**Electronic Controller for Roller Blind**                    Order No.: 0388 ..



## 1.    Description of Functions

The Controller for Roller Blind supported by a Microprocessor is placed into a 58 mm recessed box and free of maintenance. A motor of max. 1000 VA rated load and limit switch can be controlled. The controller is equipped with 9 memory registers free programmable for one „Auf" (Up) respectively one „Ab" (Down) time each. These times can be coordinated to any combination of weekdays.

The Controller for Roller Blinds is equipped with 4 types of operation:

1) Manual Mode (see chap. 4.1)
    Roller Blinds can be controlled up and down by means of keys. Lamellas are continously adjustable (Touch Operation).
2) Automatic Mode (see chap. 4.2)
    Programmed Switch Times are being realized.
3) Operation with Random Generator (see chap. 4.3)
    Programmed Switch Times will be varied up to $\pm$ 15 min. to simulate presence of persons.
4) Operation with Astro Mode (see chap. 4.4)
    Programmed Switch Times will be adjusted to times of sunrise and sunset.

Combinations of various modes are possible.
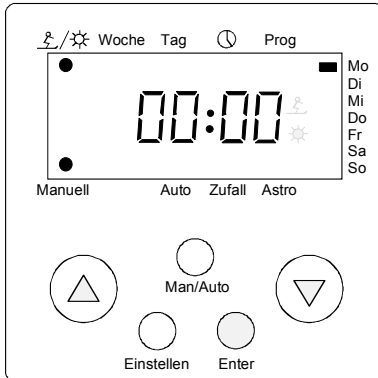
ⓘ Programmed Switch Times will not be activated during manual operation.
Manual operation is superior to automatic types of operation.

Power failure clears the display. All **Switch Times** programmed by user remain, operational reserve of clock is 2 hours. Should failure last longer than 2 hours, controller switch to manual operation after return of power, display flashes until pushing any optional key. Following a re-setting of the actual time, calendar week and weekday is essential (see chap. 3.1 - 3.5).

ⓘ Should the Controller for Roller Blinds not react on pushing keys (due to false operation), pull off the plugged-on controller unit for at least 20 minutes. By doing so a reset for the internal microprocessor is garanteed. Programmed data remain uneffected.



max. 1 Motor 1000VA
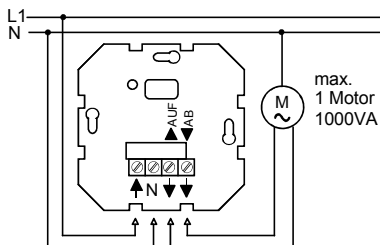
## 2.    Installation and Starting

### 2.1    Wiring Diagram

⚠ **Indications of danger**

**Note: The installation and assembly of electrical equipment may be carried out only by a skilled person.**

**Neutral conductor required!**

**Motors for Roller Blinds may not be switched parallel.**
**Please follow instructions of motor manufacturers!**

**Attention, warning of danger**

The controller for roller blind was developed for automatic operation of window shades. In case that it is used for other purposes which might cause risks (e.g. control of roller gates), the user should prevent such risks by applying additional appropriate safety measures (e.g. light barriers).
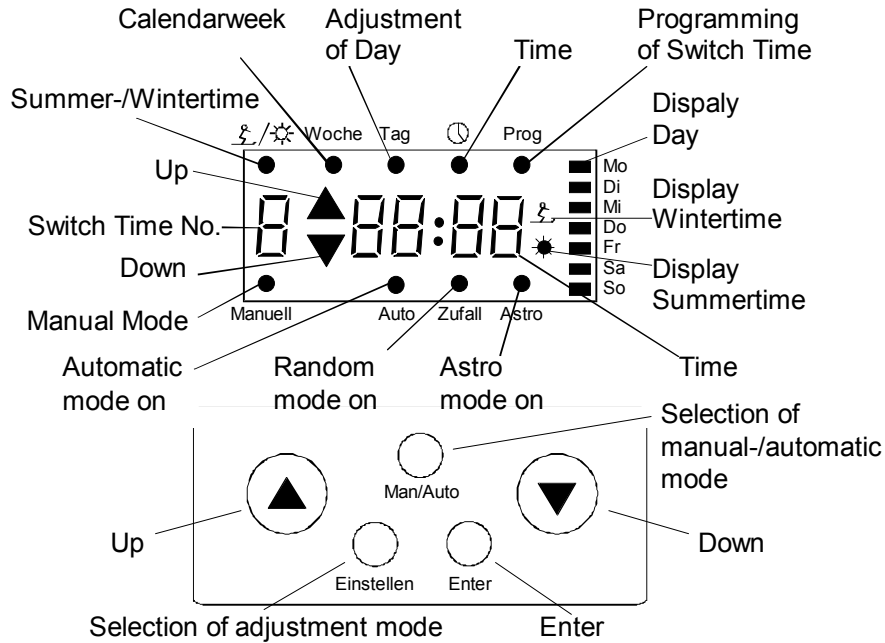


