

## Brief Instructions GPS-Module

### 1 Introduction

The Development, production and assembly of all weatronic products is based in Germany. All components are tested by the highest German standards. During the development process reliability and noise immunity are considered the most.

**MADE IN GERMANY**

### 2 Scope of supply

weatronic® **GPS-Module**

Patch cable, black plug for power supply

Patch cable, blue plug for data transfer

### 3 Safety instructions

The weatronic ® 2.4 Dual FHSS - Remote Control System has been developed exclusively for the operation of radio-controlled model cars,

model aircraft and ship models and is

**only permissible for this use.**

weatronic ® assumes no liability for improper use.

Young people under 14 years of age may operate remote controlled models only under adult supervision.

Please operate your model only on intended Areas. Be considerate to other Pilots and arrange with each other.

Stay in reach to other Pilots, so you can communicate about your landings and take-offs approaches in order to avoid accidents.

Always stay away from Non-Fly zones and never fly over spectators or any persons who are near the airfield.

The weatronic ® 2.4 Dual FHSS system can be used simultaneously with other 2.4 GHz systems, and also with 35/40/72 MHz systems. The frequency control check is no longer necessary within the 2.4GHz Band. More than 120 Weatronic ® 2.4 Dual FHSS systems can simultaneously be operated.

Before operation always perform the following routine checks: fix your model in place. Keep a safe distance. Mind bystanders, especially spectators who are not aware of the potential dangers! Indicate sources of danger, such as rotating blades and propellers or the hot exhaust of jet-turbines, etc.

First switch on your transmitter. Check whether the correct model memory is selected. Then turn on the receiver.

All functions of the model, in particular their moving direction and all surface deflections should be checked.

Also check your batteries to be sufficiently charged.

### 4 RC-equipment installations

The correct installation of the receiver, battery, servos, electric cables and antennas is highly required to operate your model. Avoid excessive vibration exposure and excessive heat load.

The receiving part of the **GPS-Module** has its own patch antenna. The antenna should preferably have direct line of sight to the open sky, or be installed directly on top of the fuselage. For carbon fiber reinforced hulls, hulls with metal-finish or metal sheeting, a strong shielding effect can occur. Here the **GPS-Module** must be necessarily moved to the

outside.

### 5 Flashing code of the LED's

LED green	Status
OFF	Switched off
Permanent ON	Switched ON, NO Satellite connection
Short blinking	Connection established, GPS position located

### 6 Connection

Direct operating at a receiver, **except Tiny 5:**

The **GPS-Module** comes with two patch cables. With black plugs for the power supply and with blue connectors for data connection.

The black one is connected for the power supply into an available servo slot. The other side is connected to the right slot of the GPS module. Minus (black cable) is right. Alternatively, the GPS module can also be operated by an external power supply. Please note the max. Voltage.

The patch cable with the blue connector is connected to the "SCU port" of the receiver and to the left slot on the GPS



module. (see Figure 1)

Figure 1

Direct operation on a Tiny 5 receiver:

The black one is connected for the power supply into an available servo slot. The other side is connected to the right slot of the GPS module. Minus (black cable) is right. Alternatively, the **GPS-Module** can also be operated by an external power supply. Please note the max. Voltage.

For data connection on a Tiny 5 the blue / transparent patch cable (WEA37636) must be used. The transparent plug is connected to the **GPS-Module**, the blue connector to the "SCU port" of the Tiny 5 receiver. Please note that the blue two-conductor plug is connected so that the brown wire is at the bottom of Tiny5 "SCU Port". (see Figure 2)

As a power supply 5-cell NiMH or 2-cell LiPo / LiFe's are used.

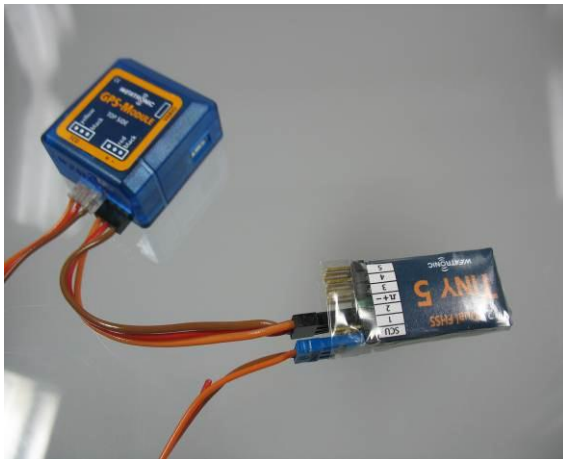


Figure 2

Operating with a **Vario** or a **MUX box**:

If the **GPS-Module** runs at the Vario (see Figure 3) or on a MUX box (see Figure 4), the GPS connection cable (WEA37673) must be used. The connector of the GPS connection cable is secured against rotation and requires very little force to connect. Any further connecting cable is not needed.



figure 3

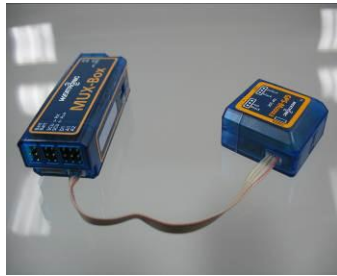
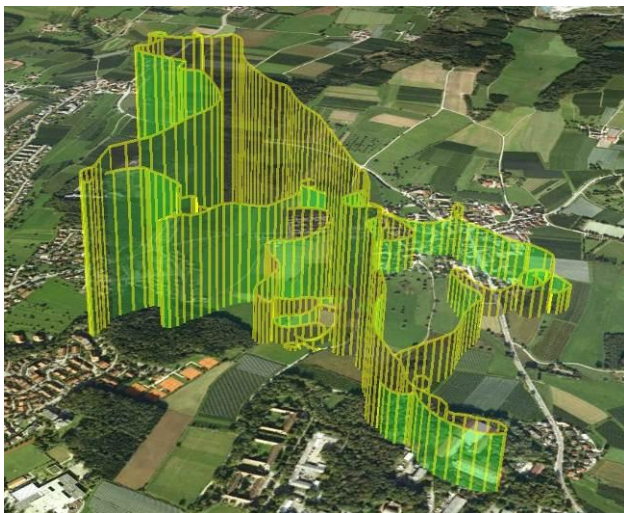


figure 4

## 7 Programming

For sophisticated tasks the voice messages from the **GPS module** can be programmed. To do this, use the weatronic® software GigaControl. With this many opportunities are given, from the cyclic announcement of the detected values (altitude, speed, etc.) to programming alarm thresholds.

An analysis of the flight in the tab "NavView" in the weatronic® software GigaControl is possible, and exporting the data to virtual globes.



## 12 Warranty Disclaimer / damages

weatronic® complies with the statutory requirements granted a 24-month warranty.

To assert a warranty claim the corresponding article should be sent to the seller

For processing the warranty claims

- proof of purchase
- detailed description of the damage
- log files of the accident.

are needed.

weatronic® will not issue warranty or guarantee for:

- improper operation
- mechanical changes
- polarity and external surges
- Short circuits
- Overheating

weatronic® assumes no responsibility for any loss, damage or expense arising out of incorrect use and operation, including any kind of resulting consequence.

As far as legally allowed, the commitment of the weatronic® GmbH to pay damages, for whatever legal reason, is limited to the invoice value of the directly involved and damage-causing goods of the Weatronic® GmbH.

## 13 Disposal instructions for countries within the EU

Inside the European Union the weatronic® **GPS Module** receiver must be disposed separated of the household waste by end of its service life.



Proper disposal information can be obtained by the local authorities.

## 10 Technical Specifications GPS Module

µ-blox5 GPS & GALILEO Super Sense® GPS chipset

High Sensitive (Tracking Sensitivity: -160 dBm)

Very short time until the first position determination

(TTFF - Time To First Fix) even at low

Signal level due to internal patch antenna

Frequency:	L1, 1575.42 MHz
Channels:	50 channels max.
Position	update rate: 4 Hz
Sensitivity:	-160 dBm tracking
Sensitivity:	-160 dBm Satfixing
Sensitivity:	-145 dBm cold start
Fault rate:	0.1 m / s
TTFF hot start:	3.5 seconds, on average.
TTFF Cold start:	30 seconds average.
Power supply:	4-10 V DC
Current consumption:	80 mA
Temperature range:	-4 ° F to +158 ° F
Dimensions:	1.30 x 1.30 x 0.63 "
Weight without cable:	0.81 oz

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