensity threshold of 5 minutes is reached. To prevent the shading system from moving down too early, the twilight function is only activated one hour before sunset. Therefore, the weekday and time must be set correctly (astronomical table). These values are also compared with the programmed Up and Down times.



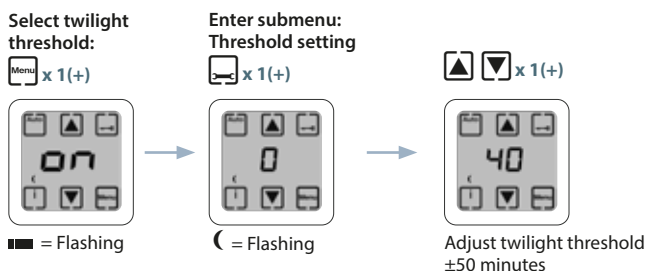
- To prevent a possible overlap between the programmed Down time and the twilight-controlled Down movement during the year, it is recommended to set the programmed Down time to 11:00 p.m. (23:00). This ensures that the shading system always moves down according to the twilight function.

THRESHOLD SETTING

Twilight occurs	before	programmed 1st Down time	Shading moves down at twilight	Always the <u>earlier time</u> applies
Twilight occurs	after	programmed 1st Down time	Shading moves down at the programmed Down time	

- The twilight threshold is factory preset to 0 and can be adjusted between -50 and +50 if required.

Desired adjustment		Procedure
Shading should move down at brighter twilight conditions (earlier)	→	Increase the threshold with the ▲ button up to +50
Shading should move down at darker twilight conditions (later)	→	Decrease the threshold with the ▼ button down to -50



NOTE
Since the twilight function becomes active one hour before sunset, the weekday must be set correctly (see section 3).

SETTING / PROGRAMMING

5 SUN FUNCTION (with connected Lux / Twilight Sensor)

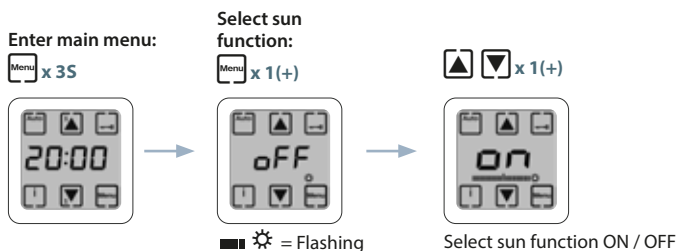
(Only in Automatic mode - in addition to the programmed Up and Down times.)

- When the sun function is activated, the Lux / Twilight sensor mounted on the window continuously monitors the sunlight intensity.
- If an individually adjusted sunlight threshold is reached, the controller starts the programmed sun response delay. After this delay has elapsed, the shading system moves down to the sensor and then moves back up slightly.
- If the shading system does not provide the desired lighting conditions, the threshold can be adjusted.
- The sunlight intensity is displayed as a bar graph. When the bar exceeds the centre mark, the response delay starts and the shading system moves down. If the sensor detects insufficient light, the shading system moves back up.

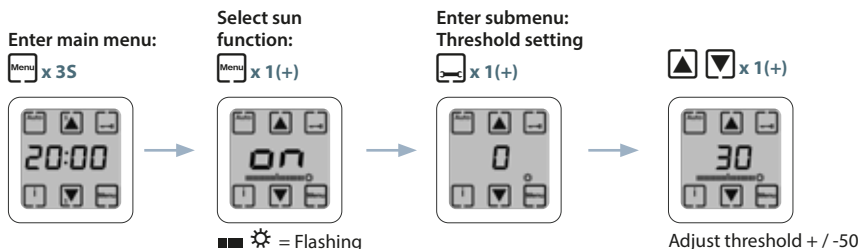


INFO BUTTON

After an evening Down movement, the sun function is automatically deactivated because the shading system is already closed. The moon symbol appears in the display. In Automatic mode, the current sunlight intensity can be displayed as a bar graph by pressing the INFO button.



THRESHOLD SETTING



Shading should move down at lower sunlight intensity



Decrease the threshold until the centre bar is exceeded.

Shading should move down at higher sunlight intensity



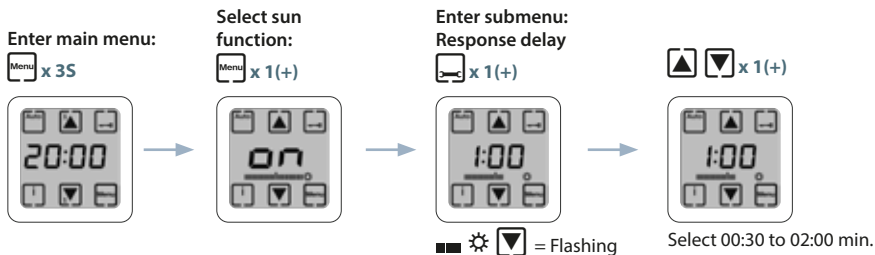
Increase the threshold until the centre bar is no longer exceeded.

