

BN-LINK U135BL

BN-LINK U135BL 7-Day Programmable Astronomical Timer Switch Instruction Manual

Model: U135BL

INTRODUCTION

Thank you for choosing the BN-LINK U135BL 7-Day Programmable Astronomical Timer Switch. This device is designed to automate your lighting based on astronomical events like sunrise and sunset, offering convenience and energy efficiency. Please read this manual thoroughly before installation and operation to ensure proper use and safety.

SAFETY INFORMATION

- **Neutral Wire Required:** A neutral wire is essential for the installation of this timer switch.
- **Single Pole Only:** This timer switch is designed for single-pole installations only.
- **ETL Listed:** This product is ETL listed, ensuring compliance with North American safety standards.
- **Qualified Electrician:** Always have a qualified electrician install this product to prevent electrical hazards.
- **Power Off at Breaker:** Before any installation or maintenance, always cut off power at the circuit breaker to avoid electric shock.

SETUP AND INSTALLATION

1. Unboxing and Preparation

The package includes the BN-LINK U135BL timer switch, a wall plate, mounting screws, and twist-on wire connectors. You will need a flat-head screwdriver and a Phillips head screwdriver for installation.

2. Wiring Instructions

Important: Ensure power is OFF at the circuit breaker before proceeding.

1. Unscrew and remove the existing wall plate and switch.
2. Verify the presence of a neutral wire in your wall box. A neutral wire is typically white.
3. Connect the **black wire** of the timer to the **hot wire** of the wall box using a twist-on wire connector.
4. Connect the **red wire** of the timer to the **load wire** of the wall box using a twist-on wire connector.
5. Connect the **white wire** of the timer to the **neutral wire** of the wall box using a twist-on wire connector.
6. Connect the **green wire** of the timer to the **ground wire** of the wall box using a twist-on wire connector.
7. Carefully push the wired timer switch into the wall box and secure it with the provided screws.

8. Attach the wall plate.



Image: Easy Wire Installation. This diagram illustrates the correct wiring connections for the BN-LINK timer switch, showing the black (hot), red (load), white (neutral), and green (ground) wires. A neutral wire is required for proper installation.

3. Initial Power-On and System Reset

1. Turn power back ON at the circuit breaker.
2. If the screen is blank, dim, or flashing, allow the internal battery to charge for **10 minutes**.
3. Press the "RESET" button to reset the system. The screen display will flash.
4. Hold the "SET" button for **3 seconds** to quit the flashing clock display.

Note: The system time and all settings will be erased after a system reset.

4. Setting Current Date, Time, and Sunrise/Sunset Time

Follow these steps to configure the basic time settings:

1. **Set Year:** Press "SET". The year (e.g., 2018) will flash. Use "+" or "-" to set the current year (from 2018 to 2099).
2. **Set Month and Day:** Press "SET" again to confirm the year. The month and day will flash. Use "+" or "-" to set the current date (from 1.1 to 12.31).
3. **Set Hour and Minute:** Press "SET" again to confirm the date. The hour and minute will flash. Use "+" or "-" to set the current time (from 12:00 AM to 11:59 PM). Ensure you select the correct AM/PM format.
4. **Confirm Time and DST:** Press "SET" to confirm the correct time. Then use "+" or "-" to set DST (Daylight Saving Time) to ON or OFF. Enable DST if your region observes it to avoid manual adjustments.
5. **Choose Time Zone:** Press "SET" to confirm DST setting. The Time Zone will flash. Use "+" or "-" to choose your local time zone from PAC (Pacific), MOU (Mountain), CEN (Central), EAS (Eastern), HAW (Hawaii), and ALA (Alaska).
6. **Set Sunrise/Sunset Time:** Press "SET" to confirm the current time zone. The sunrise time will flash. Use "+" or "-" to set the correct sunrise time for your time zone. Press "SET" again, and the sunset time will flash. Use "+" or "-" to set the correct sunset time.
7. **Exit Settings:** Press "SET" to confirm the sunset time and exit the setting process. If you are in Daylight Saving Time, check if the DST icon is displayed.

Tip: If you want to quit setting at any stage, hold "SET" for 3 seconds or leave the buttons untouched for 90 seconds. Pressing "+" or "-" once changes values by one unit. Holding for less than 2 seconds changes by 6-8 units/second. Holding for 2 seconds or more changes by 60 units/second.

Your browser does not support the video tag.

Video: How to Set Up BN-LINK Astronomical Timer Switch. This video provides a step-by-step guide on installing and setting up the BN-LINK astronomical timer switch, including initial power-on, system reset, and configuring date, time, and time zone settings.

OPERATING INSTRUCTIONS

1. Setting ON and OFF Events (Programs)

The timer switch supports up to 18 ON/OFF programs. To set a program:

1. Press "PROG". The display will show "--:--".
2. Press "SET" to set the first ON event. The day of the week will flash first. Use "+" or "-" to choose the desired day(s) or day combination (e.g., MO TU WE TH FR SA SU, MO, TU, WE, TH, FR, SA, SU, MO TU WE TH FR, SA SU).

3. Press "SET" to confirm the day(s). The time will flash. Use "+" or "-" to set the desired ON time (from 12:00 AM to 11:59 PM). If you want to choose sunrise or sunset time as the ON time, press the 'D/D' button once for sunrise or twice for sunset.
4. Press "PROG" to confirm the ON event. The display will show "--:--" again.
5. Press "SET" to set the first OFF event. The day of the week will flash first. Use "+" or "-" to choose the desired day(s) or day combination.
6. Press "SET" to confirm the day(s). The time will flash. Use "+" or "-" to set the desired OFF time (from 12:00 AM to 11:59 PM). If you want to choose sunrise or sunset time as the OFF time, press the 'D/D' button once for sunrise or twice for sunset.
7. Press "PROG" to confirm the OFF event. The display will show "--:--" again.
8. Repeat steps 2.2 to 2.6 to set additional programs, up to a maximum of 18.

