

**Description**

ESRD-TPW1 digital time switch is used for realization of time functions in the control systems and automation. It operates according to the set time schedule planned by the user.  
There is an internal battery which can protect real time clock and all the settings when the electric power supply is off.

**Features**

- Digital time switch with weekly program
- 3 year power reserve(lithium battery).
- 50 programs
- Sealable cover of the front panel, easy setting by 4 keys.
- Automatic summer/winter time switchover
- LCD display
- Holiday mode.
- single channel
- Manual control by keys combination.
- Automatic transfer of weekdays
- 220-240VAC input supply.
- Double-module, mounted on TH-35 rail.

**Technical data**

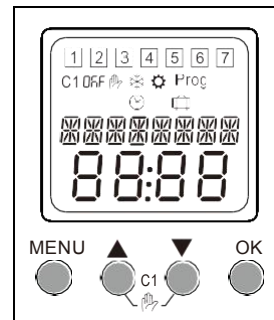
Supply terminals	A1-A2
Rated voltage	AC220-240V
Rated frequency	50/60Hz
Power consumption	1W
Supply voltage tolerance	±10%
Number of channels	Single channel
Number of programs	40
Program	weekly program, daily program
Operating modes	manual, automatic, holiday
Summer/winter time	off, automatic changes
Time tolerance	≤1s/day at 25°C
Power reserve	3 year
Data readout	LCD display
Number of contacts	1 C/O
Current of contacts	16A/250V AC1
Switching capacity	4000VA/AC1, 384W/DC
Mechanical life	10 <sup>6</sup>
Electrical life	10 <sup>5</sup>
Rated insulation voltage	250V
Protection degree	IP20
Pollution degree	3
Altitude	≤2000m
Ambient temperature	-20°C~55°C
Permissible relative humidity	≤50%(40°C,without condensation)
Storage temperature	-30°C~70°C
Wire size	1mm ~ 4mm
Tightening torque	0.5Nm
Mounting	TH-35 Rail(EN60715)
Dimensions	90*36*64mm
Standard	IEC60947-1/IEC60947-2-7

**Maximum pilotable power**

2300W	2300W	1000W	500W	500W

**Operating instruction**

**Panel**



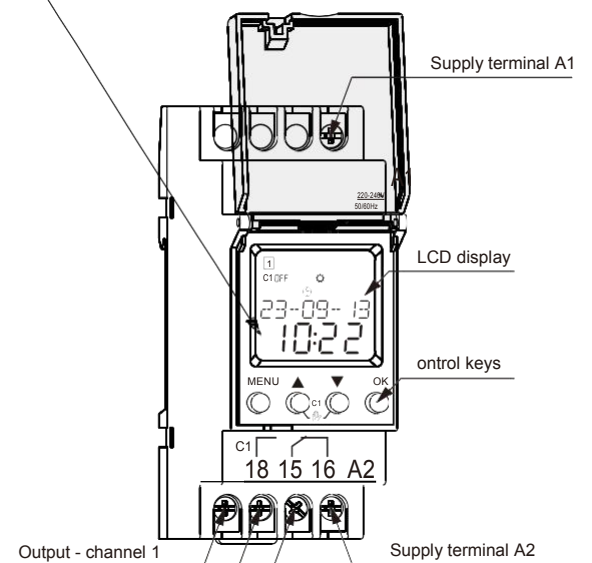
**Symbol legend**

- 1 2 3 4 5 6 7 — Days of the week Monday, Tuesday, ...Sunday
- C1 — Channel 1
- On OFF — Relay status
- ☺ — Automatic mode
- ☞ — Manual mode
- ☐ — Holiday mode
- ❄ — Winter time
- ☀ — Summer time
- Prog —Program setting

