

The right choice every time: The new top3 product family



top3 highlights:

- ightarrow Programming by app
- → Safe transfer via Bluetooth Low Energy with OBELISK top3
- ightarrow 600 W LED output
- ightarrow 800 A / 200 µs inrush current level
- ightarrow 18 languages

More time for what matters

With more than 10 million top2 devices sold worldwide, Theben time switches have been the standard in terms of functionality, ease of use and reliability for decades.

The new digital time switches of the top3 series replace the proven top2 devices and reach the next milestone in terms of performance, energy efficiency and programmability. Time switch programs can now be easily controlled using an app and transferred to the timer via Bluetooth Low Energy.

SELEKTA top3 astronomical time switches can be used for precise switching of connected consumers based on sunrise and sunset.

Ideal for LED

Thanks to the redesigned zero-cross switching, you can keep the high inrush currents of LEDs firmly under control. top3 provides 5 times more LED output than top2 (max. 600 W, 800 A/200 μ s).

Learn everything about switching LEDs correctly and dimming them harmonically at **www.perfect-led-dimming.co.uk**



Programming, whenever and wherever you like It couldn't be more flexible and convenient!



Create your programs just as you like directly at the top3 device, on a PC or laptop, or via app on a tablet or smartphone.



"App"solutely safe transfer In 3 steps









This is how it works!

Discover how easy programming and transferring can be with top3.

www.youtube.com/TheThebenAG

Step 1

The programs are transferred to the device **exclusively via the Bluetooth OBELISK top3** (Bluetooth Low Energy). This is a safer option, since built-in Bluetooth receivers, for instance in public places such as schools or in the street lighting columns, are susceptible to tampering.

You Tube

Step 2

Transfer your time program to the top3 device or read existing programs from your top3 device and load them on your smartphone. Theben offers you the possibility to save your time programs directly from the app in the cloud, to send them via email, or transfer them from smartphone to smartphone. It couldn't be any more convenient.

Step 3

After the transfer, you remove the Bluetooth Low Energy OBELISK top3. This protects your device against tampering by third parties. The Low Energy technology, which is proven in smart home applications, significantly reduces standby consumption and saves money.

Highly compatible The incredible ease of making top2 into top3

Benefit from the high level of compatibility of the top3 devices with the top2 series. Thanks to the identical terminal layout, replacing devices is a breeze.

Even better:

top2 accessories can also be used with top3. With the new Bluetooth OBELISK top3 – or your existing OBELISK top2 – you can read top2 programs and transfer them to top3 devices. This will save you time and money, as there is no need to undertake complex reprogramming when you replace a device.



Quality "Made in Germany"

All devices of the top3 series are developed and produced at our location in Haigerloch, Germany. During the manufacturing process itself, the 100 % final inspection ensures that each of our products leaves our company in a flawless condition.

And that's not all: In our in-company testing laboratory, authorised by VDE (German Institute for Electrical, Electronic and Information Technologies), we carefully examine each development from the very first idea, through prototype development, right up to start of production. This is something which cannot be taken for granted everywhere these days.



<mark>top3 app now available</mark> See what it can do



Redesigned zero-cross switching

Thanks to the completely redesigned zero-cross switching, you will keep the high inrush currents of LEDs firmly under control. **top3 provides 5 times more LED output than top2 (max. 600 W).** Furthermore, the relay contact is protected and the service life of top3 devices is extended. They protect your investments and our environment.



Convenient operation

You can easily program time switch programs on your smartphone or tablet (Android & iOS) – either graphically or in list form. Send direct commands from the app to the timer and, if you need to, set the time in the app as well.



Low consumption on standby

Compared with permanently installed Bluetooth components, a plug-in OBELISK top3 with Low Energy technology reduces standby consumption considerably. This results in greater energy efficiency and lower costs.



High investment protection

Bluetooth Low Energy is a sustainable technology, which is already being used successfully in smart homes. It supports both Android and iOS and ensures long-term protection of your investments.



