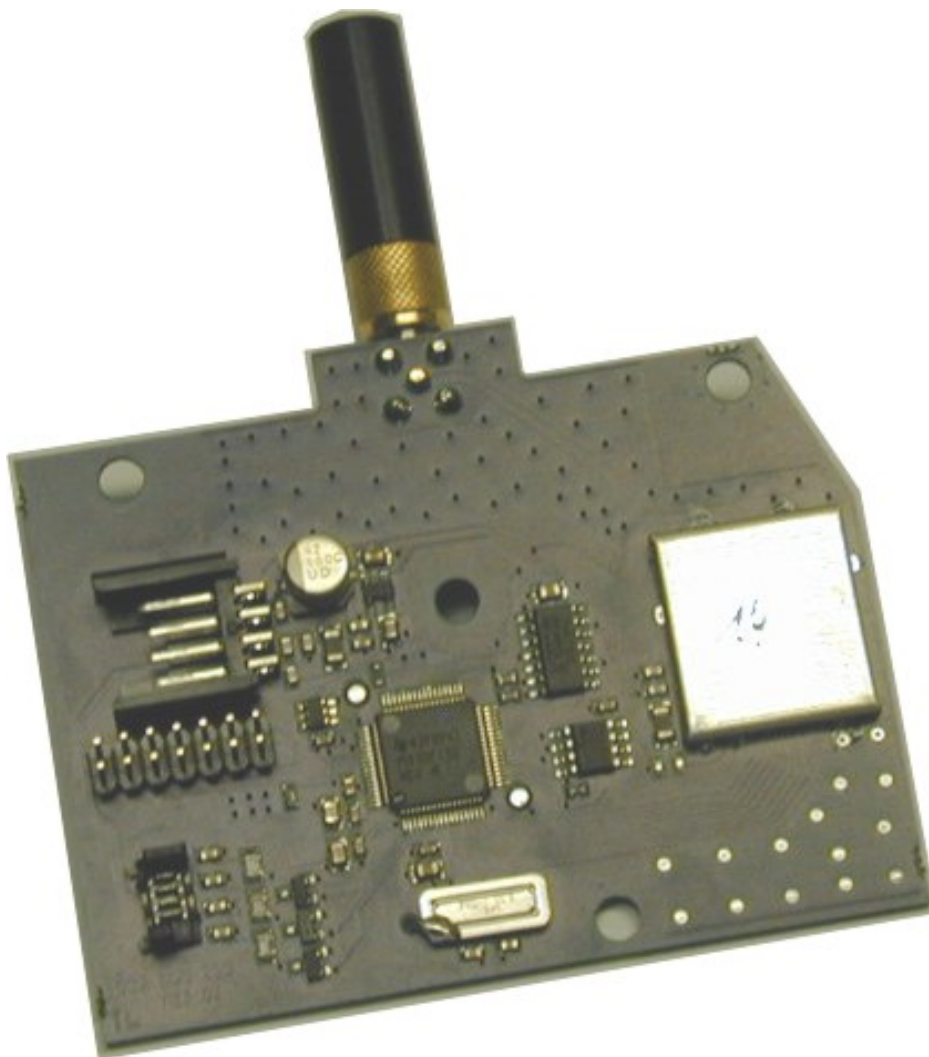


Funkmodul 2.4 GHz EASY kpl. and Funkmodul 2.4 GHz GTR/SA kpl.



The purpose of this manual is to explain how to integrate the modules “Funkmodul 2,4GHz EASY kpl.” and “Funkmodul 2,4GHz GTR/SA kpl.” into a Beissbarth wheel alignment system.

Content

1. Functional description
2. Installation Instructions
 - 2.1 Mechanical Installation
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3. FCC Compliance
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1. Functional description:

Both radio communication modules “Funkmodul 2.4 GHz EASY kpl. (932.503.144)” and “Funkmodul 2.4 GHz GTR/SA kpl. (932.503.168)” are exclusively used for different Beissbarth wheel alignment systems. Therefore the modules are mounted inside the measuring heads and the cabinet of a wheel alignment system. The radio modules are used to transmit control data from the cabinet to the measuring heads and measuring results from the measuring heads back to the cabinet.

The modules work within the 2,4GHz band and perform a bidirectional data link.

Both modules are 100% identical, except the antenna connector. On the EASY-Module the antenna connector is mounted on the solder side of the PCB and on the GTR/SA-Module the antenna connector is mounted on the components side of the PCB.

Funkmodul 2.4 GHz EASY kpl. and Funkmodul 2.4 GHz GTR/SA kpl.

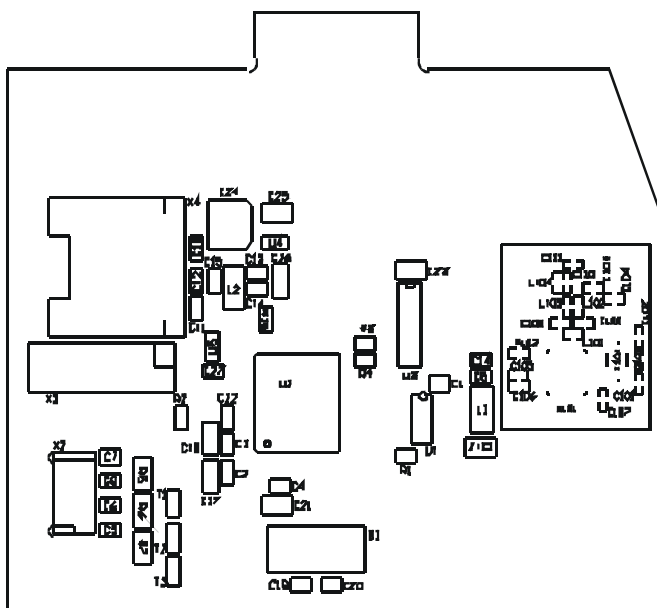
2. Installation Instructions:

Normally the modules will be ready mounted within the wheel alignment system at the production plant of Beissbarth. In case of a service action, the modules may only be changed or mounted by a Beissbarth authorized service technician.

