

FLYMASTER

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P R O B E



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TAS Probe User manual  
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## ***Warning***

It is the sole responsibility of the pilot to operate the aircraft in a safe manner, maintain full surveillance of all flying conditions at all times, and not become distracted by the Flymaster instrument. Flymaster Avionics is not responsible for any damages resulting from incorrect or no data provided by the Flymaster TAS Probe. Flight safety is the sole responsibility of the pilot.

It is unsafe to operate the Flymaster TAS Probe while in the air. Failure by the pilot equipped with a Flymaster TAS Probe to pay full attention to the aircraft and flying conditions while flying could result in accident with property damage and/or personal injury.

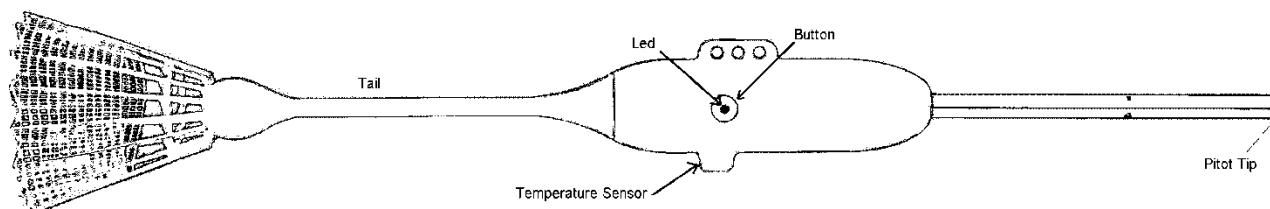
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## 1 Introduction

Thank you for choosing FLYMASTER TAS Probe. If you have any questions or comments regarding the use of our equipment you can visit our website or contact our Support Department ([support@flymaster-avionics.com](mailto:support@flymaster-avionics.com)).

## 2 Overview



*Figure 1 – TAS Probe*

The TAS Probe is a wireless measurement instrument based in a Pitot tube which provides air speed data to Flymaster instruments. The probe includes also a high sensitive temperature sensor which provides air temperature data.

Data is sent over a radio frequency link using a proprietary protocol. The TAS Probe is compatible with all the Flymaster range of instruments.

The main features of the TAS Probe are:

- Air-speed measurement from 5 to 180 km/h (1 km/h resolution);
- Temperature Measurement from -20 to +60 °C (0.1 °C resolution);
- Communication distance up to 5 meters (Line of Sight);
- Average Battery Life 200 hours (good quality Alkaline AAA );

## 3 Getting started

Before turning start using the TAS Probe you should verify the battery state.

### ***3.1 Installing/Replacing the Battery***

The TAS Probe is powered by a standard AAA 1,5 Volt battery. In order to replace the battery consider the following procedure:

**Note: Use good quality Alkaline Batteries and avoid rechargeable batteries.**

- Remove the screw and open the battery cover
- Observing the correct polarity install 1 AAA battery. The battery will fit tightly (to avoid start-up problems make sure they do not spring free).
- Install the battery cover again.

**Note: Do not over-tighten the screw of the battery cover**

### ***3.2 Turn On***

One button is used to interact with the TAS probe. The probe state can be verified through the red LED on the button. In order to turn it in:

- Press the button during more than 2 seconds. The led will flash quickly 5 times and the TAS Probe starts to send data;
- Release the button.

The Led will flash with approximately 1 second period in order to indicate that the TAS probe is On.

### ***3.3 Turn Off***

To turn off the TAS Probe:

- Press the button during more than 3 seconds. The led will flash quickly 8 times and after stops flashing at all;
- Release the button before elapse 6 seconds.

## 4 Calibrating the TAS Probe

Due to climacteric conditions changes a small offset can appear at air speeds near 0 *m/s*. Despite the offset being negligible at higher speeds (paragliding trim speed), it is possible to reset the value. The calibration procedure is the following:

- Put the TAS Probe exactly in the same position as used in the aircraft (paragliding, hangliding, etc), and still air (0 *m/s* air speed condition).
- Turn On the instrument;
- Press the button and maintain it pressed. After 3 seconds the led will flash 8 times as if it will turn Off. After 6 seconds, with the button still pressed, the led will flash 1 time and the air speed value set to 0 *m/s*. The led starts flashing again and the TAS Probe turns On;
- Release the button.

**Note: If the calibration is made in a wind condition it will result in an air speed offset which will be noted in all the speed range.**

## 5 Pairing with a Flymaster instrument

Air speed, and temperature data is sent wireless to any Flymaster instrument. In order to be able to see the TAS Probe data in your instrument you need to pair both, and also to include the right Data Fields in the layout.

The pairing procedure on the TAS Probe has only one step, which is turning the TAS Probe On. All the remaining pairing procedure steps are made on the instrument side.

Please refer to your instrument user manual in order to see how the pairing can be done.