BN-LINK®

7-DAY IN-WALL ASTRONOMICAL DIGITAL TIMER

ENERGY SAVING

Please keep this handbook

TECHNICAL SPECIFICATIONS

Sunrise/sunset activation
18 ON/OFF per day
With ON/OFF/Timing shift function
With Ni-MH rechargeable battery
Min. Setting time: 1 minute
Max. Setting time: 7 days
Supply voltage: 125V~,60Hz
Contact rating: 15A/1875W Resistive
10A/1250W Tungsten, 10A/1250W ballast,1/2 HP, TV-5
Operating temperature: 5℉–122℉(-15℃–50℃)
Storage temperature: -4℉–140℉ (-20℃–60℃)
Insulation class: II
Protection class: IP20
Important: inductive (starting load) should always be calculated
especially when controlling lighting (because of variable inductive loads).
If this load exceeds 8 Amps then it is imperative that a contactor be used.

PRODUCT QUICK GUIDE

Features
1. The manual override button allows to turn on or off the timer at any time.
2. Easy-to-read large LCD screen with clock display.
3. Up to 18 ON events and 18 OFF events daily.
4. Random security setting allows to respectively postpone ON and OFF times by 0-30 minutes to create a "lived-in" look.
5. Turn on or off DTS with one simple push.
6. Sunrise/sunset activation.

⚠ WARNING

• To prevent risk of electric shock, cut off power supply before installation.
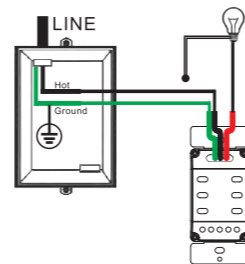• Always have a qualified electrician to install this product.

INSTALLATION

STEP 1: CUT OFF POWER SUPPLY TO THE IN-WALL WIRING BOX.
STEP 2: REMOVE THE EXISTING DEVICE IF ANY.
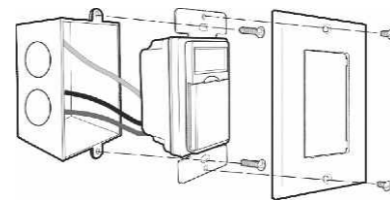**STEP 3: INSTALL THE TIMER.**
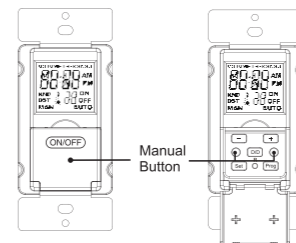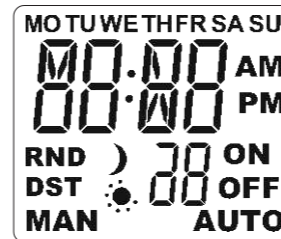
SINGLE-POLE INSTALLATION

Note:
1. To replace an existing switch, please make sure that the neutral wire is available in the wall box.

2. Before wiring, please cut OFF the power at beaker.

3. Wiring:
   a. Ground wire: Connect the Ground wire in wall box (or the earth screw) to GREEN wire of the timer. The Neutral wire from breaker should also be connected to the load's neutral wire.

   b. Hot wire: Connect the hot wire in the wall box (from breaker) to the BLACK wire of the timer.

   c. Load wire: Connect load's hot wire (from load such as light) to the RED wire of the timer.

FIX THE TIMER TO THE WIRING BOX AND THEN MOUNT THE FACE PLATE.
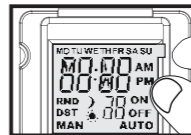

APPLY POWER TO THE WIRING BOX.

BUTTON LAYOUT AND SCREEN DISPLAY

Manual Button

REMOVE STICKER

Locate the tab at the top right of the sticker and pull to remove sticker from face of screen.

RESETTING THE TIMER

If the screen display is blank or faded, you can charge the battery for 10 minutes and then press the "**RESET**" button to reset the system. When the system is initialized, the screen display will be flashing. LCD display will appear like this icon.

Press SET to set date and time. Or hold SET for 3 seconds to quit to clock display screen.
Note: The system time and all settings will be erased after the system reset.

STEP1.SETTING CURRENT DATE, TIME AND SUNRISE/SUNSET TIME

1.1 Press **SET** in clock display screen. 2018 (year) will flash. Use **+** or **-** to set the value from 2018 to 2099.
1.2 Press **SET** to confirm current year, Month and day will now be flashing. The default value is January 1st. Use **+** or **-** to set current date from 1.1 to 12.31.
1.3 Press **SET** to confirm and the current day of the week will be displayed automatically. Hour and minute will be flashing. Use **+** or **-** to set current time from 12:00 AM to 11:59 PM.
1.4 Press **SET** to confirm correct time and then use **+** or **-** to set DST to on or off. DST ON indicates that DST activates automatically from 2:00 AM on the second Sunday of March to 2:00 AM on the first Sunday of November. DST OFF indicates that DST does not activate automatically.
1.5 Press **SET** to confirm DTS ON or OFF and Time Zone will be flashing. Use **+** or **-** to choose your local time zone from PAC (Pacific), MOU (Mountain), CEN (Central), EAS (Eastern), HAW (Hawaii) and ALA (Alaska).
1.6 Press **SET** to confirm current time zone and sunrise time will be flashing. Use **+** or **-** to set correct sunrise time in your time zone. Note: the flashing sunrise time is a default time, you may find accurate time on the internet or on a weather app on the smartphone.
1.7 Press **SET** to confirm correct sunrise time and sunset time will be flashing. Use **+** or **-** to set correct sunset time in your time zone.

