

## ELECTRONIC IGNITION EZM1TIM , EZM2TIM

The electronic ignition unit **EZM1TIM**, **EZM2TIM** was developed on the basis of knowledge gained during operation or previous type **EZM1MC** as another considerably modernized generation of electronic ignition units VLACH ELECTRONIC. The heart of this new line is a very powerful 16-bit microprocessor TEXAS INSTRUMENT. Using this processor is determined by recording the revolutions of the engine by two magnets on the propeller driver. This system enables very accurate pre-ignition control (accurate to 0.1 degree), which proves to be very advantageous during the engine running.

**EZM1TIM** is an ignition determined for one-cylinder fuel engines, **EZM2TIM** for two cylinder fuel engines. It is equipped with function FAIL SAFE which after 90 seconds of inactivity automatically switches into the inactive emergency state (STAND OFF)- in this state it is impossible to start the engine. To start the engine again is necessary to switch the ignition unit off and on again. **Warning - the STAND OFF function does NOT substitute switching off the ignition unit by the switch. The ignition unit is just switched into the emergency state.** The ignition unit in the STAND OFF state consumes the battery current (cca 20 mA) - it is necessary to switch the ignition unit off by the switch! The STAND OFF function is just a safety function - it is prevent from random ignition of the mixture in the engine cylinder when the ignition unit is not switched off after the flight and random turning the propeller (e.g. by a curious spectator).

### INSTALLATION INSTRUCTIONS

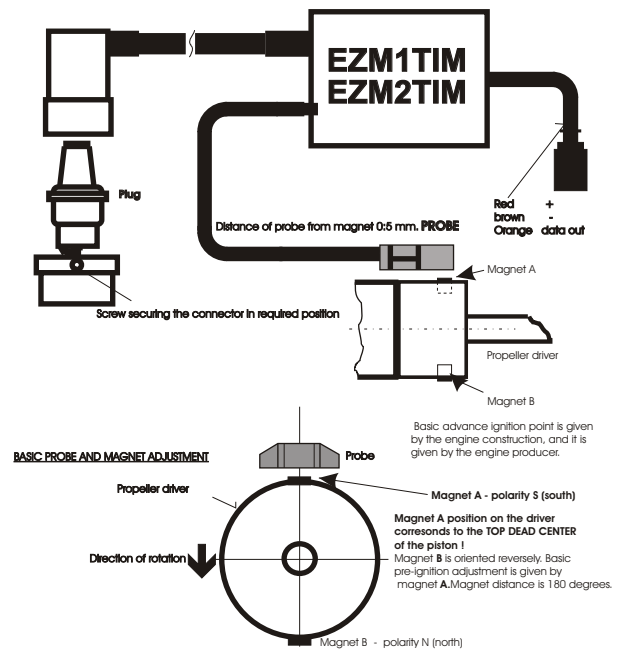
During installing the ignition unit into the model be very careful to have all parts that are connected with the ignition unit and the engine including battery sources and cables for feeding the ignition unit situated as far as possible (20 - 30cm) from the radio set and its battery. Connecting struts of the engine must be made of nonconducting materials (plastic, laminated plastic, wood). The engine-controlling servo must not be situated in a distance which is shorter than the above mentioned one. The aerial must not be led close to the engine installation. The cable leading to the sparking plug must not touch any part of the construction of the model or the engine itself - vibrations may cause damage of the ignition cable. **The guarantee does not include cables damaged in such a way!! If this requirement cannot be fulfilled, it is necessary to provide the cable with some resilient insulating material.** Provide the ignition unit with some elastic cover to minimize the influence of engine vibrations on the electronics of the ignition unit. Protect the ignition unit from the contact with fuel.

### IMPORTANT WARNING

Plug voltage is about 18,000 V! Be very careful manipulating the ignition unit - danger of electrical discharge injury!!

Technical data :	EZM1TI	EZM2TI
Supply voltage	4.8 - 6 V 4 to 5 cells NiCd or NiMH**	4.8 - 6 V 4 to 5 cells NiCd or NiMH**
Current consumption	90 - 120 mA at a still 500 mA/9000 RPM cca 18 kV	90 - 120 mA at a still 700 mA/9000 RPM cca 18 kV
Plug voltage	cca 18 kV	cca 18 kV
Weight	140 g	260 g
Dimension	55x50x25 mm	60x70x25 mm
Sensor magnet distance	max. 0.5 mm	max. 0.5 mm
Plug electrodes distance	0,6 mm	0,6 mm
Basic advance ignition point	It is given by engine construction, and it is given by the engine producer	
Working temperature range	-10 to 85 °C	-10 to 85 °C

\*\* We do not recommend to use cells Li Ion or Li Pol !!



### CAUTION !!

The ignition unit works properly only on condition that an interference-free spark plug is used !!

VLACH ELECTRONIC Jiří Vlach 756 24 Bystřička 291 Czech Republic Tel / fax +420 571 443360 mobil 0420 603 777 522 E - mail : ve@iol.cz