



# KORSMIT

Rally Electronics

## Wheel Sensor Installation Guide

M8 (HR)

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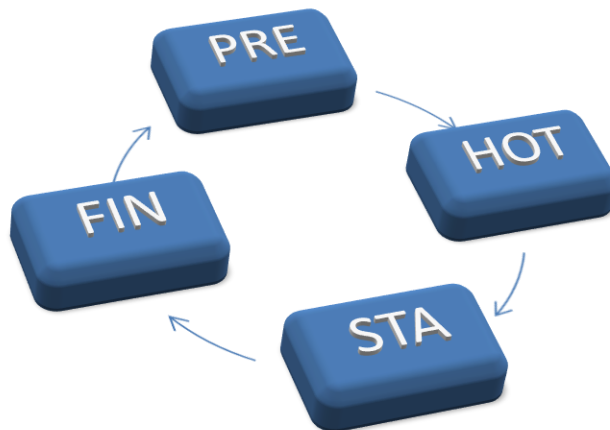
M12 (HR)

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# 1.Introduction

## General

This manual is an installation guide for the M8, M8 High Resolution (HR), M12 and M12 High Resolution (HR). In principle, the installation is for all sensors the same. Where the installation is different, we will state this clearly.

This document has 3 chapters:

- Mechanical installation
- Electrical installation
- Specifications

## 2. Mechanical installation

The sensor has to be installed in a wheel hub or somewhere where pulses can be generated while the car drives. The sensor detects ferro metals passing by the sensor head. Please make sure the metal part is passing by stable and always at the same stable distance. You should not install it on the wheel rim while this can be bend by impact or even speed and load of the vehicle.

Make sure not to over tighten the sensor.

### 3. Electrical Installation

Please perform the electrical job while removing the power supply from the car. This can easily be done by removing the GND from the battery.

The sensors used by KRE are PNP sensors. This means that we measure the pulses that go to the ground. A tripmaster can therefore always be tested by making with a wire, pulses to the ground and see if the tripmaster counts.

All sensors have 3 wires with the same wire colors. The connection is as follows:

Brown	6 to 30 Volt	Please connect this to your 12 or 24 volt power supply.
Blue	GND	Please connect this to your GND in your car
Black	Pulse	Connect this to your tripmaster.

#### Alma Rally

For your sensor, please connect the brown and blue wires to the power supply and Ground in or outside your tripmaster. While the housing of the alma Rally is relatively small, it is preferred that you connect these wires outside the tripmaster. There are no special connection blocks for the power and ground.

The black wire is connected to the block inside the tripmaster (see tripmaster manuals):

- Alma Rally : Pin 2 of block 2
- Alma Rally Plus : Pin 5

#### Alma 1

In the Alma1 you have to connect the +12 Volt of the sensor with the incoming +12 Volt. The GND, you can connect with the incoming GND (port 2) or use another GND (for example port 3 on connector 2):

Port 4 :	Brown	Power supply
Port 2 :	Blue	Ground (for easier connection you can also use port 3 of connector 2 with 4 poles)
Port 1 :	Black	Pulse

#### Alma 1 XL (A1XL1.1)

In the first serie Alma1 XL you have to connect the +12 Volt of the sensor with the incoming +12 Volt. The GND, you can connect with the incoming GND (port 4) or use another GND (for example port 3 on connector 2):

Port 2 :	Brown	Power supply
Port 4 :	Blue	Ground (for easier connection you can also use port 3 of connector 2 with 4 poles)
Port 5 :	Black	Pulse

## **Alma 1 XL (A1XL1.3 and up)**

In the Alma1 (XL) there are special connection points for the sensor (12 or 24 volt outputs).

Therefore you can just connect the sensor to Connector 1, the connector for 5 wires:

Port 3 :	Brown	Power supply
Port 4 :	Blue	Ground
Port 5 :	Black	Pulse

## 4. Specifications

	<b>Diameter (mm)</b>	<b>Thread</b>	<b>Length thread (mm)</b>	<b>Total Length (mm)</b>	<b>Cable Length (m)</b>	<b>Max pulses per wheel revolution</b>	<b>Sensor distance from sensed metal</b>
<b>M8</b>	8	M8			1	2	2
<b>M8 HR</b>	8	M8			2	20	2
<b>M12</b>	12	M12			1	1	4
<b>M12 HR</b>	12	M12			2	20	4