Note: the flashing sunset time is a default time, you may find accurate time on the internet or on a weather app on the smartphone.

1.8 Press **SET** to quit setting. Or you can also quit setting at any stage by holding SET for 3 seconds or leaving the buttons untouched for 90 seconds.

Tips: Pressing **+** or **-** once will increase or decrease the values by one unit.

Holding + or - for less than 2 seconds will increase or decrease the value by 6-8 units/second.
Holding + or - for 2 seconds or more will increase or decrease the value by 60 units/second.

STEP2. SETTING ON AND OFF EVENTS

2.1 Press **PROG** in clock display screen, "-:--" will display. Press **SET** to set the first ON event. Day of the week will be flashing first. Use **+** or **-** to choose from below options:
(MO TU WE TH FR SA SU)
(MO)
(TU)
(WE)
(TH)
(FR)
(SA)
(SU)
(MO TU WE TH FR)
(SA SU)
2.2 Press **SET** to confirm desired day or day combination and time will be flashing. Use **+** or **–** to set desired ON time from 12:00 AM to 11:59 PM; or you can choose sunrise/sunset time for the ON event by pressing **D/D** key once or twice.
2.3 At this stage, you can clear or resume current input by pressing either ON/OFF keys once or twice. ON/OFF keys are the two small keys without silk screening.
2.4 To revise previous input, you may shift to relevant stage by pressing SET and make a correction. When the 1st ON event has been correctly set, press PROG to confirm and set the 1st OFF event following Steps 2.1-2.3.

2.5 You may set up to 18 ON/OFF events in the same way.
2.6 At any setting stage, you can quit event setting by holding **PROG** for 3 seconds or leaving the keys untouched for 90 seconds.

STEP3. TO VIEW, REVISE AND DELETE EVENTS.

3.1 Press **PROG** to view PROG 1 ON, press **PROG** again to view PROG 1 OFF, keep pressing **PROG** to view other events in sequence.
3.2 To edit an event, locate the event by pressing **PROG** and then press **SET** to edit. When the edit is finished, press **PROG** to locate the next event or hold **PROG** for 3 seconds to quit.
3.3 To delete an event, locate the event by pressing **PROG** and then press ON/OFF to delete it. Note: Please make sure to delete both ON and OFF events of a program.

STEP4. MANUAL ON/OFF

To manually turn on or off the timer, press either ON/OFF key.
The timer has two operating modes: MANUAL (MAN ON/MAN OFF) and AUTO (AUTO ON/AUTO OFF).

4.1 Press and hold ON/OFF for 3 seconds or longer to switch between MANUAL and AUTO modes.
4.2 In 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.

4.3 In 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 next ON event.
AUTO ON: Power output is temporarily active and will be cut off upon next OFF event.

STEP5. DST SETTING

You can set auto DST on or off in Step 1.7.
When auto DST is ON, the DST icon will display or vanish automatically.

You can temporarily activate or deactivate DST by holding + for 3 seconds. The DST state will automatically resume upon next DST switching time point. When auto DST is OFF, you can activate or deactivate DST by holding + for 3 seconds.

STEP6. RANDOM FUNCTION

Press and hold **–** for 3 seconds or more to activate or deactivate random function. When this function is active, "RND" icon will display. At least one program shall have been 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.

STEP7. SPECIFICATIONS

Power source: 125 VAC, 60 Hz
Max. load: 15 A resistive, 10 A ballast and tungsten, 1/2 HP
Program: up to 18 programs
Min. setting: 1 minute
Max. setting: 7 days
Manual ON and OFF
Auto adjustment of sunrise/sunset time

TROUBLESHOOTING

- **PROBLEM**:
  Timer does not turn on or off as programmed.
- **POSSIBLE CAUSE**:
  Programs were not correctly set.
  DST or random function is active.
  The timer is working in manual mode.
  Programs are overlapped.
- **CORRECTIVE ACTION**:
  Re-program the timer following the operating instructions.
  Deactivate DST or random function.
  Switch the operation mode to AUTO.
  Review and correct the programs or re-program the timer.

- **PROBLEM**:
  No screen display or faded display.
- **POSSIBLE CAUSE**:
  Low battery.
- **CORRECTIVE ACTION**:
  Energize the timer to charge the internal battery for 10 minutes and then press RESET button to reset the timer.