**Features**

T1000FC+GPS is designed to provide a high precision self-correction and superb accurate stabilization for your airplane. This system will help you to become more confident in flight.

1. Safe and reliable design.
2. Inertial vector measuring, Barometer, applicable to all weather.
3. Compatible with great range of fixed wing designs.
4. Incorporated with PID smart control, leaving every adjustment to the equipment itself.
5. Multiple flight modes are available; covering pilots from beginner to 3D Pilots.
6. 3-Axis stabilization.
7. Smart self-correction. (Input full control, system will lock the travel at 45 degree).
8. GPS “Home” point flight back compatible (Optional).

**Block Diagram**

![Block Diagram](image)

- **GPS “Home” Set**
  - SV Input Voltage
  - RUDD Output
  - ELE Output
  - ALL Output
- **LED Indicator**
  - GPS Connector (optional, need to buy GPS module separately)
- **Wing Selection**
  - Normal Wing
  - V Tail or A Tail
  - Flying Wing
- **Install**
  - Orientate the receiver horizontally and keep the connector toward the tail.
  - Please note: locate the receiver as close as possible to the CG with good shock absorption material to realize the max optimum effect.

**Installation sketch map**

![Installation sketch map](image)

**Flight Mode Introduction**

1. There are three Flight Modes when without GPS system, been switched by mode-switch on transmitter.
   a. Manual mode (mode-switch on 1 position): the T1000FC will not work, the plane will be controlled by User completely.
   b. 3D Mode (mode-switch on 2 position): the plane will keep stable, make the 3D flight easy and accurate!
   c. Leveling Mode (mode-switch on 3 position): without any input, system automatically corrects the surface to keep airplane level. When you input the max control, system will lock the pitch and roll at 45 degree.

2. There are three Flight Modes after connect the GPS system, been switched by mode-switch on transmitter.
   a. Leveling Mode (mode-switch on 3 position): without any input, system automatically corrects the surface to keep airplane in level. When you input the max control, system will lock the pitch and roll at 45 degree.
   b. Altitude and Attitude Mode (mode-switch on 2 position): the plane will fly according to the current altitude and attitude, the height and direction been locked.
   c. Return Mode (mode-switch on 1 position): the plane will keep the current altitude, and fly back to the position of “home” automatically, pay attention to the power during flight, and avoid loss speed.

**Basic Setting**

1. Set the level position (initialize the Gyro): Put the airplane which has been fixed with the T1000FC on the ground levelly, dial the DIP switch to “ON” and then connect the power, the red LED light will start to glint, keep the plane on level position till the red LED light stop glitter but light constantly, then the Level Position Setting (initialize the Gyro) has been finished. Turn off the power; dial the DIP switch to Flight Control mode. Attention: This process is not necessary before each flight unless the temperature difference is big, the rudder surface will be drifted and the flight gestures are not stable, and then need to re-set the level position.

2. Set the transmitter: Turn on the power of transmitter, connect the power of plane, set the directions of Aileron, Elevator and Rudder Channel, make sure the control and the servo surface of the of the plane could keep the same under Manual Mode and 3D Mode. Dial the mode-switch to 3D mode, and check whether the rudder surface will be drifted or not, if yes, please adjust the trimmer on transmitter to make sure the rudder surface will not been drifted in long time flight.

3. Adjust the Plane: Dial the mode-switch to 3D mode or Leveling Mode, adjust the Gain knobs of Aileron, Elevator, Rudder on T1000FC, middle position of potentiometer means the minimum Gain, turn to the clockwise or anticlockwise position means the opposite direction and amount of Gain, adjust to the correct Feedback direction and Feedback amount; if the Feedback amount is too big, the plane will shake during flight, we suggest the user adjust to the maximum amount at first, and then decrease the amount according to the flight gestures. Attention: Under Leveling Mode, the Aileron and Elevator will have Feedback amount, the Rudder will have Feedback amount only under the 3D mode.
GPS Mode Setting:

Need to connect the GPS Module, we suggest to connect the GPS module after the basic setting, and make sure the flight status are good.

1. Set the position of ‘Home’ : Please put the plane on the open ground outside, make sure the GPS could connect with the satellites. The red LED light start to glitter after connect with the GPS, press the ‘Set’ key for little long time, till the red LED light glit ter continuously after light for 3 seconds, that means the position of ‘Home’ been set successfully. The position of ‘Home’ could save for long time after the first time setting. Flight Mode will turned to Leveling Mode automatically if the GPS didn’t been set successfully or some accidents happened during flight.

2. After GPS been set successfully, there have three modes which been switched by mode-switch: a. Leveling Mode. b. Altitude and Attitude Mode. c. GPS Mode.

LED Lights Instruction:

<table>
<thead>
<tr>
<th>Function Set</th>
<th>LED lights</th>
<th>Red</th>
<th>Green</th>
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</thead>
<tbody>
<tr>
<td>Set the level position (initialize the Gyro)</td>
<td>Glitter Continuously Light Continuously Light</td>
<td>Off</td>
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<tr>
<td>Without GPS</td>
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<tr>
<td>Manual Mode</td>
<td></td>
<td>Light Continuously</td>
<td>Light Continuously</td>
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<tr>
<td>(mode-switch on 1 position)</td>
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<td></td>
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<tr>
<td>3D Mode</td>
<td></td>
<td>Light Continuously</td>
<td>Glitter Single Time</td>
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<tr>
<td>(mode-switch on 2 position)</td>
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<tr>
<td>Leveling Mode</td>
<td></td>
<td>Light Continuously</td>
<td>Glitter Double Time</td>
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<tr>
<td>(mode-switch on 3 position)</td>
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<tr>
<td>Connect with GPS</td>
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<td>Leveling Mode</td>
<td></td>
<td>Glitter Continuously</td>
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<td>(mode-switch on 3 position)</td>
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<tr>
<td>Altitude and Attitude Mode</td>
<td>Glitter Continuously</td>
<td>Glitter Single Time</td>
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<td>(mode-switch on 2 position)</td>
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<tr>
<td>GPS Mode (mode-switch on 1 position)</td>
<td>Glitter Continuously</td>
<td>Light Continuously</td>
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