

Theben 1720130

Theben Selecta 172 top3 Digital Astro Timer: User Manual

Model: 1720130

1. INTRODUCTION

This manual provides essential information for the installation, operation, and maintenance of your Theben Selecta 172 top3 Digital 2-Channel Astro Timer. This device is designed for precise time-controlled switching applications, featuring astronomical functions, weekly programming, and app-based configuration. Please read these instructions carefully before using the product to ensure safe and efficient operation.

2. SAFETY INSTRUCTIONS

Warning: Electrical shock hazard. Installation and maintenance should only be performed by a qualified electrician in accordance with national wiring regulations and local safety standards.

- Always disconnect power before installation or servicing the device.
- Ensure proper grounding.
- Do not expose the device to moisture or extreme temperatures.
- Verify all connections are secure before restoring power.
- The device is designed for DIN rail mounting. Ensure it is securely fastened.

3. PRODUCT OVERVIEW

The Theben Selecta 172 top3 is a digital astro timer with two independent channels, designed for flexible and precise control of electrical loads. It features a weekly program, two external inputs, and three special programs. Programming can be done directly on the device, via PC, or conveniently through a mobile app using the optional Bluetooth Obelisk top3.



Figure 3.1: Front view of the Theben Selecta 172 top3 Digital Astro Timer, showing the display, control buttons, and terminal connections.



Figure 3.2: Detailed view of the timer's digital display and navigation buttons (MENU, arrow keys, OK). The display shows current time, date, and channel status.

Key Features:

- 2 independent channels with weekly program.
- Astronomical switching function with 3 individual twilight areas.
- 2 external inputs for additional control.
- Channel switching and channel locking capabilities.
- App programming via optional Bluetooth Obelisk top3 for secure data transfer.
- Zero crossing circuit for relay-friendly switching.
- Automatic summer/winter time conversion.
- Power reserve for continued operation during power outages.

4. INSTALLATION (SETUP)

The Selecta 172 top3 is designed for quick and easy installation on a DIN rail.

4.1 Mounting

- Ensure the power supply is disconnected at the main breaker.
- Snap the timer onto a standard 35mm DIN rail. The device occupies 2 TE (Terminal Units) width.
- Ensure it is firmly seated.

4.2 Wiring

The device uses DuoFix plug-in terminals for secure and tool-free wiring. Refer to the wiring diagram on the device and in this manual.

- Connect the main power supply (L and N) to the designated terminals.
- Connect the loads to be controlled to the output terminals (C1, C2). Each channel can handle up to 16(10)A at 250V~.
- Connect external inputs (Ext1, Ext2) if additional control signals are required.
- Ensure all connections are tight and correctly polarized.



Figure 4.1: View of the terminal connections for power input, external inputs, and two output channels.

4.3 Initial Power-Up

After wiring, restore power. The device display should illuminate. Follow the on-screen prompts for initial setup, including language, date, and time.

5. OPERATION

The Selecta 172 top3 offers multiple programming methods for maximum flexibility.

5.1 On-Device Programming

Use the MENU and OK buttons along with the arrow keys to navigate the on-screen menu.

- **Setting Date and Time:** Access the 'Settings' menu to adjust the current date and time. The device includes automatic summer/winter time conversion.
- **Weekly Program:** Configure switching times for each day of the week for both channels.

- **Astro Function:** The astronomical function calculates sunrise and sunset times based on your geographical location, allowing for automatic switching relative to dawn and dusk. You can set up to 3 individual twilight areas.
- **Special Programs:** Utilize the 3 special programs for specific events or temporary overrides.
- **Channel Switching/Locking:** Configure how channels interact or lock them to prevent unauthorized changes.



Figure 5.1: Diagram illustrating the astronomical function, showing how the timer calculates sunrise, sunset, and twilight periods (6° Dämmerung = 6° Twilight, 12° Dunkelheit = 12° Darkness) for precise light control.

5.2 App Programming (via Bluetooth Obelisk top3)

For enhanced convenience and security, the Selecta 172 top3 can be programmed using a mobile app in conjunction with the optional Bluetooth Obelisk top3 (item no. 9070130).

- **Connect Obelisk:** Insert the Bluetooth Obelisk top3 into the designated slot on the timer.
- **Download App:** Download the official Theben top3 app from your device's app store.
- **Secure Transfer:** Timer programs can only be transferred from the app to the timer when the Bluetooth Obelisk top3 is physically plugged into the clock, ensuring maximum tamper-proof security.
- **Intuitive Interface:** The app provides a user-friendly interface for creating, editing, and managing switching programs.



