

Topigeon PST001+ Pigeon Timer Specification

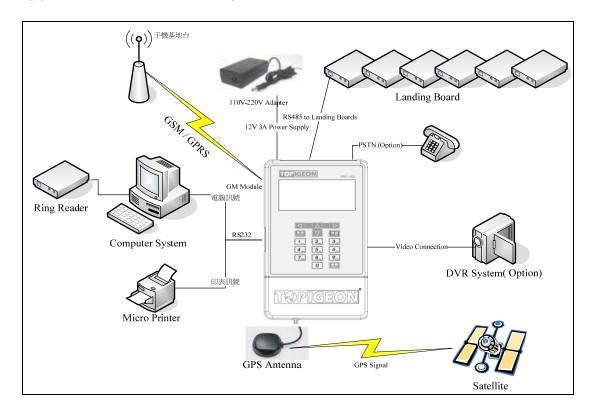
Avance Technology Briefing

The IC chip and RF currently have became the most important application technologies and been rapidly developed. More than a science in the lab, the technology has been closely linked with our ordinary life and makes dramatically changes to our daily life. The development of these technologies has far beyond what we could expect before.

Avance Technology positions itself as a Smart Solution Integrator by smart chip and wireless technology. The state of arts technology from our partners, together with localized middleware design, Avance provides a advanced, safe and demand-driven solution with proven records to customers.

1. Design Concept

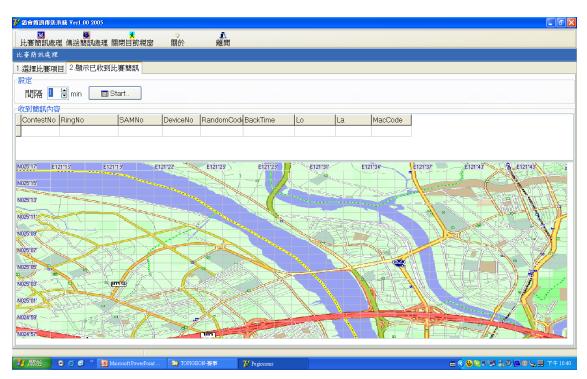
The Topigeon Pigeon Timer is developed by Avance Technology for modern pigeon racing. Combining the most advanced technologies, we hope to provide a complete solution for pigeon raiser and pigeon association around the world. We hope these new technologies can bring the pigeon racing game more fun and enhance the game to the next level!



Topigeon System Overview



- All-In-One Design: The Topigeon Pigeon Timer is the first All-In-One pigeon timer in the world which has build-in modules of GSM/GPRS, GPS, SAM and UID. User can easily install the timer without many interfaces and use it, and doesn't have to worry about future upgrade since all the functions have been designed-in.
- Training Mode: This mode is for training purpose and to be used for daily training. The training mode can be operated by pigeon raisers. It can also be connected to the computer and download the daily data to the computer for analyzing.
- Racing Mode: This mode is for racing purpose and to be used by pigeon association for formal racing. The racing mode will only be activated by pigeon association's computer system. When racing mode, all the data transition will be encrypted and can only be done by the pigeon association.
- Connecting to the internet world: Together with our back-end system, all the racing records can be transferred to the association immediately by SMS. The SMS system then will come out the results of the racing and link to the database. The association members can have the on-time information of the game results by internet.



