

General

The TTR-10 is designed to control the daily operation of electrically powered equipment for specified time periods.

Usage and Working Principle of the Device

TTR-10 works by energized the relay on it for the set period or time (off or 1-99 sec.) in the set time slots. TTR-10 repeats this cycle every day as long as it is powered.

Periods (Pr): It can be set as 5-10-15-20 and 30 minutes.

Relay On Time (Er): It can be set to Off or 1 - 99 seconds. (When set to OF, when the device energized the relay, it keeps it energized for the set period.)

Operation Mode (nd): It can be set to RE, OF and ON .

Auto (RE): The device automatically energized/de-energized the relay according to the set periods.

Off (OF): The device does not energize the relay regardless of the adjusted periods. Used to manually de-energized the relay.

On (ON): The device energize the relay regardless of the adjusted periods. Used to manually energized the relay.

Notification LEDs and Display: Two LEDs and one display on the device provide information about the settings and device status.

OUT LED: This LED lights up when the relay is energized.

PER LED: While in the normal operating screen; This led turns on when the time set for the relay to be energized is entered. While on the period setting (relay energize/de-energize hours) screen, this led turns on or off depending on the set state.

Setting up the Device

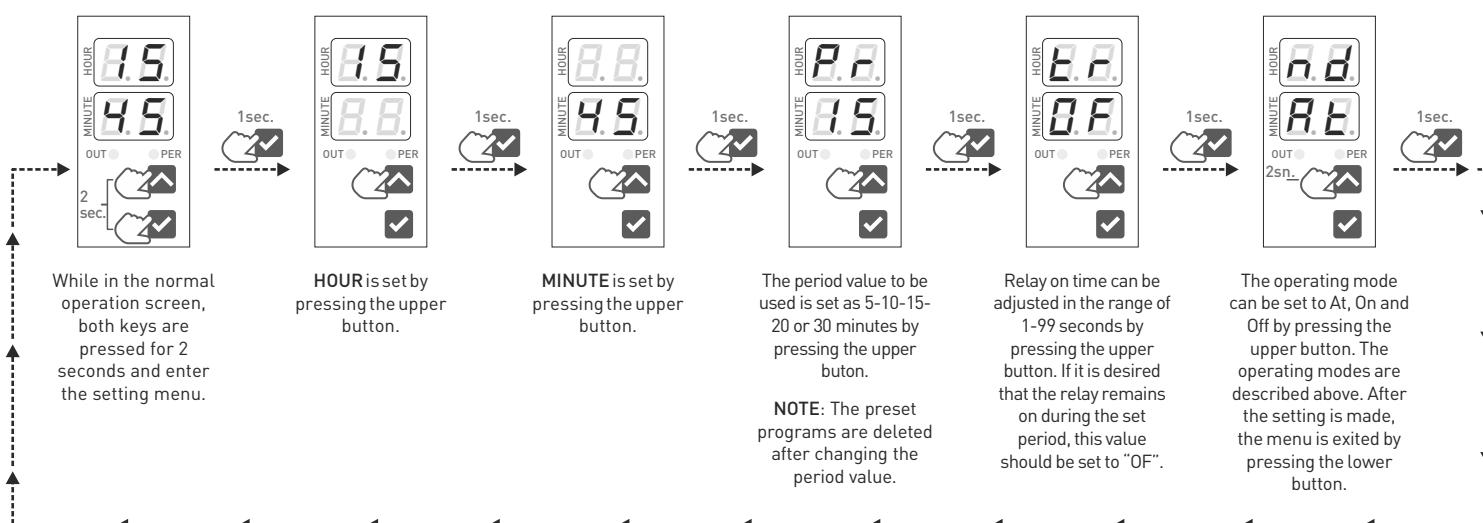
Note: If the device does not display the time correctly, the clock must be adjusted.

The setting mode is entered by pressing and holding the 2 keys on the device simultaneously for 2 seconds. After entering the setting mode, the clock appears on the upper display, and the lower display turns off. In this state, the time is set by pressing the upper button. After the hour is set, the lower button is pressed for 1 second, the minute appears on the lower display, and the upper display turns off. In this state, the minute is set by pressing the upper button.

Then, by pressing and holding the lower button for 1 second, the Period (Pr) setting screen is displayed and by pressing the upper button here, how many minute periods the device will be activated/deactivated is set. (Periods are explained in the operating principle area)

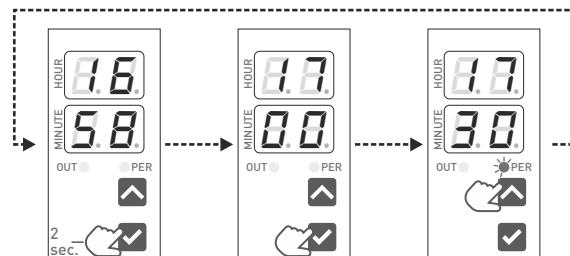
Then, by pressing and holding the lower button for 1 second, the time (tr) screen is displayed, and by pressing the up button, how long the device will keep the relay on is set. (If it is desired to keep the relay on during the set period, this setting should be set as "Of".) Then, by pressing the lower button for 1 second, the Mode (nd) setting screen is displayed and the operating mode of the device is selected by pressing the upper button. (Modes are described in the operating principle area.)

Menu Structure



Setting the Periods (Relay on/off hours)

While the device is showing the time on the screen, the lower button is pressed for 2 seconds and according to the current time, the device displays the next period (in 5-10-15-20 and 30 minute intervals according to the set value) on the screen. Press lower button to move to the next period. If the device is required to energize the relay in the period (hour) shown on the screen, the period is activated/deactivated by pressing the upper button. While active periods are displayed on the screen, the Period led (red led at the bottom of the screen) turns on, otherwise this led does not turns on.

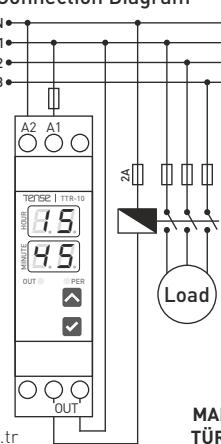


While in the normal operation screen, press the lower button for 2 seconds to enter the period setting menu.

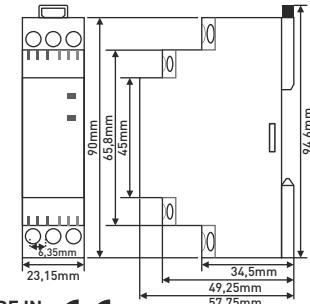
Press the lower button to go to the next period.

If it is desired to energize the relay at the time shown on the screen, the period is activated by pressing the upper button. When the period is active, the PER led is turn on.

Connection Diagram



Dimensions



Technical Specifications

Operating Voltage	: 100-240V AC 50/60Hz.
Operating Power	: <6VA
Operatin Temp.	: -20°C.....+55°C
Accuracy	: ≤3sec./Day
Number of Programs (Periods)	: 288 (5min.), 144 (10min.), 96 (15min.), 72 (20min.), 48 (30min.)
Battery Shelf Life	: 5 Years
Display	: 2x2 LED Display, 2x LEDs.
Connection Type	: Rail Mount
Weight	: <90gr.
Out	: 16A, 250V AC, 4000VA (Resistive Load)
Operating Altitude	: <2000m
Cable Diameter	: 2,5mm ²