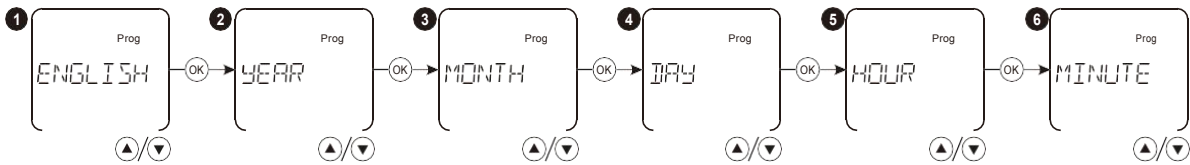
**Keys**

MENU	○ Enter main menu	○ Back to main menu	OK	○ Confirm selection
▲	○ Select menu	○ Digit +	▼	○ Select menu
▲	○ C1 manual operation			

23-09-13: DD-MM-YY, 23th.September.2013



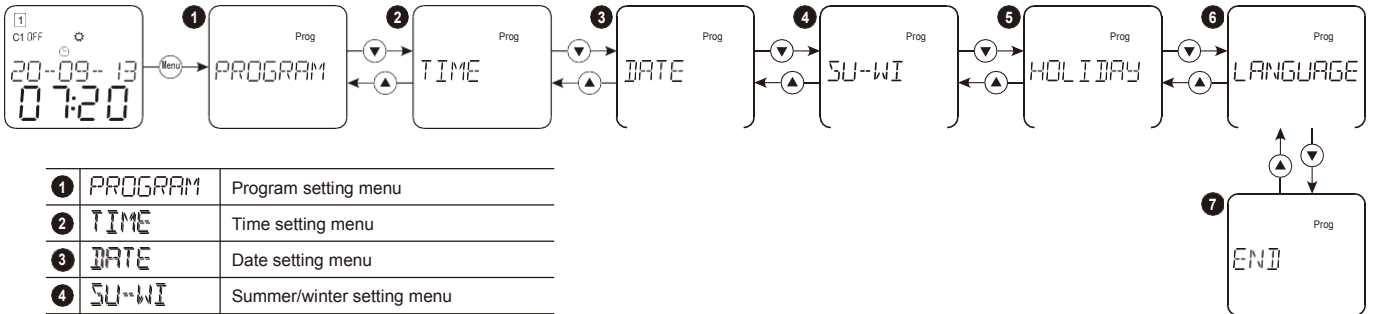
## □ Initial operation



- 1 Select the desired language with "▲▼" keys and press "OK" key.
- 2 Select adequate year with "▲▼" keys and press "OK" key.
- 3 Select adequate month with "▲▼" keys and press "OK" key.
- 4 Select adequate day with "▲▼" keys and press "OK" key.
- 5 Select adequate hour with "▲▼" keys and press "OK" key.
- 6 Select adequate minute with "▲▼" keys and press "OK" key.

Note: If the settings were not ended and without operation by keys for 2 minutes, device will return to *ENGLISH* menu.

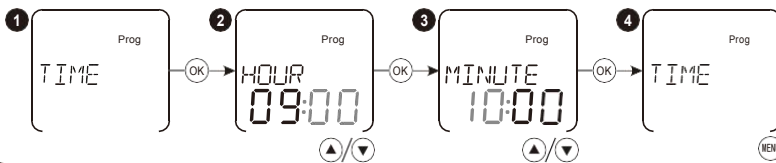
## □ Main menu



1	PROGRAM	Program setting menu
2	TIME	Time setting menu
3	DATE	Date setting menu
4	SU-WI	Summer/winter setting menu
5	HOLIDAY	Holiday mode setting menu
6	LANGUAGE	Language setting menu
7	END	End settings and exit from menu

- Press **MENU** key to enter menu setting, and symbol **Prog** appears.
- If not pressing any keys for 2 minutes, the device will automatically exit from setting.
- Select the desired menu by pressing "▲▼" keys.

