

# Digital Astro-Week Time Switch, Tempus Digital, 1 Channel (BZT18D011A)



## 1. Basic safety information

#### \Lambda WARNING

Danger of death from electric shock or fire!
Installation should only be carried out by a qualified electrician!

- The device is designed for installation on DIN top hat rails (in accordance with EN 60715)
- Corresponds to type 1 STU nach IEC/EN 60730-2-7

## 2. Proper use

- The astronomic time switch is used, for instance, for lighting equipment (roads, external staircases, display windows, entrances etc.)
- Only for use in closed, dry rooms
- Do not use on safety devices, e.g. escape route doors, fire safety equipment etc.

### Disposal

> Dispose of device in environmentally sound manner

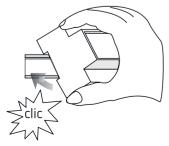
## 3. Installation and connection



#### WARNING

Danger of death from electric shock or fire!
 Installation should only be carried out by a qualified electrician!

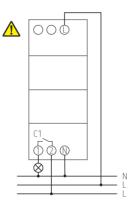
### Time switch installation



Schrack Technik GmbH

- ► Install on DIN top hat rails (in accordance with EN 60715)
- ➤ Disconnect power source
- > Cover or shield any adjacent live components
- > Ensure device cannot be switched on
- ➤ Check absence of voltage
- ► Earth and bypass

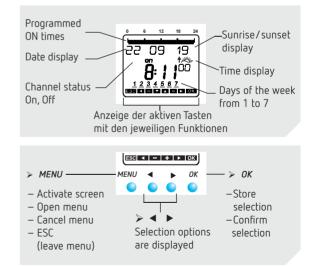
### Connecting the time switch



 Correct connection required for smooth zero- cross switching operation

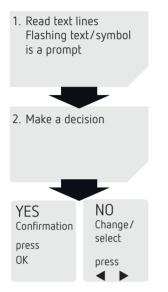
## 4. Device description

### **Display & buttons**

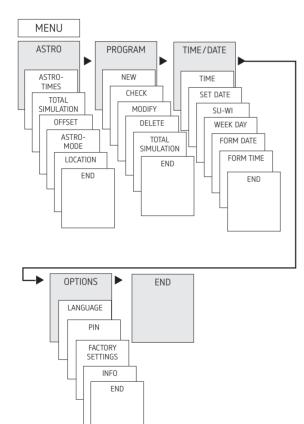




### **Operating instructions**



### Overview of menu selection

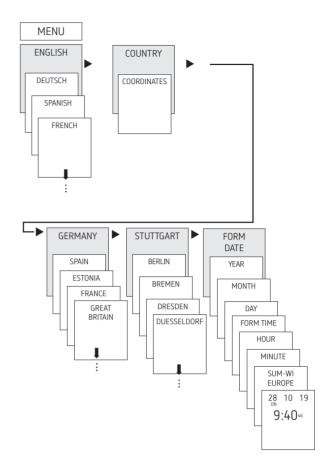


#### Initial start-up

① Since the device does not have a battery, it must be connected to the power supply during start-up, so time and date can be set.

Schrack Technik GmbH

Seybelgasse 13, A - 1230 Vienna, PHONE +43 1/866 85-0 E-MAIL info@schrack.com, INTERNET www.schrack.com



- Set language, country, town/city, date, time as well as summer/winter time (SO-WI)
- Press any button and follow on-screen instructions (see figure)

## 5. Settings and functions

#### ASTRO menu

In the ASTRO menu astro times, complete simulation, offset, astromode as well as position (location) can be viewed or changed.

Astro times

Display of the astro times (including the offsets) for the current day

• Total simulation

Display of the switching behaviour with a freely selectable Start date

Offset

The offset (adjustment value) can be used to shift calculated astro times +/-120 min. This enables the Astro switch-on and switch-off times to be adapted to local circumstances (e.g. mountains, high buildings etc.) or to personal requirements.

- Astro mode
  - Evenings on, mornings off Switches: on at sunset, switches off at sunset (Example: street lighting)
  - Evenings off, mornings on Switches off: at sunset,
  - switches on at sunrise (Example: terrarium).
  - Astro inactive: The astro times are ineffective (timer function only).

