ML MAG Logger (Memory LOG Module)

Installation and Operation Manual

1. General Description

ML MAG Logger is a LOG module for recording and viewing of events in MAG8 and MAG8Plus Fire Alarm Control Panels. All of the events are stored in a non-volatile memory. The LOG module has a real time clock powered from own battery. The information for the events is received by interface with the fire alarm control panel.

The LOG Module is available into two versions:

Version for MAG8Plus	Version for MAG8
Kit of the supplied equipment: - MAG Logger PCB. - Cable 30cm for connection to the panel. - Mounting screws – 4 pcs.	**Kit of the supplied equipment:** - MAG Logger PCB. - Small plastic box with transparent cover. - Wall mounting screws.

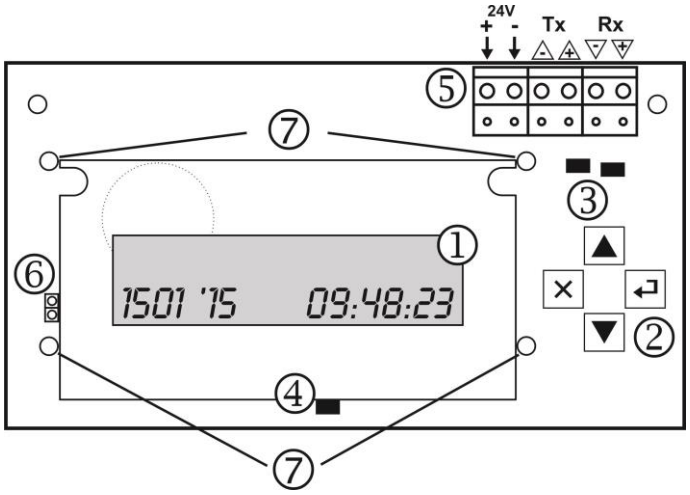
2. Functional Characteristics

- Real time clock with built-in battery 3V
- LOG Memory for 8190 events
- Input RESET
- Relay output RESET
- Special interface for connection to MAG8 and MAG8Plus panels
- Operation keypad - 4 buttons
- LCD display with backlight
- Multilanguage menus
- Small size

3. Technical Specifications

♦ Operation power supply	17 ÷ 30 VDC
♦ Nominal voltage	24 VDC
♦ Consumption in stand-by mode (average)	25 mA
♦ Consumption with activated backlight	55 ± 2mA
♦ Clock accuracy	max. 7 sec/month
♦ Dimensions of ML MAG Logger PCB	125x66mm

4. Elements of ML MAG Logger



The basic elements of ML MAG Logger are:

1. LCD display for listing the events.

2. Buttons for operation and settings:

▲	Up arrow	Viewing the menus; setting the date, time and language.
▼	Down arrow	Viewing the menus; setting the date, time and language.
×	Cancel	Rejecting the entered data; Exit from menu.
↵	Enter	Enter in a menu; Confirmation of the entered data according the current status.

3. LED indicators for presence of power supply from the control panel and communication status (transmitting and receiving data form the control panel – fast blinking in orange).

4. LED indicator for displaying of lost communication with the control panel – the LED blinks in yellow in case of lost connection with the panel.

5. Terminals for connecting to MAG8 or MAG8Plus control panel:

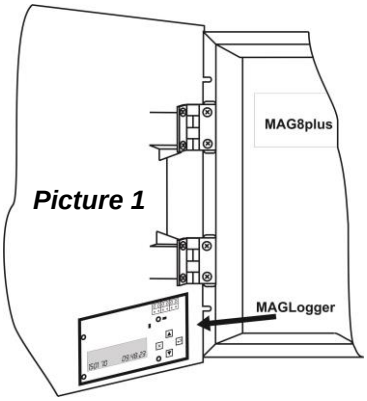
+ / - 24V	- Power supply from the control panel
+ / - Tx	- Transmitting data to the control panel
+ / - Rx	- Receiving data from the control panel

6. Jumper for storing the set time and date of the module.
7. Mounting holes.

5. Mounting and Connecting

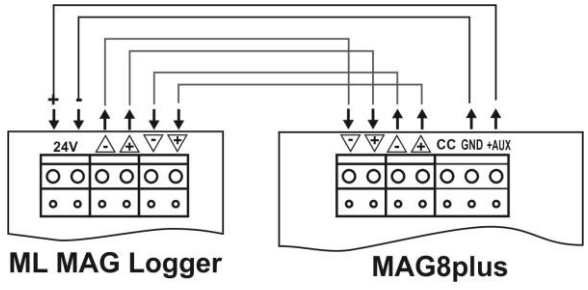
ATTENTION: Switch OFF the main and back-up power supply of MAG8 or MAG8Plus control panels before mounting and connecting the ML MAG Logger module!