2.1 Mechanical Installation

The radio module has 4 holes in the PCB in order to fixture the module with screws inside the wheel alignment components. The module must be mounted exactly at the foreseen position within the measuring heads and the cabinet. The module has to be fixed with a minimum number of two screws. The exact number of necessary screws is dependent on the wheel alignment model. The mounting direction of the module is always with a vertical antenna. The original Beissbarth antenna (2,4GHz Stubby Antenna PN 977 255 638) must not be removed and mounted at another location or replaced by another model!

2.2 Electrical Installation



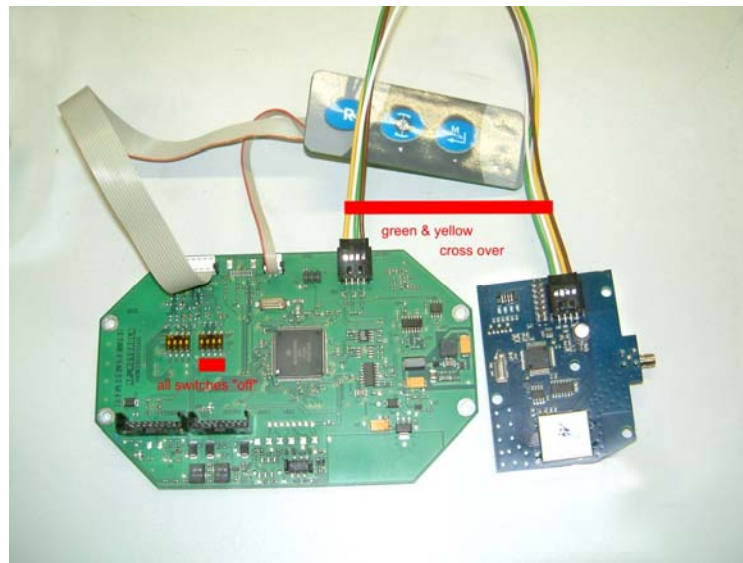
On the assembly drawing on the left side you can find the positions of the connectors X2, X3 and X4.

Loetstopmaske Top Layer in blau!

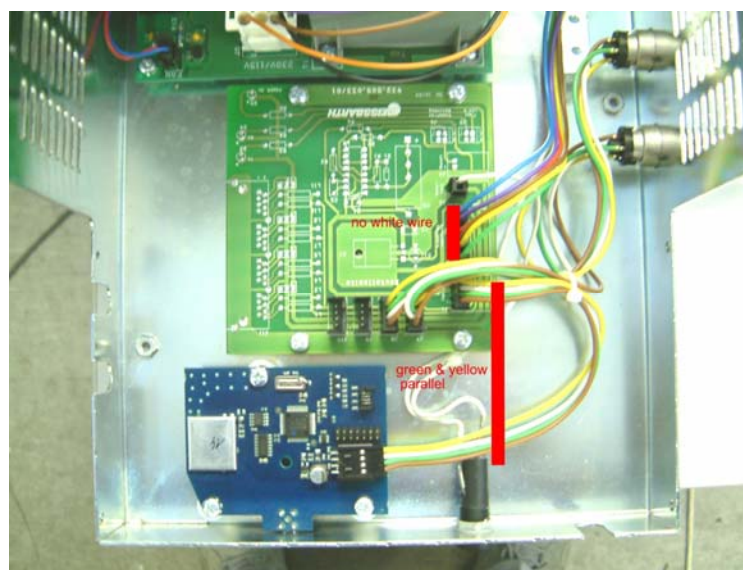
Funkmodul 2.4 GHz EASY kpl. and Funkmodul 2.4 GHz GTR/SA kpl.

For correct operation, the following connections have to be done:

- For the measuring heads make a connection between X4 and the PCB “Messprozessor”. Use the Beissbarth cable PN 932 503 013



- For the cabinet make a connection between X4 and the connectivity PCB PN 932 503 107. Use the Beissbarth cable PN 932 503 004.



- The connectors X2 and X3 have to be unconnected.

Funkmodul 2.4 GHz EASY kpl. and Funkmodul 2.4 GHz GTR/SA kpl.

3. FCC Compliance

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions. (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

4. User Information

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

5. Label Instructions

This intends to inform how to specify the FCC ID of our module "Funkmodul 2.4GHz EASY kpl." and "Funkmodul 2.4GHz GTR/SA kpl." on the product.

Based on the Public Notice from FCC, the host device should have a label which indicates that it contains our module. The label should use wording such as:

"Contains FCC ID: PWPGTR-EASY-2400."

Any similar wording that expresses the same meaning may be used.

Where the end-product into which this modular transmitter is integrated exceeds the size of a PCMCIA card (approx 8 x 10 cm) than the following statement shall be placed onto the end-product:

This device complies with Part 15 of the FCC Rules.

Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

Otherwise this statement shall be included in the user manual of the end-product.