Integrated geo-coordinates

The app identifies your current location from the location function on the mobile end device. This information can then be sent to the SELEKTA top3 astronomical time switches, saving you the hassle of entering your geocoordinates manually (longitude and latitude).



Maximum manipulation security

Time switch programs can only be transferred from the app to the timer when the Bluetooth OBELISK top3 is plugged into the time switch. This protects your device against unwanted access by third parties and ensures maximum security against tampering. This is particularly important for devices installed in public places.



Transferring when voltage is absent

A time switch program can even be transferred to a top3 device without power connection. Prepare the time switch for mounting, by simply transferring the time program in battery mode only.



Saving, sending and transferring

Save time programs directly from the app in the cloud, send programs via email, or transfer them from smartphone to smartphone. It couldn't be any more convenient.

Advanced features Selected top3 devices



Adjustable twilight range Precision astro cycle

Astronomical time switches can be used for precise switching of connected consumers based on sunrise and sunset. This makes lighting control a breeze while also lowering your energy usage. So it's good for the environment and your wallet.

SELEKTA 171 top3 RC and SELEKTA 172 top3 also feature an astro cycle which is useful for controlling roller blinds and shutters.

What's more, the new astro time switches for the first time feature a three-stage twilight range:

- Sunset (civil twilight)
- Twilight (nautical twilight)
- Darkness (astronomical twilight)



Practical, reliable and low-maintenance: Channel switching and locking

The new dual-channel TR 622 top3 and SELEKTA 172 top3 devices now offer a channel switching and locking feature. The channel switching option allows you to activate basic lighting while at the same time saving energy. For example, this can ensure even loads for street lighting elements, while reducing maintenance intervals and downtimes.

The channel locking feature prevents a channel from using conflicting commands which could damage connected devices (e.g. forward and return for motors).



Learn more from our videos at www.youtube.com/TheThebenAG



Spontaneous, annual, cyclical: A wide range of additional programs

The new TR 611 top3, TR 611 top3 RC and TR 622 top3 devices feature a small annual program and make it possible to program one-off and recurring events (e.g. pre-programmed holidays which you need only select).

In addition, the devices have a cycle and a pulse program.

This is how LED lamps are switched



Problem: Hard work for the contacts Capacitive switching loads

How can an LED lamp that only has a few watts of rated output destroy a switching contact that has been dimensioned for a multiple thereof?

Upon closer inspection, the answer is found in the switching currents: in light bulbs, the typical switching currents of the cold spiral coil cause a tenfold of the respective rated current. On LED lamps and energy-saving lamps with their capacitive characteristics, one finds switching current pulses in the µs range that could be a 1.000-fold and more of the rated current!

With the right contact at the right time

More at www.perfect-led-dimming.co.uk



Solution: Switching precisely at a point zero-cross switching

Switching devices that are designed for the C load generally deal with the inrush currents in a better manner.

Theben uses a particularly efficient solution so-called zero-cross switching. It calculates the zero crossing of the sinus curve of the alternating voltage. At this moment, the inrush current is at its minimum during switching. This protects the relay contact and extends its service life, even at nominally high switching loads. Almost all of the devices of the top3 series are equipped along with the motion detector theLuxa S and the presence detector PlanoCentro.

Digital time switches TR top3 series



TR 610 top

TR 612 top3

Operating voltage	230 V AC	
Frequency	50-60 Hz	
Type of contact	Changeover contact	
Program	Weekly program	
Number of channels	1 2	
Power reserve	10 years	
Switching capacity at 250 V AC, $\cos \varphi = 1$	16 A	
Switching capacity at 250 V AC, $\cos \phi = 0.6$	10 A	
Incandescent/halogen lamp load	2600 W	
Compact fluorescent lamps	300 W	
LED output		
• LED lamp < 2 W	50 W	
•LED lamp > 2 W	600 W	
• Inrush current	/800 A/200 µs	
Time accuracy at 25 °C	Typically ± 0.25 s/day (quartz)	
Time basis	Quartz	
Standby output	< 0.4 W	
Connection type	DuoFix plug-in terminals	
Protection rating	IP 20	
Protection class	II in accordance with EN 60730-1	
Ambient temperature	-30 °C +60 °C -30 °C +55 °C	