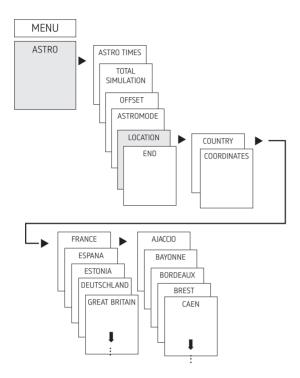
PAGE 2/4



Position

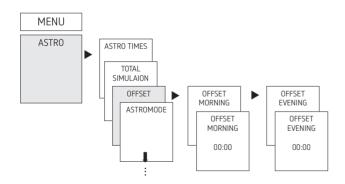
 Location set by selecting a city or by coordinates (latitude/longitude, time zone).

### Change astro time/position



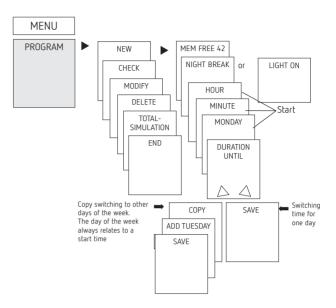
E.g. enter a different country, a different town/cityPress MENU (see picture).

### Setting the offset function



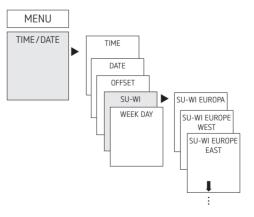
- ► Press MENU
- > Select ASTRO and press OK to confirm
- ➤ Select OFFSET and press OK to confirm
- Select OFFSET MORNING or OFFSET EVENING and press OK to confirm
- > Set the time and press OK to confirm

### Set fixed switching time



- 0 A switching time always consists of a start time and an end time (LASTS UNTIL). e.g. night switch-off on Monday 23:00 05:00 hrs
- ① There are 42 memory cells available
- Press MENU
- ➤ Select PROGRAM and press OK to confirm
- ➤ Select NEW and press OK to confirm
- Select NIGHT SWITCH OFF or DAY SWITCH ON and press OK to confirm
- Set selected switching times (hours, minutes, day) and press OK to confirm
- Select COPY or SAVE
- ➤ To save press ► and press OK to confirm
- ➤ To copy press OK

### Setting summer/winter time



- Press MENU
- ➤ Select TIME/DAT and press OK to confirm
- ➤ Select SO-WI and press OK to confirm
- > Select region for the SO-WI time and press OK to confirm

Schrack Technik GmbH

PAGE 3/4

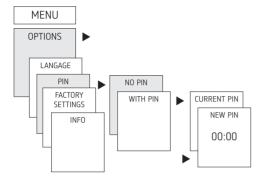


### Activate PIN-Code

The PIN code is set in OPTIONS via the menu.

If you have lost the PIN, please call the Theben Hotline.

① Have the serial number ready!



### Setting manual or permanent switching

Manual and permanent switching can be set in the automatic screen by key combination (see fig).

- Manual control Reversing the channel status to the next automatic or programmed switching.
- Permanent switching
   As long as a permanent switching (on or off) is activated, the programmed switching times are ineffective.



#### Activate manual switching

> Briefly press both keys simultaneously

#### Activate permanent switching

> Simultaneously press both keys for 2 seconds

#### Cancelling manual/permanent switching

> Press both keys simultaneously

### Resetting the time switch

- > Press the 4 buttons simultaneously.
  - $\rightarrow$  You can choose between RETAIN PROGRAM and DELETE PROGRAM.

## 6. Technical Data

Operating voltage:	230 V AC +10 % / -15 %
Frequency:	50-60 Hz
Standby:	0,54 W
Max switching capacity.:	16 A (at 250 V AC, $\cos \varphi = 1$ )
Switching capacity:	2 A (at 250 V AC, $\cos \varphi = 0.6$ )
Min. switching capacity:	10 mA/230 V AC 100 mA/24 V AC/DC
Switch output:	switching of any phase is permitted
Protection rating:	IP 20 in accordance with EN 60529
Protection class:	II in accordance with EN 60730-1 subject to designated installation
Operating temperature:	-30 °C +55 °C
Power reserve:	48 hours, rechargeable
Switching accuracy:	accurate to the second
Time accuracy (typical):	± 0,5 s/day (25 °C)
Rated impulse voltage:	4 kV
Pollution degree:	2
Software class:	A
Contact:	NO contact
Max. switching cycles with 16 A resistive load	50 000
Incandescent lamp load:	2600 W
Halogen lamp load:	2600 W
Fluorescent lamps (LLB low-loss bal- lasts):	
uncorrected	2600 VA
series-corrected	2600 VA
parallel-corrected	650 VA ( 72 μF)
Fluorescent lamps (EB):	600 W
LED-lamps (< 2 W):	30 W
LED-lamps (> 2 W):	300 W

O The time switch display is only fully functional at temperatures from +5 °C - +55 °C.

Schrack Technik GmbH