Tip: To quit event setting at any stage, hold "PROG" for 3 seconds or leave the keys untouched for 90 seconds. To clear or resume the current input, press either the ON/OFF key once or twice. To revise a previous input, press 'SET' to shift to the relevant stage and make the correction.



Image: Timer Display for Sunrise/Sunset. This image shows the timer display with 5:00 AM and 8:00 PM settings, indicating the flexibility of programming for different times of day.

2. Auto/Manual Mode

This timer switch has two operating modes: MANUAL (MAN ON/MAN OFF) and AUTO (AUTO ON/AUTO OFF).

- **Switching Modes:** After completing program setup, press and hold the ON/OFF button for 3 seconds or longer to switch between MANUAL and AUTO modes.
- **MANUAL Mode:** Press ON/OFF to turn the timer constantly ON or OFF.
 - MAN ON: Power output is constantly ON.
 - MAN OFF: Power output is constantly OFF.
- **AUTO Mode:** Press ON/OFF to temporarily turn the timer ON or OFF.
 - AUTO OFF: Power output is temporarily cut off and will be resumed upon the next ON event.
 - AUTO ON: Power output is temporarily active and will be cut off upon the next OFF event.

Note: Ensure the timer switch is set to AUTO mode for it to operate based on the programmed settings.

3. Daylight Savings Time (DST) Mode

The DST mode automatically adjusts the time, eliminating the need for manual changes and ensuring accurate lighting control year-round.

- **Activate/Deactivate DST:** Temporarily activate or deactivate DST by holding the "+" button for 3 seconds.
- When DST is ON, the DST icon will be displayed on the screen.
- When DST is OFF, the icon will disappear.

4. Random Mode

Activate the "Random" vacation mode to randomize light schedules, creating the illusion that your home is occupied to deter potential intruders.

- **Activate/Deactivate Random Function:** Press and hold "-" for 3 seconds or more to activate or deactivate the random function.
- When this function is active, the "RND" icon will display.
- At least one program must be set before activating the random function.

- When the random function is active, the ON and OFF events will be randomly postponed by 0-30 minutes respectively.



Image: Random Mode for Security. This image depicts a house exterior with a figure resembling a burglar, highlighting how the random mode can make your home appear occupied, enhancing security.

MAINTENANCE

The BN-LINK U135BL timer switch requires minimal maintenance. Ensure the device is kept clean and free from dust. Do not use abrasive cleaners or solvents. In case of any issues, refer to the troubleshooting section or contact customer support.

TROUBLESHOOTING

Problem 1: No screen display or faded display.

Possible Cause: Low battery.
Corrective Action: Energize the timer to charge the internal battery for 10 minutes, then press the "RESET" button to reset the timer.

Problem 2: Timer does not turn on or off as programmed.

Possible Cause A: The timer is working in manual mode.
Corrective Action: Switch the operation mode to AUTO by holding the ON/OFF button for 3 seconds.
Possible Cause B: Random function is active.
Corrective Action: Deactivate random function by holding the "-" button for 3 seconds.
Possible Cause C: DST is disabled, while the device is located in a region that observes DST. As a result, the internal time was not adjusted when DST started or ended, causing the scheduled operations to run at incorrect times.
Corrective Action: Enable DST by following the time setting procedure on the timer switch (hold "+" for 3 seconds).
Possible Cause D: Current system time on the timer switch is incorrect.
Corrective Action: Verify and correct the current time setting on the device by following the time setting procedure on the timer switch.
Possible Cause E: Programs were not correctly set.
Corrective Action: Re-program the timer following the operating instructions in this manual.

Your browser does not support the video tag.

Video: BN-LINK Astronomical Timer Switch Troubleshooting. This video provides visual guidance and solutions for common issues encountered with the BN-LINK astronomical timer switch, such as display problems or incorrect program execution.

SPECIFICATIONS

Operation Mode	ON-OFF-ON
Current Rating	15 Amps
Operating Voltage	125 Volts
Contact Type	Normally Closed
Connector Type	Clamp
Brand	BN-LINK

Terminal	Screw
Item dimensions L x W x H	4.6 x 2.8 x 1.6 inches
Actuator Type	Push Button
Contact Material	Metal
Number of Positions	18
Controller Type	Push Button
Control Method	Touch
Color	White
Wattage	1875 watts
Unit Count	1.0 Count
Manufacturer	BN-LINK
UPC	810079585892
Part Number	BND-60 U135B
Item Weight	5.5 ounces
Product Dimensions	4.6 x 2.8 x 1.6 inches
Item model number	U135BL
Style	Astronomical with Blue Backlight
Item Package Quantity	1
Batteries Included?	Yes
Batteries Required?	Yes
Battery Cell Type	NiMH

WARRANTY INFORMATION

BN-LINK products are designed to provide reliable performance. For specific warranty details, please refer to the documentation included with your purchase or contact BN-LINK customer support. Keep your purchase receipt as proof of purchase for warranty claims.

CUSTOMER SUPPORT

If you require further assistance or have any questions regarding your BN-LINK U135BL Astronomical Timer Switch, please contact our support team:

Email: support@bn-link.com

Website: [Visit the BN-LINK Store on Amazon](#)

We are here to help!