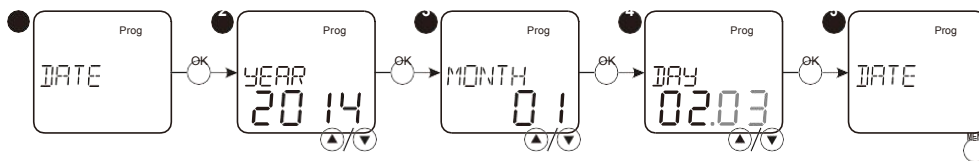
### ● Set time



- 1 Select **TIME** and press "OK" key.
- 2 Select adequate hour with "▲▼" keys and press "OK" key. adjusting range is 0~23.
- 3 Select adequate minute with "▲▼" keys and press "OK" key. adjusting range is 0~59.
- 4 Return to last menu by pressing "MENU" key.

Long press ▲ 0.5s, increase the numerical value rapidly  
 Long press ▼ 0.5s, decrease the numerical value rapidly

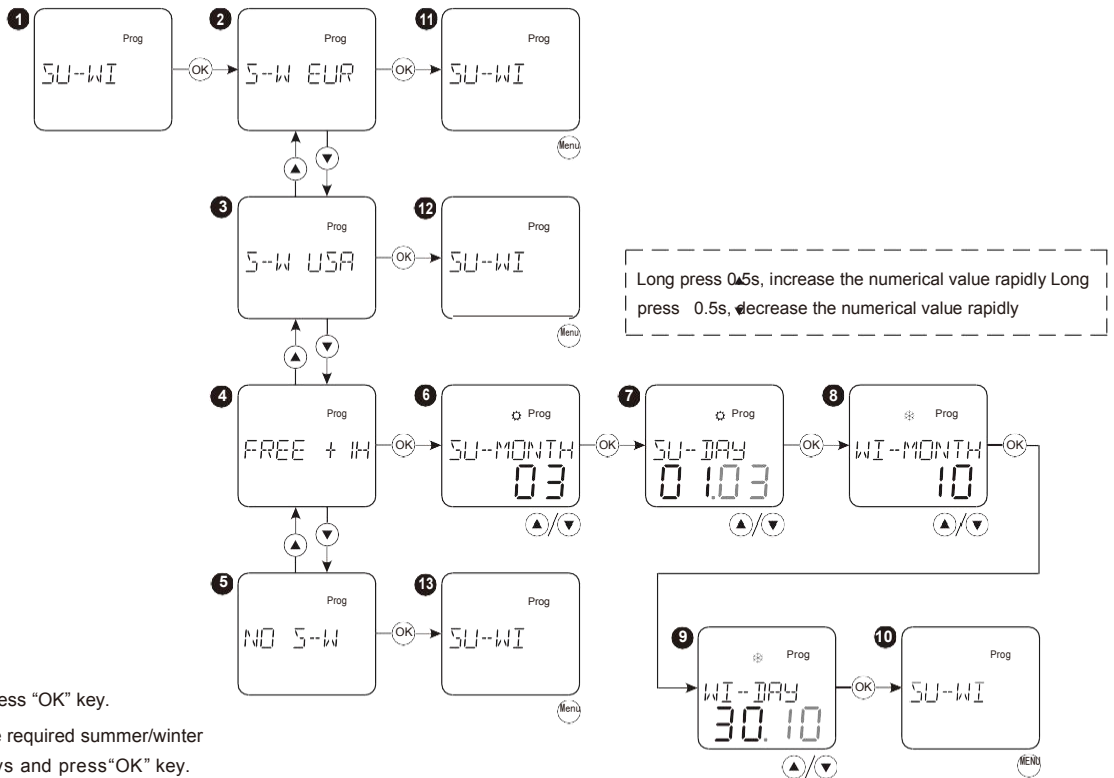
### ● Set date



- 1 Select **DATE** and press "OK" key.
- 2 Select adequate year with "▲▼" keys and press "OK" key. adjusting range is 2000~2095. Select adequate month with "▲▼" keys and press "OK" key.
- 3 Select adequate day with "▲▼" keys and press "OK" key.
- 4 Return to last menu by pressing "MENU" key.