## 2.2 Original Setting

After switching on to mains for the very first time, the activation of the LCD-display may take up to 60 s, showing:
Monday 00:00, Wintertime, Calendarweek 1, Manual Mode

## 2.3 Programmed Switch Times ex work

Switch Times 1 and 2 are pre-programmed and individually variable:
Switch Time 1:  mon - fri    7.00 Uhr Up      22.00 Uhr Down
Switch Time 2:  sat - sun    8.30 Uhr Up      22.00 Uhr Down

# 3. Setting of Actual Dates

ⓘ Flashing displays and all keys required for activating the respectivefunctions appear in red.
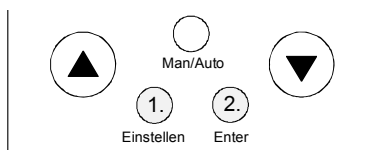


### 3.1 Transition to Setting Mode

Touch key *Einstellen* (Adjustment), then touch key *Enter* within 2 s.

Should there be no key activities for 5 minutes, the setting mode will automatically be left. Key *Einstellen* (Adjustment) interrupts setting mode any time.

All dates confirmed with *Enter* remain.

ⓘ Basically all dates can be changed via keys ⋀ or ⋁. Dates are being transferred to the controller with key *Enter*, followed by next point of menu.
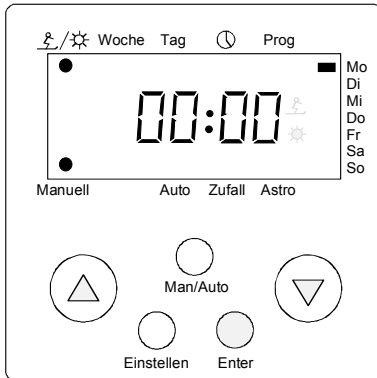
### 3.2 Setting of Summertime / Wintertime

Symbol is marked (dot under ☽/☀ ), adjusted symbol flashes.
Set Summertime / Wintertime via key ⋏ or ⋎.
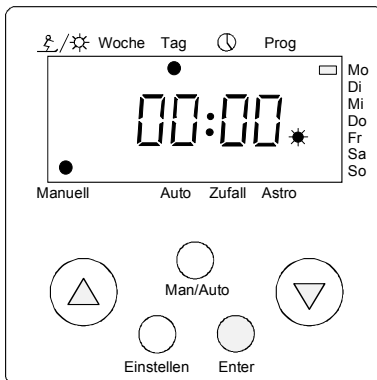Confirm with *Enter*.
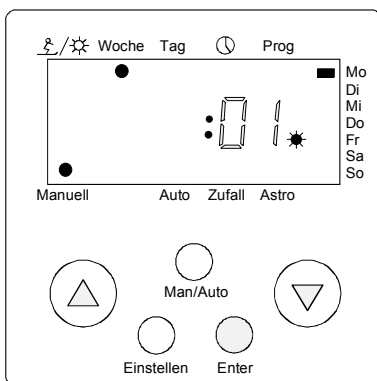
### 3.3 Calendarweek

Dot is forwarded to „Woche" (week), adjusted calendarweek
flashes. Set with key ⋏ or ⋎.
For rapid motion press key for approx. 3 s.
Confirm with *Enter*.