Figure 5.2: The Theben Selecta 172 top3 timer shown alongside various mobile devices demonstrating the app programming interface and the Bluetooth Obelisk top3.

5.3 PC Programming (via Obelisk Interface)

The device also features an Obelisk interface for PC programming, offering another flexible method for managing complex schedules.

6. MAINTENANCE

The Theben Selecta 172 top3 is designed for long-term, maintenance-free operation.

- **Cleaning:** Use a soft, dry cloth to clean the exterior of the device. Do not use abrasive cleaners or solvents.
- **Internal Components:** There are no user-serviceable parts inside the device. Do not attempt to open the casing.
- **Firmware Updates:** Check the Theben website or app for any available firmware updates for improved functionality or bug fixes.

7. TROUBLESHOOTING

If you encounter issues with your Theben Selecta 172 top3, refer to the following common problems and solutions.

Problem	Possible Cause	Solution
Display is blank.	No power supply.	Check circuit breaker and wiring connections to L and N terminals.

Problem	Possible Cause	Solution
Loads not switching as programmed.	Incorrect program settings, manual override active, or wiring issue.	Verify program settings, check for active manual overrides, inspect load wiring.
App programming not working.	Bluetooth Obelisk top3 not inserted, app not connected, or Obelisk faulty.	Ensure Obelisk is correctly inserted. Check app's connection status. Try restarting the app.
Incorrect time/date.	Initial setup error or power reserve depleted.	Manually set time/date via menu. If power reserve is depleted, allow device to charge for a few hours.

If the problem persists, contact Theben customer support or a qualified electrician.

8. SPECIFICATIONS

Detailed technical specifications for the Theben Selecta 172 top3 Digital Astro Timer.

Parameter	Value
Model Number	1720130
Brand	Theben
Channels	2
Program Type	Weekly, Astro, Special Programs
External Inputs	2
Mounting	DIN Rail (2 TE width)
Switching Capacity per Channel	2 x 16(10)A, 250V~
LED Power	600 W
Inrush Current	800 A / 200 µs
Stand-by Power	0.4 W
Terminals	DuoFix plug-in terminals
Dimensions (Product)	6.4 x 3.5 x 8.4 cm
Weight	130 g
Material	Polycarbonate
Energy Efficiency Class	B



Lampenlasten SELEKTA 172 top3

- LED-Lampe < 2 W	50 W
- LED-Lampe > 2 W	600 W
- Leuchtstofflampenlast (VVG)	2600 VA
- Glüh- / Halogenlampenlast	2600 W
- Kompaktleuchtstofflampen	1100 W

Figure 8.1: Table detailing the maximum lamp load capacities for the Selecta 172 top3.

Translation:

LED-Lampe < 2 W: 50 W (LED lamp < 2 W)

LED-Lampe > 2 W: 600 W (LED lamp > 2 W)

Leuchtstofflampenlast (VVG): 2600 VA (Fluorescent lamp load (conventional ballast))

Glüh- / Halogenlampenlast: 2600 W (Incandescent / Halogen lamp load)

Kompaktleuchtstofflampen: 1100 W (Compact fluorescent lamps)

9. WARRANTY AND SUPPORT

The Theben Selecta 172 top3 Digital Astro Timer comes with a standard manufacturer's warranty. Please refer to the warranty card included with your product or visit the official Theben website for detailed warranty terms and conditions. For technical support, troubleshooting assistance, or inquiries regarding your product, please contact Theben customer service through their official website or the contact information provided in your product packaging.

10. EXAMPLE APPLICATIONS

The Theben Selecta 172 top3 is versatile and suitable for various time-controlled switching applications.



Figure 10.1: Example of the timer controlling street lighting in a town square, ensuring lights activate and deactivate according to astronomical times.



Figure 10.2: Illustration of ground-level pathway lighting being managed by the timer, providing illumination during twilight and night hours.

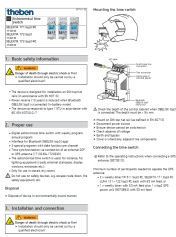
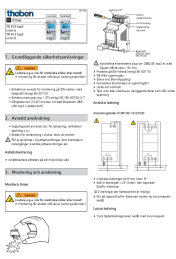




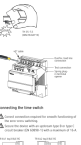

Figure 10.3: An example of the timer controlling facade lighting on buildings, enhancing aesthetics and security after dark.