Long press ▲ 0.5s, increase the numerical value rapidly  
 Long press ▼ 0.5s, decrease the numerical value rapidly

## ● Switchover Summertime/winter time

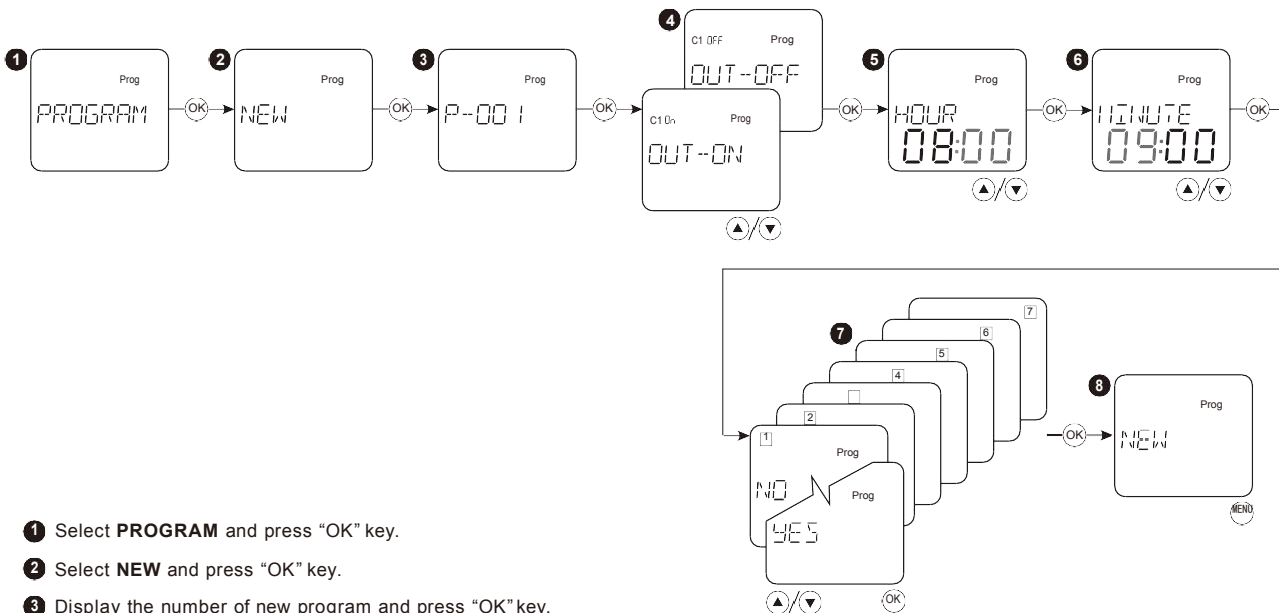


Long press 0.5s, increase the numerical value rapidly  
 Long press 0.5s, decrease the numerical value rapidly

- 1 Select **SU-WI** and press "OK" key.
- 2 3 4 5 Select the required summer/winter mode with "▲▼" keys and press "OK" key.
- 6 Set the start month of summer time and press "OK" key.
- 7 Set the start day of summer time and press "OK" key.
- 8 Set the start month of winter time and press "OK" key.
- 9 Set the start day of winter time and press "OK" key.
- 10 11 12 13 Return to last menu by pressing "MENU" key.

