



MODEL : MTJN-15M
CODE : 14JN12
WEIGHT :133 gr
(36x90x65)mm
IP 30



SCAN QR TO VIEW
THE PRODUCT

Description :

Shiva Amvaj Multi Timer is a highly efficient with a measuring accuracy of 0.01 sec. This device has two separate relays and can be applied in the following operation modes:

- A: ON/OFF Delay timer
- B: Left/ Right timer
- C: Flasher operation at different times
- D: Combined flasher operation

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Features:

- High accuracy microprocessor unit (accuracy: 0.01 s)
- Fifteen function programs including different timer, flasher, and cw/ccw operations
- Different displays
 - A segment :Time
 - B segment :Operation Mode
 - REL A: Relay A status
 - REL B: Relay B status
- Start type selector power START terminal connection/disconnection
- Resetting
 - START terminal selector power connection/disconnection
 - Simultaneous pressing of the $\uparrow$ and $\downarrow$ buttons
- Options
 - Determining relay status after start
 - Data back up in case of power supply failure

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Operation

- Power Supply : 180-250 VAC/ 50-60 Hz
- Operating condition
 - Temperature: -20 °C .. +65 °C
 - Humidity: 70%
- Output: Two 10A relays

Shiva Amvaj Digital Multitimer operates in 15 different modes, as described in Table 1.

Note 1: The adjustable range is from 1 to 999 (expressed in different time units).

Example: In B7, the adjustable range is as follows:

1 to 999 min: Right-hand; 1 to 999 sec: Left-hand; 1 to 999 min: Rest

Note 2: Other combinations can be obtained by converting sec to min (1 min = 60 s) and min to hour (1 h = 60 min) in Table 1.

TABLE 1

Delay ON/OFF Timers	CW and CCW Timers	Flashers	Combined Flashers
0.01-9.99 Sec 1	sec-sec-sec 6	sec-sec A	sec-min d
0.1-99.9 Sec 2	min-sec-min 7	min-min b	sec-hour E
1-999 Sec 3	min- min-min 8	hour-hour c	min-hour F
1-999 Min 4	hour-hour-hour 9		
1-999 hour 5			

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Note 3: In Left/Right-Hand Mode (particularly B1 and B2 Modes where resting time starts from 1 sec), the resting time (down time) must be set cautiously and in accordance with motor/engine specifications so as to avoid damage to the motor/engine due to insufficient resting time.

Based on its application, the device must then be set in accordance with Table 2 after selecting one of the listed 15 modes.

Table 2: Setting the device

SETTING	Displayed Characters	Button
Upon pressing $\leftarrow$ for 4 s, the device enters the Settings mode	SE n4	press $\leftarrow$ for 4 Sec

VER:0001

Selecting the desired mode from Table 1	Mod 2	$\leftarrow$
Selecting one of the following positions for Relay B: A: Positions of Relays A and B are similar A-: Position of Relay B is different from Relay A Off: Relay B is turned off	r b F	$\leftarrow$
Selecting either position Count up or Countdown	COU d	$\leftarrow$

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Selecting state of Relay A after connection to START: n: Relay is connected upon connection to START and disconnected after time count has completed f: Relay is disconnected upon connection to START and reconnected after time count has completed	REL n	$\leftarrow$
Selecting connection/disconnection delay: n: Time count starts upon connecting to START f: Time count starts upon disconnecting from START	SE n	$\leftarrow$
Selecting memory status: selecting "n" when time counting, The measured time is saved in case of power outage and time count is resumed from the saved value after reconnecting Off: Time count is restarted in case of power outage or disconnection from the begin	SAU F	$\leftarrow$

If there is a delay or if no button is depressed in 10 seconds during the setting process, the settings entered so far would be disregarded and the device exits Settings Mode.

Note 4: Use the $\uparrow$ and $\downarrow$ buttons to select the desired values and press ENTER to save your settings.

Note 5: By default, the device is in the Unlocked mode. To enter the Settings mode, press and hold down ENTER for 4 seconds (as mentioned in Table 2).

Note 6: To lock the device, simultaneously press the $\uparrow$ and $\downarrow$ buttons and hold them down for 5 seconds. After the device is locked, the Settings mode is made inaccessible. To unlock the device, simultaneously press the $\leftarrow$ and $\downarrow$ buttons and hold them down for 30 seconds.