ⓘ Please see calendar for actual calendarweek (KW), as this date may vary from year to year by few days. For further explanations please see fig. 1 and 2 of chapter 4.
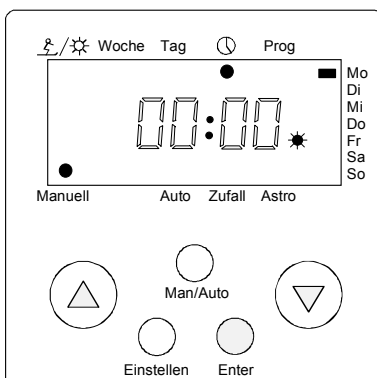
### 3.4 Present day

Dot is forward to „Tag" (day), mark is flashing for indicating day of
week.
Set with key ⋏ or ⋎.
Confirm with *Enter*.
Mo  = Monday
Di   = Tuesday
Mi   = Wednesday
Do  = Thursday
Fr   = Friday
Sa  = Saturday
So  = Sunday

### 3.5 Present time

Dot is forward to "🕐", time is flashing.
Set with key ⋏ or ⋎.
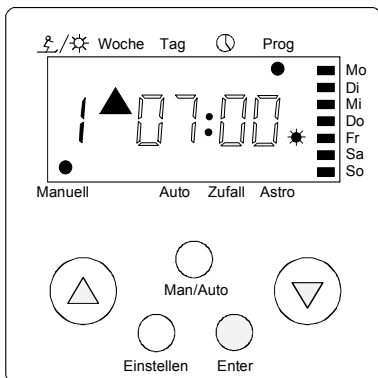For rapid motion press key for approx. 3 s.
Confirm with *Enter*.

## 3.6 Programming of Switch Times

### 3.6.1 Setting of Switch Time Number

Dot is forward to „Prog", symbol for „Auf" (Up) time 1 flashes. For further Switch Time Numbers please touch keys ⋏ or ⋎.
For changing „Auf" (Up) or „Ab" (Down) times of a Switch Time Number press *Enter*.

All Switch Times of Switch Time Numbers programmed prior to that point remain uneffected when setting or altering Switch Time.
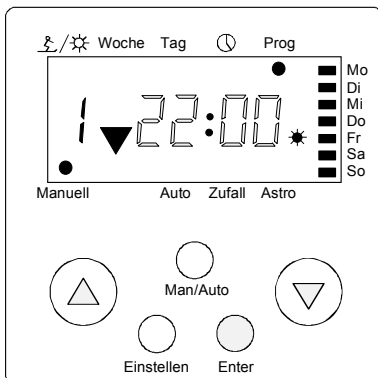
ℹ Please note a time period of a minimum of 2 minutes between all programmed Roller Blind movements!

### 3.6.2 Programming of „Auf" (Up) time

„Auf" (Up) time of a Switch Time Number flashes and can be changed ba pressing ⋏ or ⋎.
For rapid moition press key approx. 3 s.

Confirm „Auf" (Up) time with *Enter*.

### 3.6.3 Programming of „Ab" (Down) time

„Ab" (Down) time of a Switch Time Number flashes and can be changed by pressing ⋏ or ⋎.
For rapid moition press key approx. 3 s.
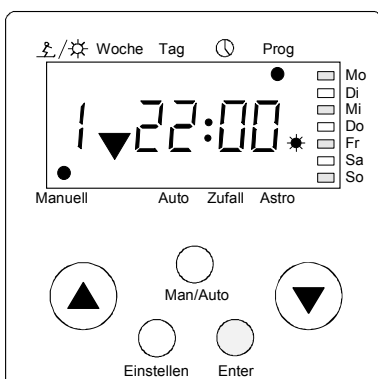
Confirm with *Enter*.

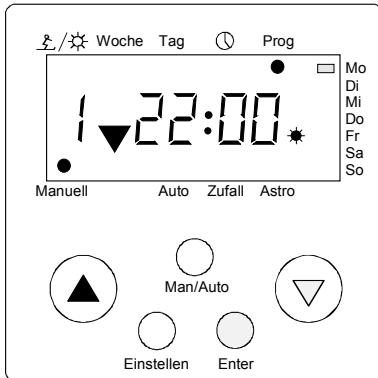### 3.6.4 Programming of Weekdays

Should there be no day programmed, Mo (Monday), Mi (Wednesday), Fr (Friday), So (Sunday) flash **in exchange** with Di (Tuesday), Do (Thursday), Sa (Saturday). Programmed days flash **continuously.**

Confirm with *Enter*.