Display	Function	Summer switching	Winter switching
S-W EUR	Europe sum/win	Last Sunday in March	Last Sunday in October
S-W USA	U.S.A sum/win	Second Sunday in March	First Sunday in November
FREE + IH	Free sum/win	Freely programmed	Freely programmed
NO S-W	No sum/win	None	None

## ● Create a new program



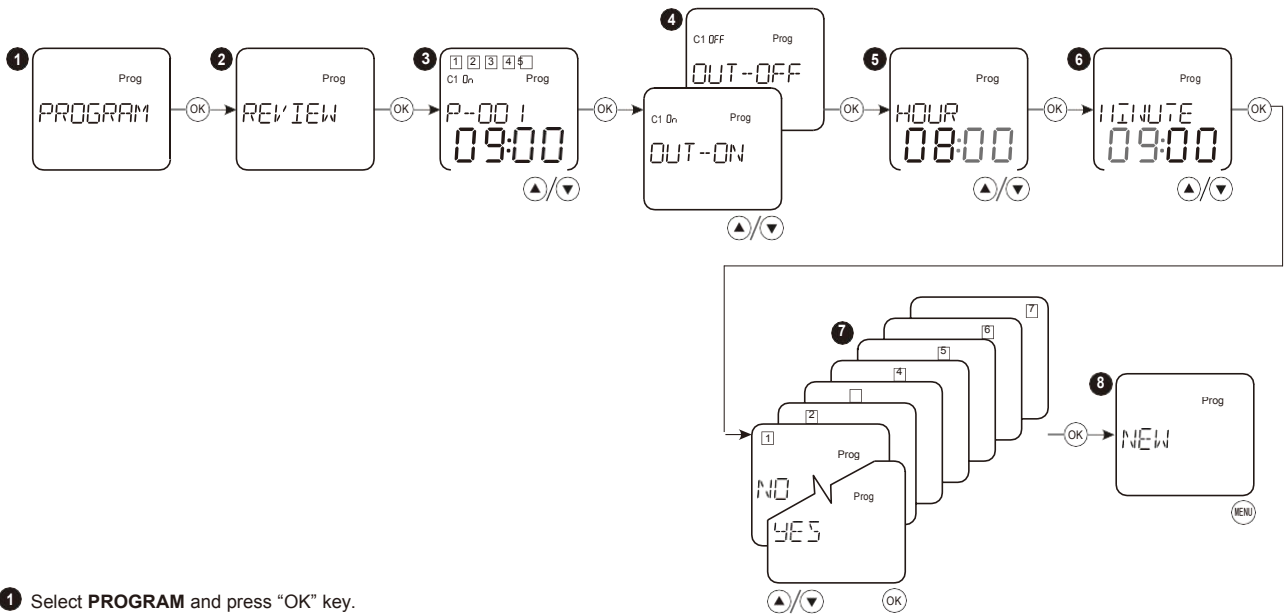
- 1 Select **PROGRAM** and press "OK" key.
- 2 Select **NEW** and press "OK" key.
- 3 Display the number of new program and press "OK" key.

When the programs memory is full, new program will not be created, symbol "FULL" appears on the screen.

- 4 Display the output state of channel 1. Select **OUT-ON** or **OUT-OFF** with "▲▼" keys and then press "OK" key.
- 5 Set the hour with "▲▼" keys and press "OK" key.
- 6 Set the minute with "▲▼" keys and press "OK" key.
- 7 Set the program activity on a week day( from Monday to Sunday) with "▲▼" key  
 If YES is selected, program operation is enabled for flashing day. If NO is selected, program is not used for flashing day.
- 8 Return to last menu by pressing "MENU" key.

Long press 0.5s, increase the numerical value rapidly  
 Long press 0.5s, decrease the numerical value rapidly

