BN-LINK®

7-Day Digital Appliance Timer
NEMA 3R Non-Metallic Enclosure
Manual Override
120-227V 40A
DPDT

CP-U49B
Multi-Voltage
DPDT Time Control

PRODUCT BRIEF

This time control is a universal, digital time control which can be field configured for various power: 120VAC,208VAC,240VAC, and 277VAC, all in one unit. Selection of the desired supply voltage is easily achieved by positioning the dip switch to the required voltage. This time control comes in a NEMA 3R indoor and outdoor enclosure. This unit is intended for the control of lighting, heating, air conditioning, pumps, motors, or general electrical circuits in residential, commercial, industrial and agricultural facilities.
Switch Rating: DPDT.

SKU# & SPECIFICATION

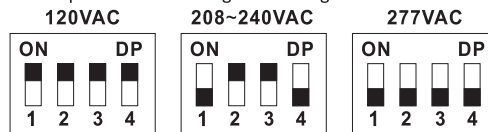| No.	SKU#	Min.Time Interval	ON/OFF perday	Box Type	Switch Rating
1.	CP-U49B	1 minute	8	N-3R Non-Metallic Enclosure	DPDT

TECHNICAL INFORMATION

- 120-240VAC, 60Hz,40A resistive
- 277VAC, 60Hz, 30A resistive
- 14VDC, 30A resistive
- 120VAC, 1HP, 10A Ballast
- 208-240VAC, 2HP,5A Ballast
- 277VAC, 1HP, 5A Ballast
- 120VAC, 8.3A Tungsten
- 208-277VAC, 5.4A Tungsten
- 120VAC, 800VA Pilot Duty
- 208-277VAC, 720VA Pilot Duty
- TV-5
- Max programs per day: 8 ON/OFF
- With power and load indicator
- With ON/OFF/ Timing manual switch
- Min. Setting time: 1 minute
- Max. Setting time: 7 days
- Environmental rating: -40°F to 130°F
- Humidity:0-95%;

INPUT VOLTAGE DIP SWITCH SETTING

Caution: Dip switch voltage selection must be finalized prior to applying power to the time control.

1. Do not apply power to the timer prior to setting correct input voltage using the DIP switch.
2. Determine the input voltage using the DIP switch (see wiring diagrams).

3. Set the Dip switch according to the diagram below

Caution: Do not check circuits by sparking wires to terminals, Damage to the timer may result.
If loads are connected to both NC and NO contactors, both contacts are derated to 67% of the above values.
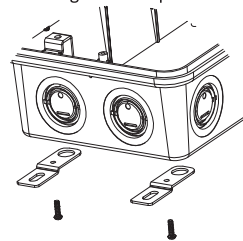
LED INDICATORS FUNCTION

Power LED (Red) – light illuminates when power is applied to the timer.
Status LED(Green) – light illuminates when power is applied to the loads.

INSTALLATION

Before wiring or service, power to this time control and the equipment it controls must be turned off, turning off the time control only will not prevent a shock hazard. Supplying power to time control, installation should be performed by a licensed electrician only.
Before installing this product read all instruction carefully.
Choose the appropriate KO's according to the cable, wire size and direction.
Optional external mounting tabs are provided as following:

Remove protective cover panel in time control housing by pressing the clip at the bottom of cover panel.
DIP SWITCH CONFIGURATION
WARNING, FAILURE TO PROPERLY CONFIGURE THE DIP SWITCH WILL RESULT IN DAMAGE TO THE UNIT AND VOID THE WARRANTY, BEFORE INSTALLING AND WIRING THE TIME CONTROL, PROPER CONFIGURATION MUST BE SELECTED, THIS IS ACCOMPLISHED AS PER THE ABOVE DIP SWITCH DIAGRAM.

OPERATING INSTRUCTIONS

1. Reset the timer
Press the "Reset" button with the tip of a small non-metallic insulated tool, such as a pencil or toothpick. LCD display will turn on.
2. Set up current day and time
Example: if it is 7:30 AM Friday, please follow below steps to set the current day and time.
2.1 Press and hold the "CLOCK" button, then press the "WEEK" button until "FR" displays on top of the screen.
2.2 Press and hold the "CLOCK" button, then press the "HOUR" button until 7:00 AM displays on the screen.
Note: please pay attention to AM/PM.
2.3 Press and hold "CLOCK" button, and press "MIN" button until 7:30 AM displays on the screen.

3.Set programs

3.1 Press the "PROG" button to enter the program setting.

Example: if you want to turn on a device every day at 8:05 am and turn it off at 9:00 pm, please follow below steps.