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Related Documents - 1720130

	<p>Theben SELEKTA 171/172 top3 RC Astronomical Time Switch - Operating Instructions</p> <p>Comprehensive guide to installing, programming, and operating Theben SELEKTA 171 top3 RC and SELEKTA 172 top3 astronomical time switches, covering features, settings, and technical specifications.</p>
	<p>Theben TR 610 top3 & TR 612 top3 Timer Manual</p> <p>Comprehensive user manual for Theben TR 610 top3 and TR 612 top3 timers, covering installation, operation, programming, and technical specifications. Learn how to set up and utilize these advanced time switches for various applications.</p>

 <p>SELEKTA 174 top3 Artikel-Nr.: 174103 EAN: 4056002174103</p> <p>Handbuch und Funktionen</p> <p>SELEKTA 174 top3 ist ein digitaler Zeitschaltuhr mit 174 Kanälen. Sie ermöglicht die Steuerung von Beleuchtung, Heizung, Klimaanlage und anderen elektrischen Verbrauchern. Die Uhr ist über eine Fernbedienung oder eine App steuerbar. Sie verfügt über eine automatische Zeit- und Datumseinstellung sowie eine programmierbare Wochen- und Tagessteuerung. Die Uhr ist für den Einsatz in Innenräumen geeignet und hat eine Lebensdauer von bis zu 10 Jahren.</p>	<p>Theben SELEKTA 174 top3 Digital Time Switch - Features, Specifications, and Accessories</p> <p>Detailed information on the Theben SELEKTA 174 top3 digital time switch, including its features, technical specifications, functional descriptions, and available accessories. This device offers advanced time and light control capabilities.</p>
 <p>SELEKTA 172 top3 RC Artikel-Nr.: 172103 EAN: 4056002172103</p> <p>Handbuch und Funktionen</p> <p>SELEKTA 172 top3 RC ist ein digitaler Zeitschaltuhr mit 172 Kanälen. Sie ermöglicht die Steuerung von Beleuchtung, Heizung, Klimaanlage und anderen elektrischen Verbrauchern. Die Uhr ist über eine Fernbedienung oder eine App steuerbar. Sie verfügt über eine automatische Zeit- und Datumseinstellung sowie eine programmierbare Wochen- und Tagessteuerung. Die Uhr ist für den Einsatz in Innenräumen geeignet und hat eine Lebensdauer von bis zu 10 Jahren.</p>	<p>Theben SELEKTA 172 top3 RC Digital Time Switch - Technical Specifications and Features</p> <p>Detailed technical specifications, features, and accessories for the Theben SELEKTA 172 top3 RC digital time switch. This astronomical time switch offers weekly programming, GPS synchronization, app control via Bluetooth, and various advanced functions for lighting control.</p>
 <p>Handbuch und Funktionen</p> <p>Das Handbuch beschreibt die Installation, Programmierung und Verwendung der digitalen Zeitschaltuhren der Theben TR top3 BLE RC-Serie. Es enthält detaillierte Informationen über die verschiedenen Funktionen der Uhr, wie die automatische Zeit- und Datumseinstellung, die programmierbare Wochen- und Tagessteuerung, die Fernbedienung und die App-Steuerung. Das Handbuch ist für die Benutzer der TR top3 BLE RC-Serie gedacht.</p>	<p>Theben TR top3 BLE RC Digitale Zeitschaltuhren: Handbuch und Funktionen</p> <p>Umfassendes Handbuch für die digitalen Zeitschaltuhren der Theben TR top3 BLE RC-Serie. Erfahren Sie mehr über Installation, Programmierung mit Jahres- und Astroprogrammen, Bluetooth-Konnektivität und die Verwendung der OBELISK top3 App und PC-Software.</p>
 <p>TR 642 top3 BLE 12-24V RC Artikel-Nr.: 642103 EAN: 4056002642103</p> <p>Handbuch und Funktionen</p> <p>TR 642 top3 BLE 12-24V RC ist ein digitaler Zeitschaltuhr mit 642 Kanälen. Sie ermöglicht die Steuerung von Beleuchtung, Heizung, Klimaanlage und anderen elektrischen Verbrauchern. Die Uhr ist über eine Fernbedienung oder eine App steuerbar. Sie verfügt über eine automatische Zeit- und Datumseinstellung sowie eine programmierbare Wochen- und Tagessteuerung. Die Uhr ist für den Einsatz in Innenräumen geeignet und hat eine Lebensdauer von bis zu 10 Jahren.</p>	<p>Theben TR 642 top3 BLE 12-24V RC Digital Time Switch</p> <p>Detailed information on the Theben TR 642 top3 BLE 12-24V RC digital time switch, featuring app programming via BLE, annual and astro programs, multiple channels, and extensive programming options.</p>