SETTING / PROGRAMMING

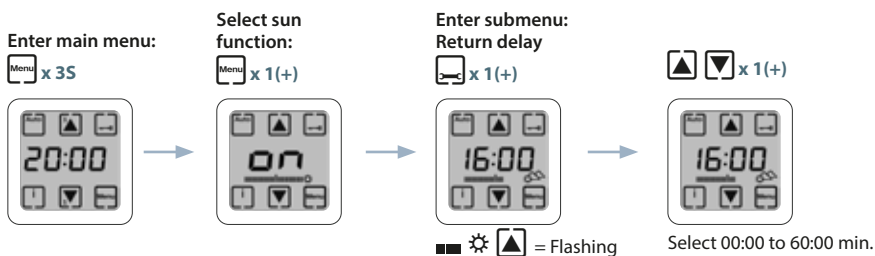
RESPONSE DELAY / RETURN DELAY

- The response delay and return delay are required to prevent the shading system from moving up and down continuously under rapidly changing light conditions.

RESPONSE DELAY (Waiting time before the Down movement when the sunlight threshold is exceeded.)

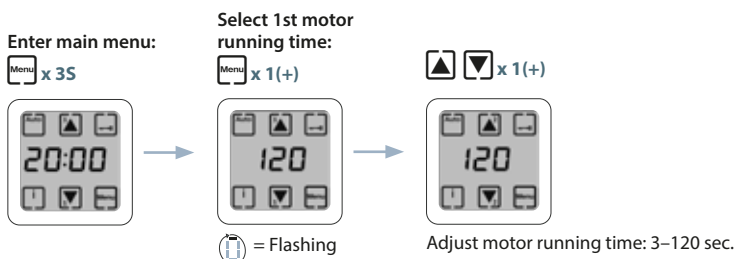


RETURN DELAY (Prevents an immediate Up movement caused by brief shading, e.g. a passing cloud)



6 1ST MOTOR RUNNING TIME (Time during which the motor is activated.)

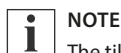
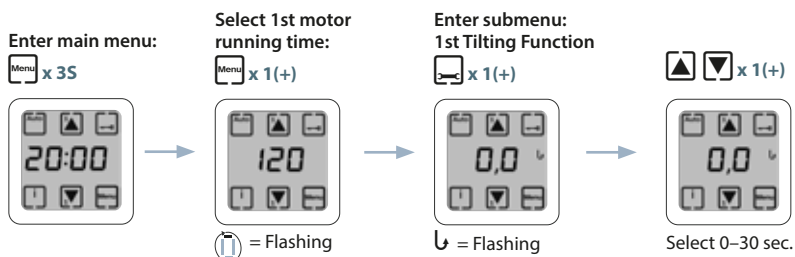
- The 1st motor running time is factory-set to 120 seconds.
- This ensures complete opening and closing of the shading system.
- Note: Always set the motor running time longer than the actual travel time of the shading system.
- If the controller is used for shading systems that require only a pulse command, set the motor running time to 3 seconds.



SETTING / PROGRAMMING

TILTING FUNCTION / TILTING TIME

- If a tilting time in seconds is entered, the shading system moves back up by the programmed time after the Down movement. This allows either tilting of the slats (approx. 3 seconds) or partial opening (up to 30 seconds) for roller shutters or adjustment of the slat angle for venetian blinds.
- The return movement is only executed after the programmed motor running time has elapsed, i.e. after a maximum of 120 seconds.
- A tilting time of 0.0 means that the tilting function is disabled.

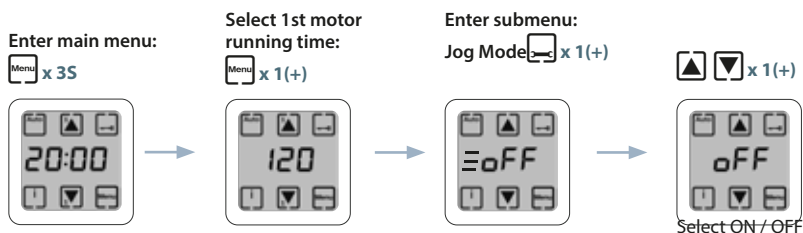


NOTE

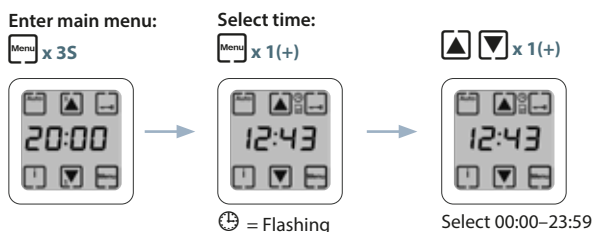
The tilting function must be configured separately for the Weekly Programme (submenu) and the Daily Programme (main menu).

