VER: 9801

2-RELAY TIME SWITCH

MODEL: STB-2RM
CODE: 12B8
WEIGHT : 175 gr
(72 x86 x60) mm
IP 30

SCAN QR TO VIEW THE PRODUCT

The 2-relay time switch offers 90 adjustable daily, weekly, and monthly programs with each having an OFF and ON time. Moreover, one or both of the outputs can be selected for each program. Adjustable parameters in the daily, weekly, and monthly modes are as follows:
Daily: hour, minute, and second
Weekly: hour, minute, second, and day of the week
Monthly: hour, minute, second, day of the month.
In the daily mode, the operating days can be activated/deactivated with respect to the days in the week or month, and in the monthly mode, with respect to the days in the week..
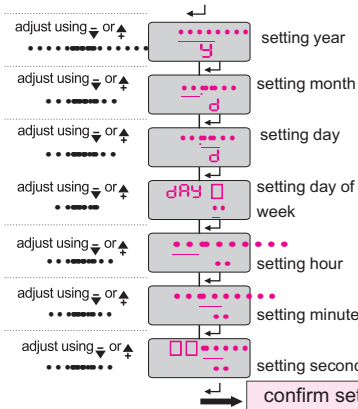
①

Features

- Lithium batteries with a durability of more than 5 years (removable)
- Ability to store date, hour, and all the settings in case of power outage
- Displaying: Date, hour, and weekdays,
  Errors and adjustable messages
- 4 indicators to display different programs
- Capabilities: Activating or deactivating programs in specific days
  Adjustment of the rates with a minimum precision of 1 second and
  maximum precision of 1 month.
  Execution of 90 different programs on a daily, weekly, or monthly basis
 Adjustment of output for each program.
  Displaying relay output

Technical specifications

- Supply voltage: 180-250 VAC / 50-60 Hz
- Ambient conditions: Temperature: -20 to +65
  Humidity:70%
- Output: 2 Relays (16A)

②

Installation manual

Mount the device at the desired level on the rail inside the enclosure or using the rail provided in the package (use the Shiva Amvaj Panel Case for mounting outside the enclosure). Then, connect the supply voltage and adjust according to the instructions.

Note 1: Avoid directly connecting capacitive loads, switching, or LED drivers to the device as such consumers drain excessive start-up currents. Instead, external relays or appropriate contactors must be used.

PH N

PH N

2-RELAY
TIME SWITCH

18 15 16 28 25 26
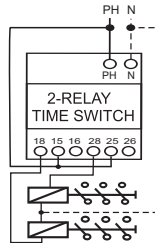
Timer and date adjustment

Note: In the tables, the bold underlined texts indicate the blinking mode, while the symbol ⬚ indicates an OFF digit. Values and numbers can be changed using the ▼, ▲ buttons , and changes can be accepted by ↵ The allowed range for each parameter is demonstrated below ▲ , ▼

③

start adjustment using ↵

adjust using ▼ or ▲ — setting year

adjust using ▼ or ▲ — setting month

adjust using ▼ or ▲ — setting day

adjust using ▼ or ▲ — dAY ⬚ setting day of week

adjust using ▼ or ▲ — setting hour

adjust using ▼ or ▲ — setting minute

adjust using ▼ or ▲ — setting second

confirm setting

Example: Assume the timer and date for the command should be set on the date Friday 17/08/2018 at 12:25':25".

The weekdays are defined as follow
• : Sunday
• • : Monday
• • : Tuesday
• • : Wednesday
• • : Thursday
• • : Friday
• • : Saturday

④

Note: The maximum value for day depends on the adjusted month and year, which can be 31, 30,29, or 28.
Note: Changing the hour and date is applied only when all the adjustment steps are taken.
Note: If the battery is empty, the message bat starts blinking on the screen, which requires changing the battery and re-adjusting the timer.

Adjusting on the daily mode

Example 1: Assume the two following commands are to be set on a daily basis by the device:

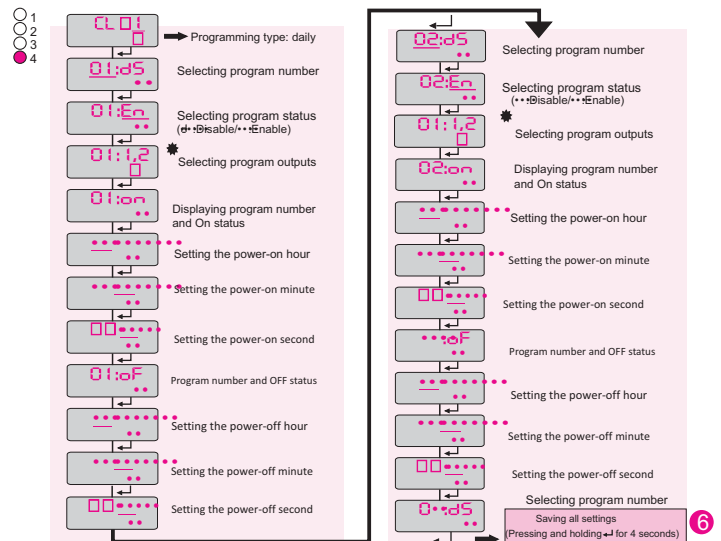- Turning on at 7:15':15" and turning off at 15:47':20".
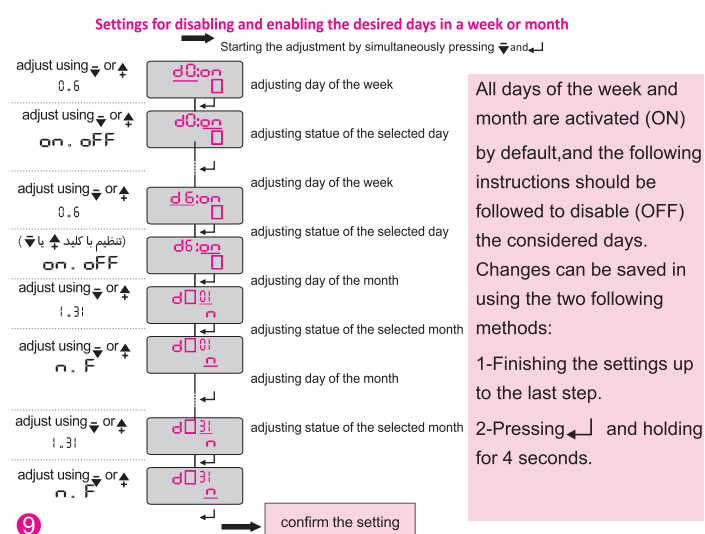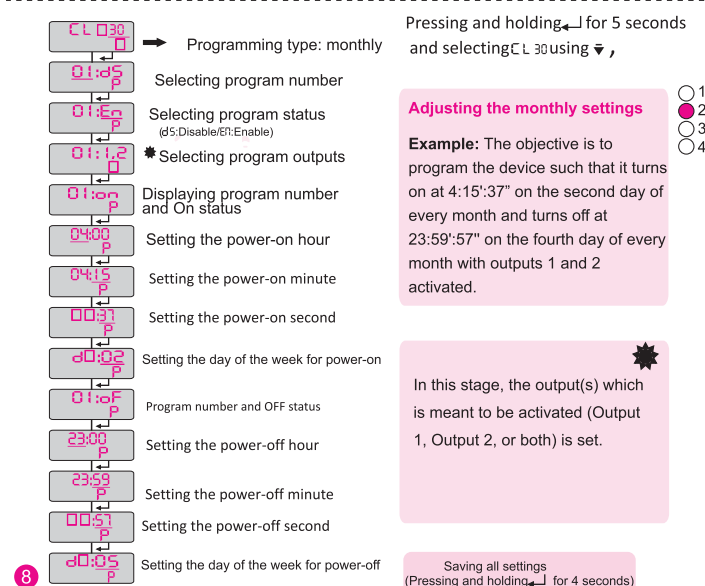- Turning on at 16:25':37" and turning off at 15:47':20".

To set these two programs, follow the instructions in Page 6. Note the followings before starting the adjustment:

1- If you need the program to turn on a daily basis, set the configurations in the daily menu (you can also deactivate the program on some days if required).

2- When finished programming, you can save the settings and exits by
  Pressing and holding the button ↵ for 4 seconds
  Adjusting all the programs (each of the 50 programs)

3-To exit the adjustments without saving: Simultaneously press ▼, ▲
  Leave the device idle for 30 seconds.

To start the adjustment process (daily, weekly, monthly), press and hold ↵ for 5 seconds, after which the word •••• appears on the device display

⑤

Pressing ↵ and holding for 5 seconds and selecting CL 1 using ▼, ▲

○ 1
○ 2
○ 3
● 4

CL 01 → Programming type: daily

01:dS — Selecting program number

01:En — Selecting program status (d••Disable/••En Enable)

01:1,2 ⬚ — Selecting program outputs

01:on — Displaying program number and On status

— Setting the power-on hour

— Setting the power-on minute

⬚⬚ — Setting the power-on second

01:oF — Program number and OFF status

— Setting the power-off hour

— Setting the power-off minute

⬚⬚ — Setting the power-off second

02:dS — Selecting program number

02:En — Selecting program status (•••Disable/•••Enable)

