

M AND 12 SERIE

TIMER112: INSTALLATION AND USE

1. Installation

- 1.1 The instrument is inserted into the panel through a 71x29mm hole and is secured via the suitable brackets, exerting correct strength. If the optional rubber gasket is used, this must be placed between the panel and the instrument bezel, checking carefully that there are no gaps.
- 1.2 For proper functioning the unit needs an ambient temperature between -10°...+50°C and 15%...80% r.H. To reduce the effects of electro-magnetic interference, place the unit as away as possible from power lines.
- 1.3 Power supply, input and output must be wired strictly following the diagram indicated on the enclosure.
- 1.4 The input for remote countdown start must be wired to the relevant external button exclusively, the connecting wire must not exceed 2m. length. Don't power this input!

Caution: where delicate or valuable products have to be maintained in special conditions, we recommend not to use the same instrument for both control and limit functions.

2. Timer function description

Three function modes are available. To configure the unit, keep keys [^]+[v] pressed and power the unit. "ty#" appears, then select the mode with keys [^] or [v]. To store press [set].

TIMER112../1 (mode 1)

It's possible to program the output On switching time between 00h:00 min. to 99h:59 min. Press [pgm/set]; the "on" LED and the minutes blink. Press key [^] or [v] to program the desired setpoint value; proceed to setting the hours by pushing [HM]. The hours blink; press [^] or [v] to program. After setting the hours, push [pgm/set] again to store the new value and exit from programming.

TIMER112../2 (mode 2)

As above but with range between 00min.:01sec. and 99min.:59sec.

TIMER112../3 (mode 3)

It allows to program a standby time (output off status) before the output is switched on. Press [pgm/set] to program: the "off" LED and the standby minutes blink. Set the desired value by pressing [^] or [v], proceed to setting the hours by pressing [HM]. After the standby time has been set, press [pgm/set] to program the output on times. The "on" LED and the minutes blink. To program output on status minutes and hours proceed as explained above. When the operation is over, press [pgm/set].

During the countdown the display shows the time left to the end of the period; it's however possible to display the entire set period by pressing [pgm/set].

In mode 1 and 3, when the time left is shorter than an hour, the display shows the time in minutes and seconds.

Start/Stop

In mode 1 and 2, if [start] is pressed or the input for remote start makes, the output is switched on immediately ("on" LED lights up), whereas in mode 3 the standby time starts first ("off" LED lights up). It's possible to interrupt the program at any time by pressing [stop]. In this case the program is erased and the output is switched off.

Manual Mode

It's possible to change the output status indefinitely, even when the program is in operation, by pressing [hand] and [pgm/set] sequentially and simultaneously. The display shows "hAnd" and the output status is selected via [^] (on) or [v] (off). To exit from manual mode press keys [hand] and [pgm/set] again.

Note: the function mode and the setpoint are stored in non-volatile memory. In the event of a power failure the setpoint is retained in memory, whereas the program (countdown and manual) is lost.

Technical Data

Dimensions	76x35x76 mm (WxHxD)
Operating temperature	-10°...+50°C
Range	1sec...99h:59min.
Resolution	1sec.
Relay power rating	see data on unit
Connections	screw terminals, 2 mm ²
Supply voltage	12Vac/dc, 2VA
Protection on front	IP40; opt. IP54
Enclosure inflammability	fire-retardant

Warranty

LAE electronic warrant that their products are free of any defects in workmanship and materials for a period of one year from date of production shown on the enclosure. LAE electronic Srl shall only repair or replace those products of which defects are due to LAE electronic Srl and recognised by their technicians. LAE electronic Srl are not liable for damages resulting from malfunctions of the products.

Defects due to exceptional operating conditions, misapplication and/or tampering will void the warranty.

All transport charges for returning the product to the manufacturer, after prior authorisation by LAE electronic Srl, and for the return to the purchaser are always for the account of the purchaser.