JOG MODE FOR VENETIAN BLINDS

- When this function is activated, jog mode of up to 2 seconds is enabled. If the operating button is pressed for longer than 2 seconds, the motor running command is executed.



6 TIME / DATE



SETTING / PROGRAMMING

TIME / DATE YEAR

Select time:

 x 1(+)

Enter submenu:

Year

 x 1(+)



 = Flashing

 x 1(+)



Select 2003–2099

TIME / DATE TIME / DATE

Select time:

 x 1(+)

Enter submenu:

Day and Month

 x 1(+)



 = Flashing

 x 1(+)



Select 01:01–31:12

AUTOMATIC DAYLIGHT SAVING TIME CHANGEOVER

■ „ON“ = Daylight saving time changes automatically twice a year.

■ „OFF“ = Automatic daylight saving time changeover is disabled and can be set manually in the submenu.

Select time:

 x 1(+)



Enter submenu: Automatic
DST Changeover

 x 1(+)



sw = Flashing

 x 1(+)



Select ON / OFF

MANUAL DST SETTING

Select time::

 x 1(+)



Enter submenu: Automatic
DST Changeover

 x 1(+)



Enter submenu:
Manual DST Setting

 x 1(+)



W = Flashing

Manual DST setting

 x 1(+)



Select +1 hour / -1 hour

SETTING / PROGRAMMING

LOCKING THE TOUCHSCREEN DISPLAY

Activate display lock:



x 3Sek.



Deactivate display lock:

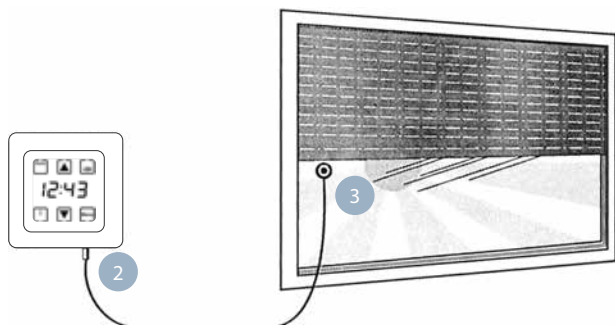


x 3Sek.



MOUNTING LUXSENSOR

INSTALLING THE LUX SENSOR



NOTE

For the additional Sun Protection function, an LS TQ-Series Lux Sensor (Part No. 01130130 or 01130330) is required for each controller.

- 1. Carefully remove the display.
- 2. Plug the Lux/Twilight sensor into the socket on the rear of the display.
- 3. Carefully press the display back into the cover frame.
- 4. Attach the Lux/Twilight sensor to the desired position on the window pane.
- 5. Activate the Sun Protection function in the menu and switch the controller to Automatic mode.

BATTERY REPLACEMENT / RESET

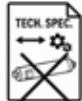
BATTERY REPLACEMENT / RESET

- In the event of a power failure, all previously programmed times and settings remain stored for up to 2 years. During the first 10 minutes, the display flashes. After that, the display is switched off to conserve battery power.
- Once the mains power is restored, the controller automatically displays the current time.
- If an Up or Down command is pending during the power failure, the corresponding command is executed automatically once the power supply has been restored.
- To replace the battery, pull the control unit out of the power supply and remove the battery from the rear of the control unit.
- After replacing the battery without mains power, perform a reset of the controller. The factory default settings will then be restored and all user programming, including the time and date, will be deleted.

WARRANTY / MAINTENANCE

The manufacturer's General Terms and Conditions of Sale and Delivery apply. Vestamatic International GmbH's Terms and Conditions of Sale and Delivery form part of the sales documentation and are supplied to the operator with the product. Claims for personal injury or property damage are excluded if they result from one or more of the following causes:

- Improper use of the product.
- Opening the product by the customer.
- Improper installation, commissioning or operation of the product.
- Failure to comply with the specified technical specifications.
- Failure to observe the safety regulations and instructions contained in these operating instructions.
- Operation of the product with improperly installed connections, defective safety devices or incorrectly fitted protective devices.
- Structural modifications to the product.



MAINTENANCE

The time switch is maintenance-free.