Item numbers, accessories and promotion packages

top3 devices	6100130	6120130	
Previous models (top2 devices will be replaced!)	6100100, 6100101, 6100102, 6100103, 6100105, 6100107	6120100, 6120101, 6120102, 6120103, 6120105, 6120107	
Bluetooth OBELISK top3	9070130		
top2 RC–DCF antenna	-		
top2 RC-GPS antenna	-		

TR 611 top3 TR 611 top3 RC TR 622	top3
230 V AC 110–230 V AC 230 V	AC
50-60 Hz	
Changeover contact	
Weekly program, 3 special programs	
1 2	
10 years	
16 A	
10 A	
2600 W	
300 W	ENR
	DEALISTICE
50/W	
600W	
800 A/200 us	
$Iypically \pm 0.25 \text{ s/ day (quartz)}$	
Quartz Quartz DLF GPS Quart	(Z
<u> </u>	VV
II in accordance with EN 60730-1	
-30 °C +60 °C -25 °C +55 °C -30 °C	+55 °C
6110130 6110330 62201	30
6110100 6110300 62201	00
9070130 9070130 90701	30
- 9070410 -	
- 9070610 -	

_

Astronomical time switches SELEKTA top3 series



50 W

600 W

Operating voltage	230 V AC		
Frequency	50-60 Hz		
Type of contact	Changeover contact		
Program	Astro/weekly program		
Number of channels	1	2	
Power reserve	10	years	
Switching capacity at 250 V AC, $\cos \varphi = 1$	16 A		
Switching capacity at 250 V AC, $\cos \varphi = 0.6$	10 A		
Incandescent/halogen lamp load	26	500 W	
Compact fluorescent lamps	300 W		

I FD	011	hou	ŀ
	00	-pu	

LED lamp < 2 W LED lamp > 2 W

 Inrush current 	800 A7	200/µ\$//////////////////////////////////	
Time accuracy at 25 °C	Typically ± 0.25 s/day (quartz)		
Time basis	Quartz		
Standby output	< 0.4 W		
Connection type	DuoFix plug-in terminals		
Protection rating	IP 20		
Protection class	II in accordance with EN 60730-1		
Ambient temperature	-30 °C +60 °C	−30 °C +55 °C	
Item numbers, accessories and promoti	on packages		
top3 devices	1700130	1740130	
Previous models (top2 devices will be replaced!)	1700100	-	
Bluetooth OBELISK top3	9070130		
top2 RC–DCF antenna	-		
top2 RC-GPS antenna	-		







SELEKTA 171 top3 RC

230 V AC

110-230 V AC

50 -	-60 Hz	
Changeo	over contact	
Astro/weekly program	n, small annual program	
1	2	
10	years	
1	16 A	
1	IO A	
26	00 W	
31	W 00	
		NL FOR





Typically ± 0.25 s/day (quartz)

Quartz DCF GPS	Quartz	
0.8 W	< 0.4 W	
DuoFix plug-in terminals		
IP 20		
II in accordance with EN 60730-1		
−25 °C +55 °C	−30 °C +55 °C	
1710330	1720130	
1710100	1720100	
9070130	9070130	
9070410	-	
9070610	-	

One for all Bluetooth OBELISK top3

With only one Bluetooth OBELISK top3 you can operate as many top3 devices as you like. (Article number: 9070130)

Illustration in original size (50 mm x 17 mm x 10 mm)





Theben AG

Hohenbergstraße 32 | 72401 Haigerloch, Germany Phone +49 7474 692-0 | Fax +49 7474 692-150 info@theben.de | www.theben.de/en

9900668 | 4218 Subject to technical changes and improvements.