01:1,2 — Selecting program outputs

02:on — Displaying program number and On status

— Setting the power-on hour

— Setting the power-on minute

⬚⬚ — Setting the power-on second

••oF — Program number and OFF status

— Setting the power-off hour

— Setting the power-off minute

⬚⬚ — Setting the power-off second

0••dS — Selecting program number

Saving all settings
(Pressing and holding ↵ for 4 seconds)

⑥

Left column — Section 7 (Weekly)

Display	Description
CL □ 01	Programming type: weekly
01:dS	Selecting program number
01:En	Selecting program status (Disable/Enable)
01:1,2	Selecting program outputs
01:on	Displaying program number and On status
04:00	Setting the power-on hour
04:15	Setting the power-on minute
00:37	Setting the power-on second
00:3	Setting the day of the week for power-on
01:oF	Program number and OFF status
21:00	Setting the power-off hour
21:26	Setting the power-off minute
00:50	Setting the power-off second
00:50 4	Setting the day of the week for power-off

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Pressing and holding ↵ for 5 seconds and selecting CL 7 using ▼ ,

○ 1
○ 2
● 3
○ 4

Adjusting the weekly settings

Example: The objective is to program the device such that it turns on at 4:15':37" on Tuesday and turns off at 21:26':50" on Wednesday with its output activated.

Saving all settings
(Pressing and holding ↵ for 4 seconds)

Left column — Section 8 (Monthly)

Display	Description
CL □ 30	Programming type: monthly
01:dS	Selecting program number
01:En	Selecting program status (dS:Disable/En:Enable)
01:1,2	Selecting program outputs
01:on	Displaying program number and On status
04:00	Setting the power-on hour
04:15	Setting the power-on minute
00:37	Setting the power-on second
d0:02	Setting the day of the week for power-on
01:oF	Program number and OFF status
23:00	Setting the power-off hour
23:59	Setting the power-off minute
00:57	Setting the power-off second
d0:05	Setting the day of the week for power-off

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Pressing and holding ↵ for 5 seconds and selecting CL 30 using ▼ ,

○ 1
● 2
○ 3
○ 4

Adjusting the monthly settings

Example: The objective is to program the device such that it turns on at 4:15':37" on the second day of every month and turns off at 23:59':57" on the fourth day of every month with outputs 1 and 2 activated.

In this stage, the output(s) which is meant to be activated (Output 1, Output 2, or both) is set.

Saving all settings
(Pressing and holding ↵ for 4 seconds)

Left column — Section 9

Settings for disabling and enabling the desired days in a week or month

Starting the adjustment by simultaneously pressing ▼ and ↵

Control	Display	Description
adjust using ▼ or ▲ 0..6	d0:on	adjusting day of the week
adjust using ▼ or ▲ on . oFF	d0:on	adjusting statue of the selected day
		adjusting day of the week
adjust using ▼ or ▲ 0..6	d6:on	adjusting day of the week
(تنظیم با کلید ▲ یا ▼) on . oFF	d6:on	adjusting statue of the selected day
adjust using ▼ or ▲ 1..31	d0:01 n	adjusting day of the month
adjust using ▼ or ▲ n . F	d0:01 n	adjusting statue of the selected month
		adjusting day of the month
adjust using ▼ or ▲ 1..31	d0:31 n	adjusting statue of the selected month
adjust using ▼ or ▲ n . F	d0:31 n	

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confirm the setting

All days of the week and month are activated (ON) by default, and the following instructions should be followed to disable (OFF) the considered days. Changes can be saved in using the two following methods:

1-Finishing the settings up to the last step.

2-Pressing ↵ and holding for 4 seconds.

Right column — Section 10

Disabling all programs

By pressing and holding ▲ and the symbol CL r along with a countdown from 5 appears on the screen. Once the countdown reaches zero, all the programs are disabled (In case some days of the month of week have been disabled, they are all activated by pressing and holding ▼)

Indicators

5 indicators are available on the panel, two of which indicate the status of outputs, while the remaining three represent the monthly, weekly, and daily modes. The activated indicator shows the program currently set on the device.

Possible Error

When programming the device, one of the two following errors may appear on the screen, which will remain until you re-enter the settings and resolve the problem.

1- If duplicate programs with the same power-off and power-on times exist, the error $\frac{eq:nn}{E}$ appears, where nn is the program number.

2-If two programs interfere, the err $\frac{mm:nn}{E}$ is displayed, where mm and nn are the numbers for the interfering programs.

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Right column — Section 11

Solution

1- Disable all the programs (which can be done by pressing and holding ▼ for 5 seconds), and reprogram the device.

2 - Enter the settings and modify the programs indicated by the error.

Note 1: The same instructions should be followed if you intend to enter multiple programs. The only difference is the program number which should be changed accordingly.

Note 2: The lit indicator for the output shown the active status of the relay.

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Right column — Guarantee

3 year GUARANTEE

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

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

ISO 9001-2015   CE

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