IMPORTANT NOTE: For correct operation of ML MAG module, the fire alarm panels MAG8 and MAG8Plus must be programmed to operate in MASTER operation mode – a jumper is set on the MASTER terminals on the main board.

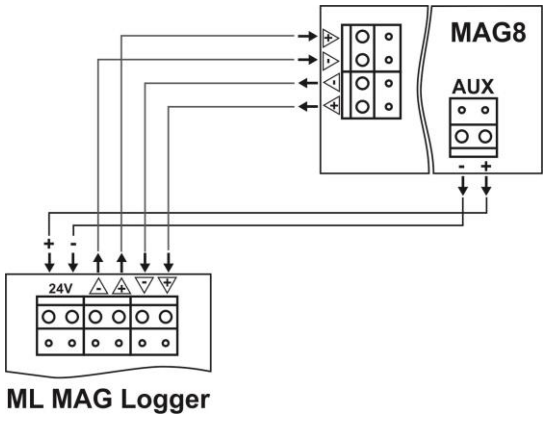


Picture 1

Installation steps of ML MAG Logger into MAG8Plus:
1. Open the front cover of MAG8plus and switch off the main power supply and the battery.
2. Mount the Logger PCB as shown on Picture 1 - on the internal side of the cover, over the printer opening, with the LCD display on top.
3. Fix the ML MAG Logger PCB to the cover with the supplied in the kit mounting screws.
4. Connect the module to MAG8Plus Control Panel as shown on Picture 2(a), using the supplied connection cable in the set.
5. Set a jumper for storing the time and date of the events – set a jumper on position 6 as shown at item 4.



Picture 2 (a) – Connection diagram of ML MAG Logger to MAG8Plus



Picture 2 (b) – Connection diagram of ML MAG Logger to MAG8

6. Operation with ML MAG Logger module

6.1 Initial power-up

Attention: By default the menus are in English. If you want to choose another language, see item *6.2.3 Language setting*.

With the initial power-up of the ML MAG Logger the display shows:

where X.X is the software revision of the module.

ML MAG Logger enters in normal operation mode:

on the upper row is shown the last event in the system: **Power On**, and on the lower - the current set date and time in format DDMM 'YY HH:MM:SS.
***Note**: The last event in the system usually is **Panel Reset** if there is a connected fire panel to the ML MAG Logger module.*

6.2 Menus

In normal operation mode, press the ENTER button (↵) to enter the ***menu mode***. Use the buttons UP ARROW (▼) and DOWN ARROW (▲) to select a menu.

There are 3 menus in ML MAG Logger setting structure:

1. EVENT HISTORY – viewing the memory LOG events is the system
2. SET DATE/TIME – setting the date and real time clock
3. LANGUAGE – setting a language

6.2.1 – Event viewing (EVENT HISTORY)

In normal operation mode, press the ENTER button (↵) to enter the ***menus mode***. The display shows:

Press the ENTER button (↵) to enter the submenu for viewing the LOG events. The display shows **the last event** in the module LOG memory with number, date and time of happening. With pressing the DOWN ARROW button (▼) the user can review all the events up to the **first one** at initial power-up ML MAG Logger. Use the UP ARROW button (▲) to review the events again from the first to the last one.
Press the CANCEL button (✕) to exit the menu. The module returns to normal operation mode.

Table of events:

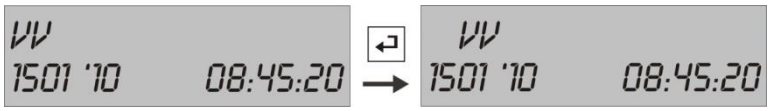
Event	Description
Panel Reset	The RESET button of the control panel has been pressed.
Snd Fault	Fault in the sounder circuit.
Snd Flt Rst	The fault of the sounder circuit is restored.
Snd Enabld	The sounders are enabled.
Snd Disbld	The sounders are disabled.
Fire Zn XX	Fire in the zone, where XX is the zone number.
Test Zn XX	Test in the zone, where XX is the zone number.
Fault Zn XX	Fault in the zone, where XX is the zone number.
Restore Zn XX	The zone fault is restored, where XX is the zone number.
Disabld Zn XX	Disabled zone, where XX is the zone number.
Enabled Zn XX	Enabled zone, where XX is the zone number.
Power On	Initial power-up of the ML MAG Logger module.

