

TMR15 : instructions for installation and use

Thank you for having chosen an LAE electronic product. Before installing the instrument, please read this instruction booklet carefully in order to ensure safe installation and optimum performance.

1. INSTALLATION

- 1.1 The TMR15, size 77x35x77 mm (WxHxD), is inserted into the panel through a hole measuring 71x29 mm and is fixed by means of the suitable clips, by pressing gently. If fitted, check that the rubber gasket adheres to the panel perfectly, in order to prevent debris and moisture infiltration to the back of the instrument.
- 1.2 The instrument should work with room temperatures between -10°C.. +50°C and relative humidity between 15%.. 80% inclusive. Supply voltage, switched powers and connection set-up should scrupulously comply with the indications given on the container. To reduce the effects of electromagnetic disturbance, keep the sensor and signal cables well separate from the power wires.

2. OPERATING MODES

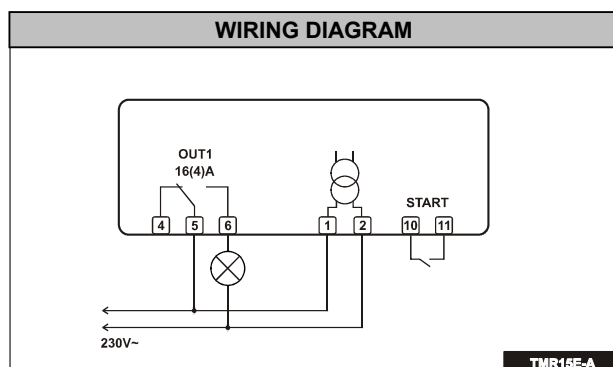
The TMR15 features two main operating modes: Normal and Manual; when the unit is powered, its software loads the operating mode active before the TMR15 was switched off.

- 2.1 **Normal Mode.** In the STOP state, the output is off and the display shows the programmed cycle time. Pressing the button [U] or making the remote start contact causes the output to be switched on and the display shows the countdown time. During the countdown, by pressing the buttons [◀] or [▶], the total cycle time is displayed. By pressing [U] it's possible to quit the program and switch over to the STOP state at any time. In case of a power failure, the timer always resumes the STOP state.
- 2.2 **Manual Mode.** Pressing the button [M] for 3 seconds activates the manual mode, with the buttons [◀] and [▶] you choose the permanent state of the output (On/Off). This operating mode and the associated state are stored and maintained even in case of power failure. To exit and revert to normal mode, press [M] for 3 seconds.
- 2.3 **Cycle Time Setting.** From the STOP state it's possible to program the time by pressing [◀] or [▶] till you obtain the desired value. Autoscaling in minutes/seconds and hours/minutes takes place automatically, the respective two dots on the display show the scale active, in other words: 9 minutes and 59 seconds and 9 hours and 99 minutes. Exit from the programming is automatic after 5 seconds of not using the keypad or immediate by pressing [M].
- 2.4 **Setup.** The setup is accessed by pressing and keeping the buttons [M] + [U] pressed for 5 seconds. The available parameters appear in the table here below. Press button [▶] to pass from one parameter to the next, viceversa press the button [◀] to go back. To display the value of a parameter press [U], to modify it press [U] + [◀] or [▶] simultaneously. Exit from the setup is either by pressing [M] or automatic after 20 seconds of not using the keypad.

Par.	Adjustment	Description
Alr	YES/NO	Buzzer enabling
Loc	YES/NO	Keypad lock
Adr	1..255	Peripheral Address

3. AUXILIARY FUNCTIONS

- 3.1 **Keypad lock.** The keypad lock avoids undesired, potentially dangerous operations, which might be attempted when the controller is operating in a public place. From the Setup it's possible to assign YES or NO to the parameter Loc. With LOC=YES all keypad commands are inhibited, countdown START therefore takes place through remote command only. To resume normal keypad operation, just re-program Loc=NO.
- 3.2 **Buzzer.** The TMR15 can be fitted with a buzzer to warn that the cycle has come to an end, this function is active with ALR=YES.
- 3.3 **Serial port.** The TMR15 can have an optional serial port for connection to a PC or programmer. In the first case it is important to assign to the parameter **ADR** a different value for each linked unit (peripheral address); with automatic programming, ADR should remain on 1.



WARRANTY

LAE electronic SPA guarantees its products against defects due to faulty materials or workmanship for one (1) year from the date of manufacture shown on the container. The Company shall only replace products which are shown to be defective to the satisfaction of its own technical services. The Company shall not be under any liability and gives no warranty in the event of defects due to exceptional conditions of use, misuse or tampering.

LAE electronic does not accept units back unless LAE electronic has previously given its allowance or request.