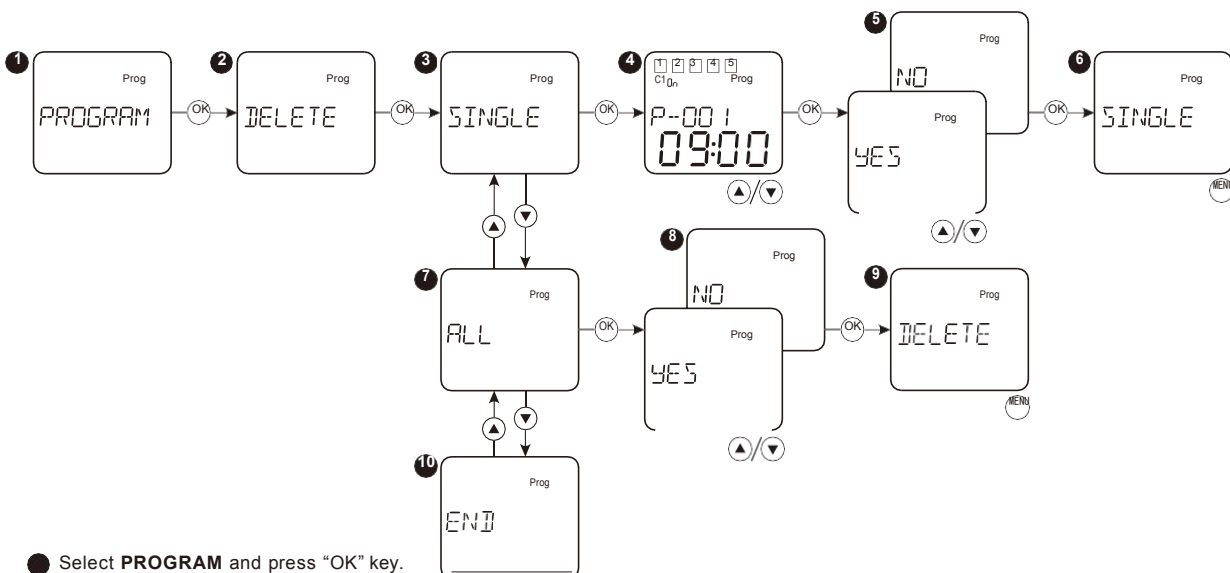
## ● Modify a program



- 1 Select **PROGRAM** and press "OK" key.
- 2 Select **REVIEW** and press "OK" key.
- 3 Select the desired program with "▲▼" keys and press "OK" key.
- 4 Display the output state of channel 1. Select **OUT-ON** or **OUT-OFF** with "▲▼" keys and then press "OK" key.
- 5 Set the hour with "▲▼" keys and press "OK" key.
- 6 Set the minute with "▲▼" keys and press "OK" key.
- 7 Set the program activity on a week day( from Monday to Sunday) with "▲▼" keys.  
If **YES** is selected, program operation is enabled for flashing day. If **NO** is selected, program is not used for flashing day.
- 8 Return to last menu by pressing "MENU" key.

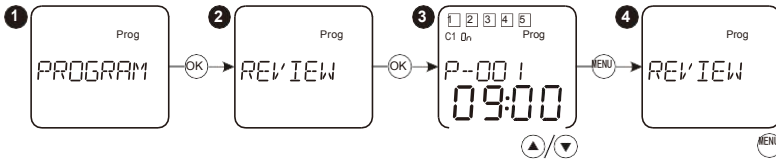
Long press 0.5s, increase the numerical value rapidly  
Long press 0.5s, decrease the numerical value rapidly