6.2.2 – Setting the date and time (SET DATE/TIME)

Attention: The jumper for storing the time and date of the events must be set – see position 6 as shown at item 4!

In normal operation mode, press the ENTER button (↵) to enter the ***menus mode***. Press the DOWN ARROW button (▼). The display shows:

Press the ENTER button (↵) to enter the submenu for setting the date and time. The fields have the following format: DDMM 'YY HH: MM:SS (day/month/year hour/minutes/seconds).
A "VV" symbol appears over the set field. The value of every field can be increased with pressing the UP ARROW button (▲) or decreased with DOWN ARROW button (▼). Press the ENTER button (↵) to confirm the entered value – the symbol "VV" moves over the next field, and so on till the end of the display to the field for setting the seconds.



The user can reject the entered values at any time with pressing the CANCEL button (✕). The module returns back to normal operation mode without saving the date and time.

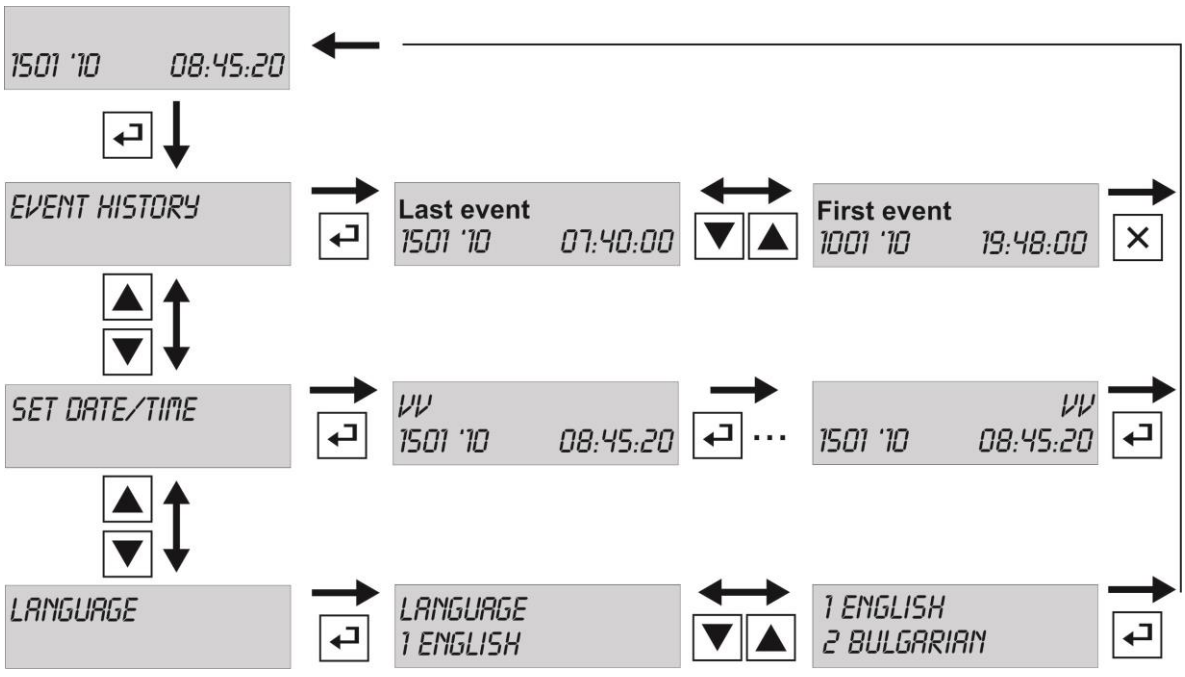
To confirm and save the entered date and time press the ENTER button (↵), when the symbol "VV" is over the field for setting the seconds. The module returns back to normal operation mode with the date and time.

6.2.3 – Language setting (LANGUAGE)

In normal operation mode, press the ENTER button (↵) to enter the ***menus mode***. Press the DOWN ARROW button (▼) twice. The display shows:

Press the ENTER button (↵) to enter the submenu for setting the language. Use the DOWN ARROW (▼) and UP ARROW (▲) buttons to select the new language. Confirm your choice with pressing the ENTER button (↵). The module returns back in normal operation mode.

7. Application – Menu structure



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