User Manual for the Seagull Wireless Telemetry System
Patent Pending

Document Version 0.6, Model # SEA-01

Eagle Tree Systems   SEA-01

   Tested to Comply With FCC Standards

FOR HOME OR OFFICE USE

Introduction

The Seagull Wireless Telemetry system is designed to be small, compact, and easy to use.

Safety

The Seagull Transmitter has no user serviceable parts inside.   Do not remove the case from the Seagull Transmitter.
Do not operate the Seagull Transmitter so that the antenna within 20 cm of the human body.

Radio Interference and FCC Information

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC
Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates,
uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to
radio communications. However, there is no guarantee that interference will not occur in a particular installation.
If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on,
the user is encouraged to try to correct the interference by one or more of the following measures:

--Reorient or relocate the receiving antenna.
--Increase the separation between the equipment and receiver.
--Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
--Consult the dealer or an experienced radio/TV technician for help.

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Intended Uses

The Seagull System is designed to be used to transmit data in Radio Controlled model Planes, Cars, Helicopters, Boats and other RC models.

Packing List

Your Seagull system includes the Wireless Telemetry Data Dashboard Receiver, the Wireless Telemetry transmitter, and this instruction manual.   A
Flight, Car or Boat Data Recorder system is required, and is sold separately by Eagle Tree Systems.

Features

Some of the features of the Seagull system are:

- Fully compatible with all known plane, heli, car and boat systems

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- Small self-contained LCD Telemetry receiver attaches simply to your radio, or is monitored by your pit crew, and provides fully programmable visual feedback and audible alarms. No laptop needed at field!
- Powered from your receiver battery – no additional battery required in your model!
- Available either as an expander for our Recorder products, or as a complete system
- 65536 unique IDs (programmable) means interference problems are extremely unlikely at your site
- Transmits up to 16 channels of telemetry data in real time: temp, RPM, speed, amps, volts, EGT, G-force, servo movements, mAH, and many more!
- Fully programmable audible alerts can be set on all parameters.
- Built-in variometer support for audible and visual monitoring of climbrate
- Receiver is a USB peripheral: configuration is a snap on your PC, and you can plug the receiver into your laptop while racing to get full screen live display and recording of your race on your laptop screen!
- Since this system plugs into our car, flight and boat data recorders, you get the benefits of instantly interchangeable on-board car logging and/or wireless telemetry, depending on your needs!
- Switchable low or high output power mode
- Switchable sample rates for high resolution, or longer battery life

Data Transmitted to the Seagull Receiver

Depending on your application, some or all of the below data can be transmitted to the Seagull Receiver.

Servo movements: The Seagull will display positions of up to four servos.

Receiver Battery Voltage: The Seagull will display your receiver's battery voltage (or whatever battery is being used to power the servos).   T

Speed: The Seagull displays the speed of your model with each sample.

Altitude: The Seagull displays the flight's altitude with each sample.

RPM: The Seagull displays the RPM of your model's engine.

Temperature 1: The Seagull displays temperature from the supplied temperature sensor.

Temperature 2: The Seagull can display a second temperature input with the purchase of an additional temperature sensor, sold separately.

Optional Accessories: Optional expanders for measuring G-Force, Exhaust Gas Temperature, Electric Motor Current/Voltage, and other parameters are available from Eagle Tree Systems.   All data from these expanders is compatible with Seagull.

Installation Instructions

Plug the Seagull Transmitter cable into the "Expansion" port on your Flight, Car or Boat Data Recorder. Ensure that the red wire of the cable corresponds with the red dot on the port label.

Either mount the Seagull Data Dashboard Receiver on the front of your radio transmitter, hand it to a member of your crew, or plug it in to your laptop's USB connector.

Configuration Instructions

To configure the Seagull system, launch the Data Recorder Windows application and select "Tools->Seagull Setup Wizard."   This wizard will guide you through the rest of the installation process.