Resetting

Upon completion of the time count process, the device can be reset in two ways:

- 1- Resetting via software: By simultaneously pressing the $\uparrow$ and $\downarrow$ button and holding them down for 4 s, the device is reset and the time count can be restarted from zero.
- 2-Resetting via hardware: This reset is performed by disconnecting and reconnecting the START terminal.

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Upon selecting the desired subgroup, time settings for Groups A to D are performed as follows.

Settings Group A

Suppose we wish the device to turn on 4 s after it is connected to the mains.

The setting process in this case would be:

Reminder: Since the desired time is in seconds, we must select A3 in the initial settings.

Press ENTER until the cursor and REL A in the upper display start blinking. Use the $\uparrow$ and $\downarrow$ keys to select the desired connection/disconnection time (in this example, "4 seconds" and "connection"). Now, press $\leftarrow$ again to save the program for execution.

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Settings Group B

In case the timer is used to control the clockwise and counterclockwise operations of the motor in a particular device, then a subgroup of Group B must be selected.

Upon selecting Group B, the setting procedure continues as explained below. For example, if we wish the motor to rotate counterclockwise for 15 s, rest for 5 s, and rotate clockwise for 10 s, the settings would be as follows:

Reminder: Since "second" is used as the time unit for clockwise and counterclockwise operations as well as the rest period, the B1 subgroup must be selected in the initial settings.

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Press the Enter key until the cursor in the upper display starts blinking and REL A appears. Use the $\uparrow$ and $\downarrow$ keys to select the desired clockwise operation (15 s in this example). Confirm your selection by pressing $\leftarrow$. Once the upper display cursor and the indicator REL B have started blinking again, you can set the time for the counterclockwise operation.

After selecting the desired time interval (10 s in this example), press $\leftarrow$ to save the settings. Again, the upper display cursor and the characters REL A and REL B would start blinking, indicating that the device is ready for setting the rest time between clockwise and counterclockwise operations. Upon setting the rest time (5s in this example), press $\leftarrow$ to save the settings and exit the settings mode. Now, the timer is ready to execute the selected program.

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Settings Group C ,D

Group C settings are used for controlling the ON/OFF time for the flasher.

For example, consider the motor in a water pump which pumps water for 1 hour before being turned off for 4 h. As time in this example is expressed in hours, the C3 subgroup must be selected in the initial settings. Upon pressing $\leftarrow$, the upper display cursor and the REL B characters would start blinking.

Use the $\uparrow$ and $\downarrow$ keys to enter the time the pump is in operation and then press $\leftarrow$ to activate the blinking mode in the upper display for setting the OFF time (with the cursor and REL B duly blinking). Enter the OFF time (4 h in this example), then press $\leftarrow$ to save the value and exit the Settings mode.

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The setting procedure for Group D is similar to that used for Group C. The only difference between these settings is in the selection of their time units.

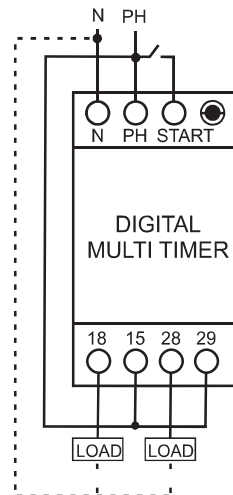
Installation

Mount the device directly inside the panel or use the railings inside the box to install it on another surface. You can also use the Shiva Amvaj panel frame for this purpose.

Do the wiring of the supply, START, and output circuits in accordance with the wiring drawing.

Note1: The timing sequence would not begin unless the START terminal is connected to the PHASE terminal

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Note2 : Avoid direct connection of capacitive loads, switching loads, or LED drivers to the device due to the excessive starting currents required by these loads. Use a suitable external relay or contactor in such cases.



Respecting the customer is our duty

3 year no question asked guarantee under these conditions;

1-at most it should be within 3 years from the date printed on the label of the product

2-the label on the product should be safe and sound

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Shiva Amvaj products in accordance with international standards and with a 3 year no question asked guarantee are presented

ISO 9001-2015



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