Topigeon Online Web System



2. Security Design

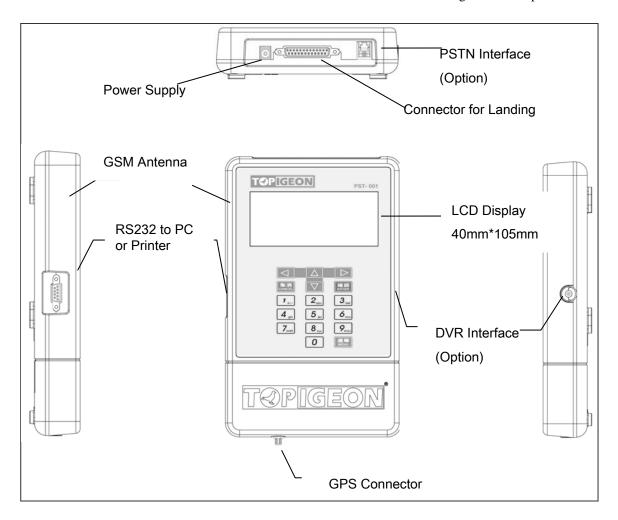
- GPS Module: The GPS coordinates will be embedded to the racing records to avoid loft moving, and adjust timer's time by satellite time automatically.
- GSM/GPRS Module: The timer can provide on-time information by SMS (Short Message Service). The message is encrypted by SAM module to avoid fraud message. The pigeon raiser and the pigeon association can get the message of each pigeon. In the racing mode, the message, which includes loft number, ring/UID number, coordinators and landing time, can go to the association directly for final records.
- SAM Module: All the data transition, including data upload and download, will be protected and authenticated by security key.
- UID System: The system can record each ring's UID and send back to association to avoid fraud ring number.
- DVR Interface (Option): The timer can connect to standard DVR to record the status of the loft.
- The timer can connect to micro printer to print out the timer's records for evidence.

Model: Topigeon PST-001+

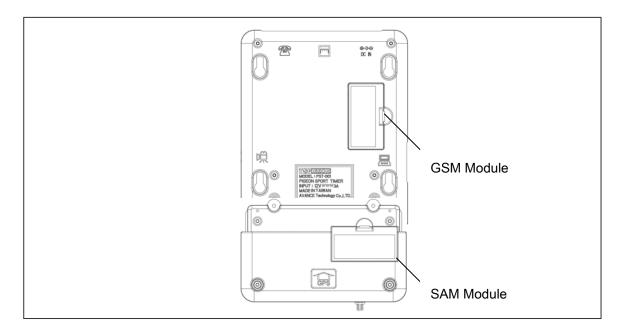
- Include: LCD Display, Key Pad, RS232
 Module, GSM Module, Landing Board
 Connector, Timer, Data Storage, Power
 Supply, Audio Connector, GPS Module,
 SAM module
- Power Supply: DC12V 1A
- Maximum 16 boards can be connected
- Dimension: 237mmx145mmx38mm







Topigeon Timer Front View



Topigeon Timer Back View



3. Accessory

■ NXP Hitag-S 256 Ring





■ Single Channel Landing Board

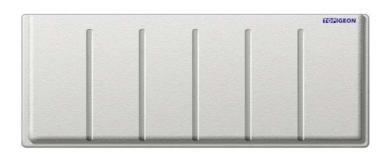


Model: PLB-001S+

Dimension:

22.5cmx11cmx1.5cm

■ 6 Channel Landing Board



Model: PLB-001L+

Dimension:

77cmx29.5cmx2cm

4. Others

- The timer can be connected to the PC by RS232 port.
- The timer can be connected to thermal printer (ESC/POS Print Commands) by RS232 port.

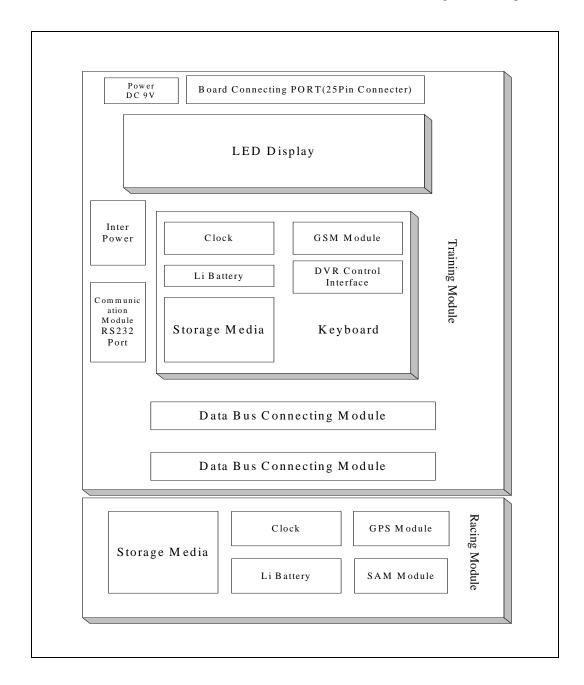




RS232 Port

Micro Printer





PST001+ Diagram