Alterations of setting realize with key ⌄. Flashing mark is forwarded to Mo (Monday). Enter programms day, ⌄ leaves a day out. A programmed day is indicated permanently, the flashing mark moves a day further. In case So (Sunday) is programmed or left out, the next Switch Time can be programmed (see chap. 3.6). In case of programming errors of previous Switch times, re-call with key ⌄.

For no further programming of Switch Times interrupt with key *Einstellen* (Adjustment). Automatic interruption occurs after Switch Time 9. Time appears after interruption.

### 3.6.5 Checking of set Dates

Touche *Einstellen* (Adjustment), then touch key *Enter* within 2 s. A further touching of key *Enter* shows all dates without altering them. By reaching the first Switch Time Number, a quick check of Switch times is possible by pressing key ⌃ or ⌄.

An interruption is permanently possible by pressing key *Einstellen* (Adjustment) or automatically after 5 minutes, display showing present time.

### 3.6.6 Clearing of Switch Times

Two alternativ ways of clearing Switch times exist:
1. Clearing of programmed weekdays.
   Leave all days out by touching key ⌄ (see chap. 3.6.4). „Auf" (Up) and „Ab" (Down) times remein.
or…
2. Programm „Auf" (Up) and „Ab" (Down) time to equal hours (see chap 3.6.2 and 3.6.3).
   Programmed weekdays remain uneffected.

## 4. Types of Operation

### 4.1 Manual Mode

Dot indicates „Manuell" (Manual). Roller Blind can be brought up and down by touching key ⌃ or ⌄, relevant symbol appears in display.

Position is locked when key is being pressed for approx. 3s. Position is de-locked after 2 minutes or by touching any key.

For changing position of lammellas touch key⌃ or ⌄ (Touch Operation).

By using this type of operation, preprogrammed Switch Times will not be carried out (see chap. 1).
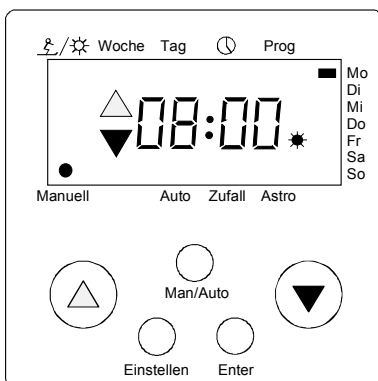
### 4.2 Automatic Mode

Change from manual to last set automatic mode with key *Man/Auto*.

By pushing key *Enter* after *Man/Auto* die within 2 s, the random generator and/or astro mode can be selected by ⌃ or ⌄.

Confirm selection with *Enter*.

Selected mode is activated and Switch Times are being realized according to programming.