## Delete a program



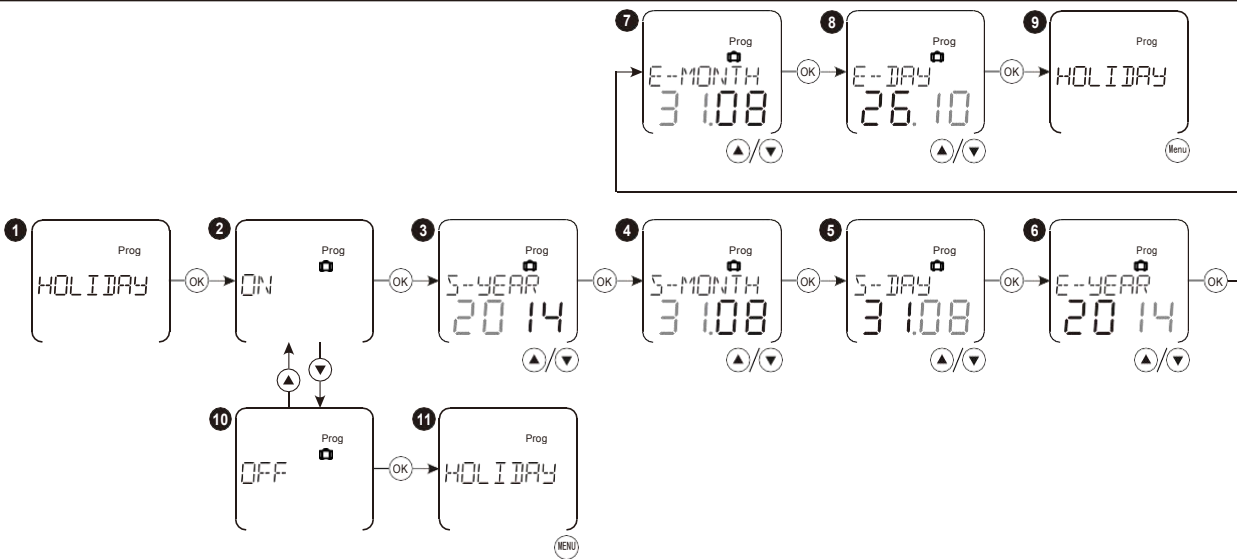
- 1 Select **PROGRAM** and press "OK" key.
- 2 Select **DELETE** and press "OK" key.
- 3 Select **SINGLE** to delete single program and press "OK" key.
- 4 Select the desired program with "▲▼" keys and press "OK" key.
- 5 Select **YES** or **NO** with "▲▼" keys and press "OK" key.
- 6 Return to **SINGLE** sub-menu, Exit from the setting by pressing "Menu".
- 7 Select **ALL** to delete all programs and press "OK" key.
- 8 Select "YES" or "NO" with "▲▼" keys and press "OK" key.
- 9 Return to **DELETE** sub-menu, Exit from the setting by pressing "MENU".
- 10 End program setting.

## Check a program



- 1 Select **PROGRAM** and press "OK" key.
- 2 Select **REVIEW** and press "OK" key.
- 3 View the operation of the set programs with "Exit ▲▼" keys and press "OK" key.
- 4 from the setting by pressing "MENU" key.