3.2 Press the "WEEK" button to enter the program setting, you will see all the days of the week on the top and "1 ON" to the left of the display.

Note: Press "WEEK" multiple times until you get the day combination you want.

Day combination options:

MO to SU

Individual day: MO, TU, WE, TH, FR, SA, SU

MO to FR

SA, SU

MO to SA

MO, WE, FR

TU, TH, SA

MO, TU, WE

TH, FR, SA

3.3Press the "HOUR" button until 8:00 am displays on the screen.

3.4Press the "MIN" button until 8:05 am displays on the screen.

3.5Press the "PROG" button once to set program "1 OFF".

3.6Repeat Steps 3.2 to 3.4 to set program "1 OFF".

3.7If you want to set the second ON/OFF program, press "PROG" button again, you can repeat Steps 3.2 to 3.6 to set the program, or press the "CLOCK" to return the current time.

Press "R" button in any program to erase the program.

Press "R" button again to restore an erased program.

You can set up to 8 different ON and OFF programs for your timer. To do so, just repeat Steps 3.1 to 3.6 for program "2 ON", "2 OFF", "3 ON" and etc.

3.8. Once you have set the programs, make sure you're in AUTO mode so that the timer will run your programs.

4.Switching between manual and auto modes

overriding programs/manually turning on/off

To run your programs, your timer must be in AUTO mode. You can tell which mode the timer is currently in by checking if AUTO or MAN is present below the current time.

To switch between AUTO and MANUAL modes: Press and hold the "MANUAL" button for 4 seconds or more.

To override a program and turn on/off the timer: Simply press the "MANUAL" button once to turn the timer on or off manually.

5.Set random for vacation security

In order to use the random function, you must set at least 1 set of programs. Pressing the "WEEK" and "HOUR" buttons simultaneously will activate security mode. "RND" will be shown to the right side of the display.

When the timer is working in Auto mode and the random function is on, the previously programmed ON and OFF times will be separately postponed by 2-32 minutes.

NOTE: A timer program shall be 33 minutes or longer for the random function to work properly.

Press the "WEEK" and "HOUR" buttons again to turn off the random function.

6.DST - Daylight saving time function

Press HOUR & MIN simultaneously to activate or deactivate DST.

Note: A small symbol "+1 h" will appear on the far right of the LCD screen when DST is active.

Turning on this function will change the current time 1 hour ahead; turning off the function will revert the change.

This timer cannot adjust Daylight Saving Time by itself. It must be manually enabled.
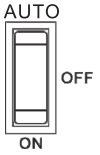
7.Troubleshooting

Timer does not turn on or off.

a. Make sure AM and PM are correct on the current time and in the program settings.

b. Timer program should be on AUTO setting.

c. Make certain that both an ON and OFF times have been specified.

d. If the number is not clear or blank on the screen, please power on the timer for 30 minutes to charge the internal battery, then press the Reset button.

e. If the timer cannot Turn ON or Turn OFF on time, please check if the Random function is active.

f. If the timer is always ON or always OFF, please check if the program is in Auto mode.

OVERRIDE SWITCH FUNCTION

AUTO– Programs actived: timer will function according to scheduled program

OFF– Always off: timer is in override and in "OFF" mode until override switch is set to ON or AUTO
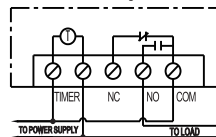
ON– Always on: timer is in override and load will remain "ON" until the override switch is reset to OFF or AUTO
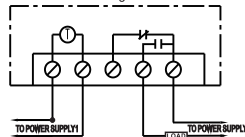

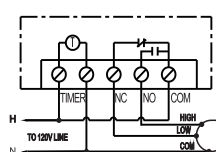## WIRE CONNECTION DRAWINGS

Typical Wiring Diagrams--SPDT

Timer and Load, Same Voltage Wired as Single Throw

Timer and Load, Different Voltage Wired as Single Throw
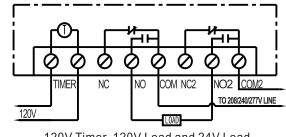
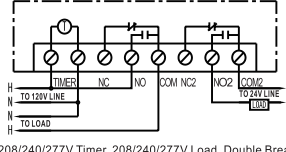120V Two Speed Fan Wired as Double Throw
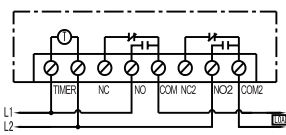
Typical Wiring Diagrams--DPDT

120V Timer, 208/240/277V Load, Double Break Wired as Single Throw

120V Timer, 120V Load and 24V Load Wired as Single Throw

208/240/277V Timer, 208/240/277V Load, Double Break Wired as Single Throw