## 4.3    Random Generator

Programmed Switch Times will vary up to ± 15 minutes when Random Generator is being switched to Automatic Mode. All Switch Times of a day will be changed to the same random time to avoid overlapping of switching operations.
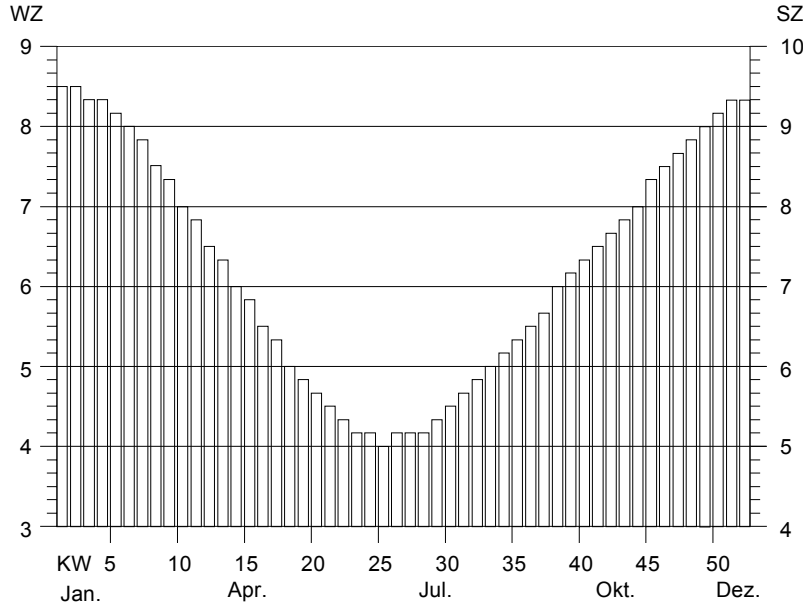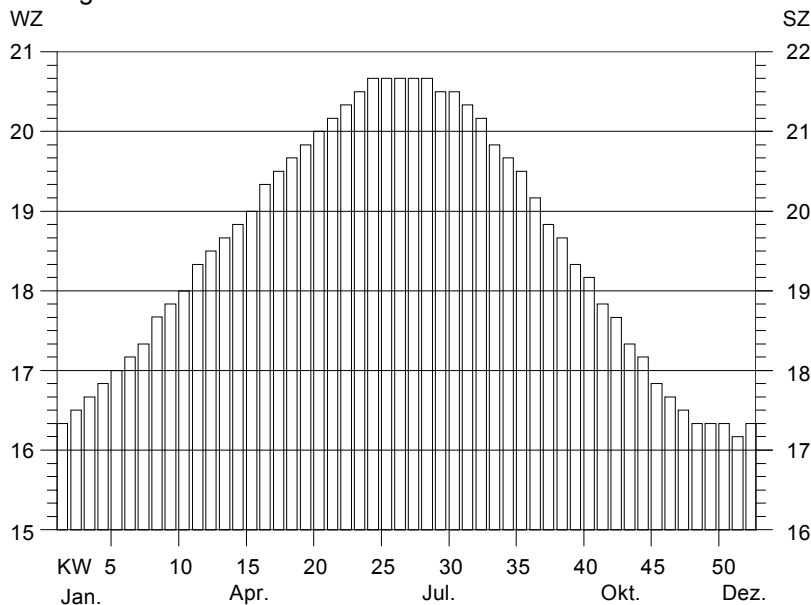
Fig. 1: Times of sunrise



## 4.4    Astro Mode

If the venetian blind is requested to be opened at sunrise (SA) and closed at sunset (SU), programmed Switch Times (automatic operation) have to be made conform to the changing astronomical calendar constantly.

By activating the Astro Mode, Switch Times programmed within dark period in the morning are being carried out at SA. Switch Times programmed within the dark period in the evening are being carried out at SU. For this purpose all times of sunrise and sunset are stored permanently in the control of venetian blind (see fig. 1 and 2). Switch Times programmed within the brightness of day remain unchanged from the Astro Mode.