## ● Holiday program

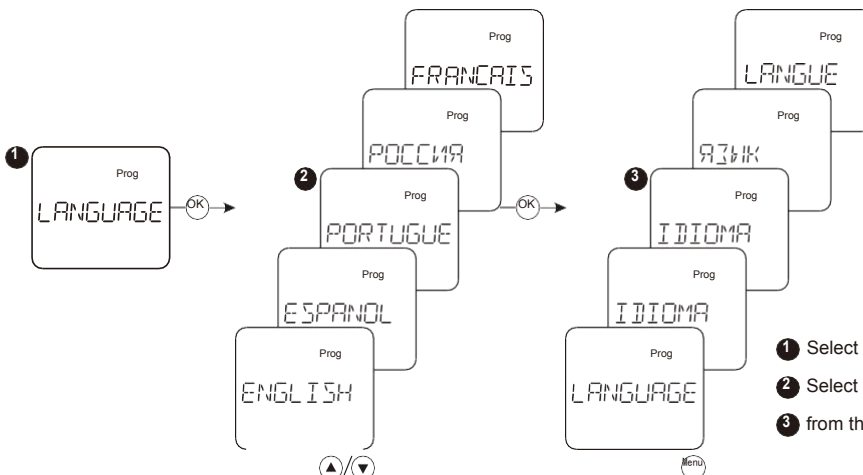


- 1 Select **HOLIDAY** and press "OK" key.
- 2 Select **ON** to activate holiday mode and press "OK" key.
- 3 Set the start year of holiday with "▲▼" keys and press "OK" key.
- 4 Set the start month of holiday with "▲▼" keys and press "OK" key.
- 5 Set the start day of holiday with "▲▼" keys and press "OK" key.
- 6 Set the end year of holiday with "▲▼" keys and press "OK" key.
- 7 Set the end month of holiday with "▲▼" keys and press "OK" key.
- 8 Set the end day of holiday with "▲▼" keys and press "OK" key.
- 9 Return to **HOLIDAY** menu. Exit from the setting by pressing "MENU" key.
- 10 Select **OFF** to deactivate holiday mode and press "OK" key.
- 11 Return to **HOLIDAY** menu. Exit from the setting by pressing "MENU" key.

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 Long press ▲.5s, increase the numerical value rapidly  
 Long press ▼.5s, decrease the numerical value rapidly  
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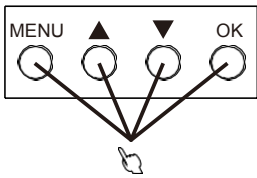
## □ Language setting

### Select menu language



- 1 Select **LANGUAGE** and press "OK" key.
- 2 Select the desired language with "▲▼" and press "OK" key Exit
- 3 from the setting by pressing "MENU" key.

**Reset**



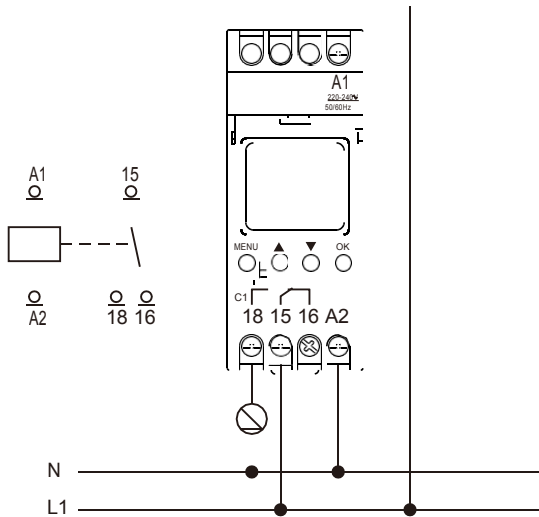
Press the four keys simultaneously for 3 seconds to reset automatically. The device was restored to factory settings.

**Keys combination for MANUAL control**

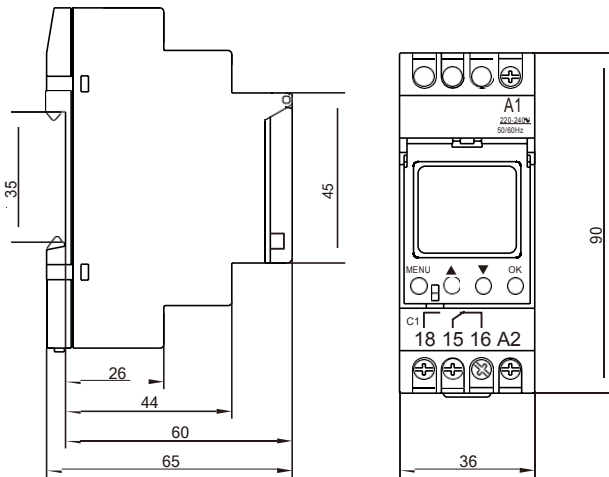


Press “▲▼” keys simultaneously, the output state of channel 1 switches to MANUAL.  
When the output states of other operation modes was changed, Manual mode exits automatically.

**Wiring diagram**



**Dimensions**



**Safety instruction**

**WARNING**

- Please disconnect the power supply before installation.
- Connect the supply voltage as stated on the product.

1. The device should be installed, operated and maintained by qualified personnel.
2. Don't dismantle or repair the device whether it operates normally, otherwise no responsibility is assumed by manufacturer or seller.
3. Please refer to wiring diagram when connecting.
4. Never use the product at the site which can be invaded by corrode gas, strong sunshine light or rain.