**For activating the Astro Mode, please see chap. 4.2.**

Fig. 2: Times of sunset
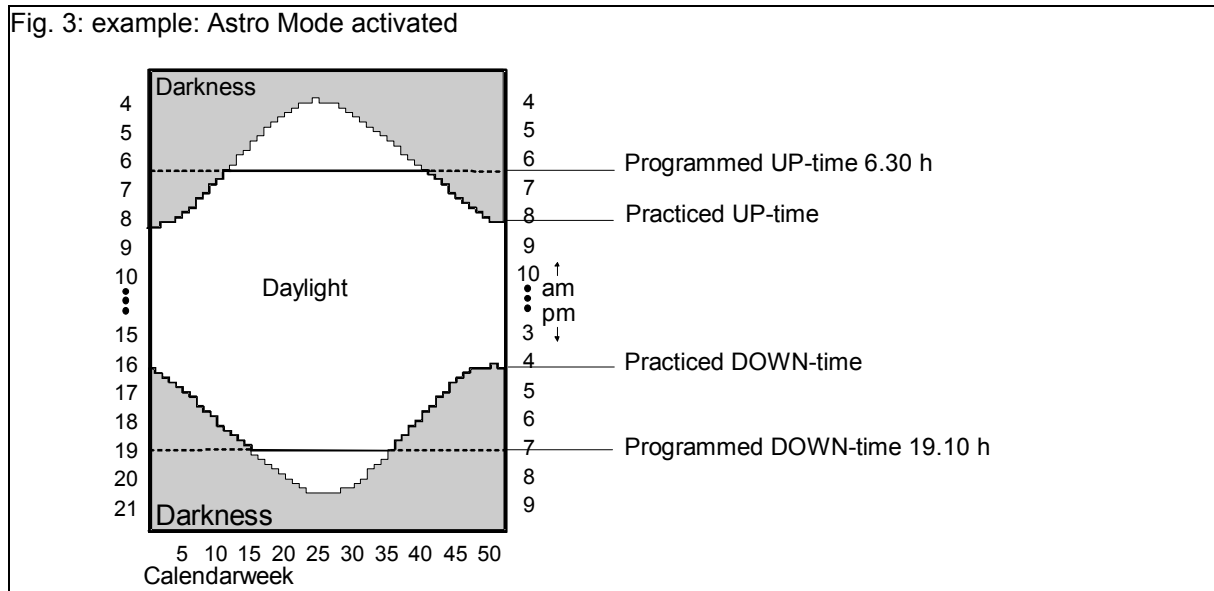


WZ = Wintertime,
SZ = Summertime

**Note:** If Astro Mode is activated do not programm more than a max. of one pair of Switch Times (e.g. 1 UP, 1 DOWN) per half day (morning / Afternoon).

If it is required for a venetian blind to be opened at SA and closed at SU, it may be done with **activated Astro Mode** and followingprogramming:
Switch Time 1: Mon-Sun 04.00 h UP; 21.00 h DOWN.

If it is required for a venetian blind to be opened at 06.30 h earliest and closed at 19.10 h in the evening latest, use following programming:
**Astro Mode activated,** Switch Time 1: Mon - Sun 06.30 h UP, 19.10 h DOWN (please see following page, fig. 3)

Fig. 3: example: Astro Mode activated



- Programmed UP-time 6.30 h
- Practiced UP-time
- Practiced DOWN-time
- Programmed DOWN-time 19.10 h

Darkness / Daylight / Darkness
Calendarweek

## 4.5 Combination of Random and Astro Mode

If Astro **and** Random Mode are activated, Switch Times are being made conform to times of sunrise and sunset (see chap. 4.4) and varied with a random time of up to $\pm$ 15 minutes additionally. (see chap. 4.3). **For activating Random Mode, please see chap. 4.2.**

# 5. Technical Data

| | | | |
|---|---|---|---|
| Rated Voltage: | 230 V +6%, -10%, 50Hz Neutral conductor required | Astro Mode: | internal stored times of sunrise and sunset |
| Rated Load: | max. 1000 VA | Relay Output: | 2 NOC |
| Time-keeping quality: | $\pm$ 1 min./month | Pulse Duration: | 2 minutes |
| Operation reserve: | 2 hours | Connexion: | srew clamps for max. 2,5 mm² |
| Switch times: | 9 „Auf" -(UP) and „Ab"-(DOWN) times each | Self-consumption: | < 2 W |
| Shortest period between switches: | 2 minutes between 2 movements | Fuse: | T 6,3A / 250 D |
| | | Ambient Temperature: | -10°C to + 40°C |
| Random Generator: | max. $\pm$ 15 min. | | |

## 6.    Planning Aid

Following table may be used for clarifying programmed dates.

| Switch Time No. (SN) | ⋀ | ⋁ | Mon | Tue | Wed | Thu | Fri | Sat | Sun |
|---|---|---|---|---|---|---|---|---|---|
| Example (SN) No. 2 | 08.30 | 22.00 | | | | | | X | X |
| 1 | | | | | | | | | |
| 2 | | | | | | | | | |
| 3 | | | | | | | | | |
| 4 | | | | | | | | | |
| 5 | | | | | | | | | |
| 6 | | | | | | | | | |
| 7 | | | | | | | | | |
| 8 | | | | | | | | | |
| 9 | | | | | | | | | |

## Acceptance of guarantee

We accept the guarantee in accordance with the corresponding legal provisions.

**Please return the unit postage paid to our central service department giving a brief description of the fault:**

Gira
Giersiepen GmbH & Co. KG
**Service Center**
Dahlienstrasse 12
D-42477 Radevormwald

CE    The CE sign is a free trade sign addressed exclusively to the authorities and does not include any warranty of any properties.

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