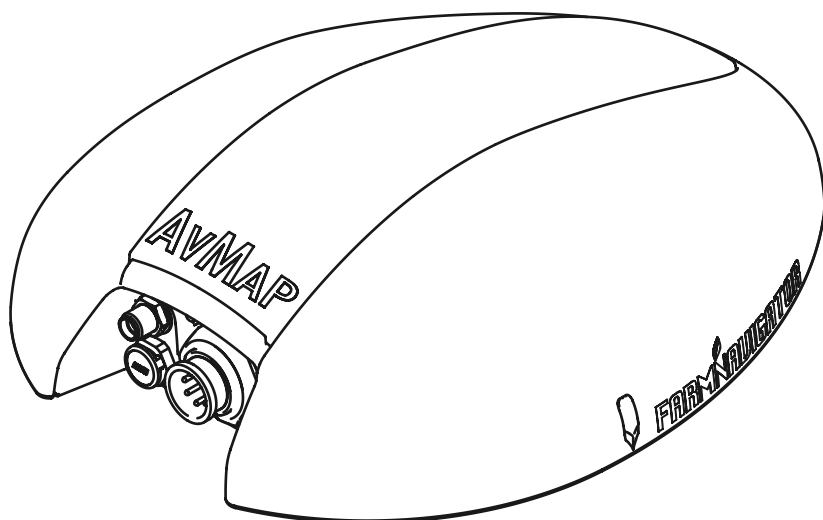




MMR4GFMAE010

# FARMNAVIGATOR



# All in One *RTK*

## INSTALLATION MANUAL

# 1. Product description

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The All in One RTK embeds a GNSS receiver with tilt sensor and a 4G Cat.1 modem, offering RTK corrections, telematic services and connectivity all across Europe.

## 1.1 Content of the package

The Package includes:

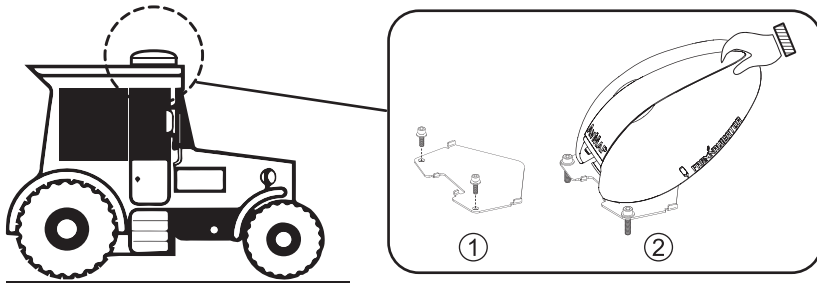
- All in One RTK Receiver
- All in One RTK Power & I/O cable
- Steel bracket + adhesive tape

## 2. How to properly install the receiver on the tractor

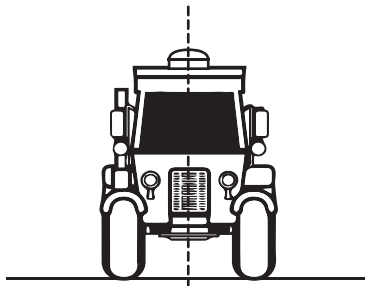
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In order to achieve the highest accuracy, the receiver must be installed following the instructions below. This allows the receiver, equipped with a inertial platform, to provide accurate dynamic vehicle information and precise terrain compensation. In case of special applications and installation on implements, follow the instructions in the dedicated manual.

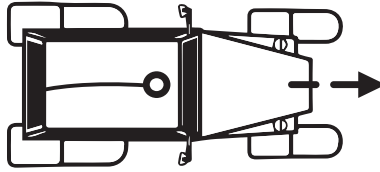
**ATTENTION:** the receiver is equipped with very strong magnets, during installation always stay alert and focused on keeping your hands safe.



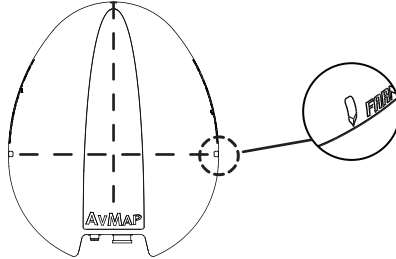
1. On the roof of the tractor, horizontally, using the steel bracket to avoid vibrations.



2. In the center of the cabin.



3. The connector for Power & I/O cable must be oriented opposite to the driving direction.



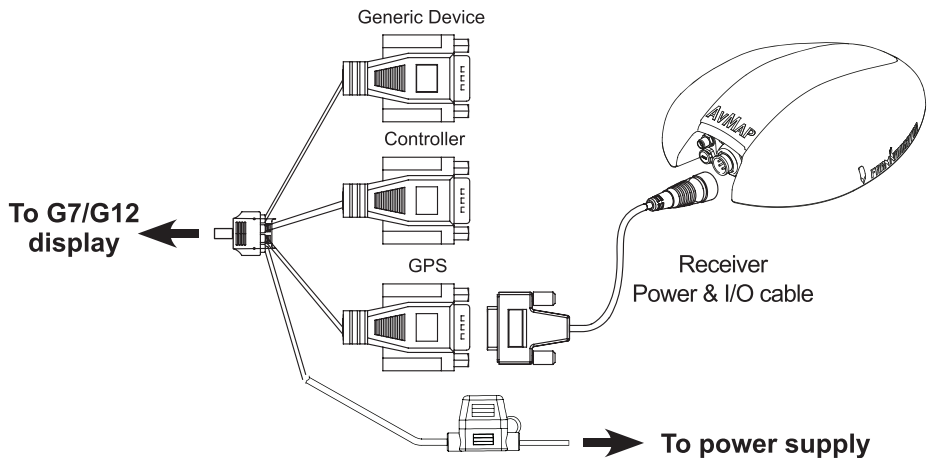
4. The center (x,y axes) of the GNSS antenna inside the plastic case is marked with a reference symbol.

Images are for illustrative purposes only and can differ from the real product.

### 3. How to use the receiver with FARMNAVIGATOR products

Connect the Power & I/O cable to the "GPS" connector of the G7/G12 display and you are ready to use your receiver.

Follow the instructions available in G7/G12 user manual in order to check the satellite signals on your G7/G12 display.



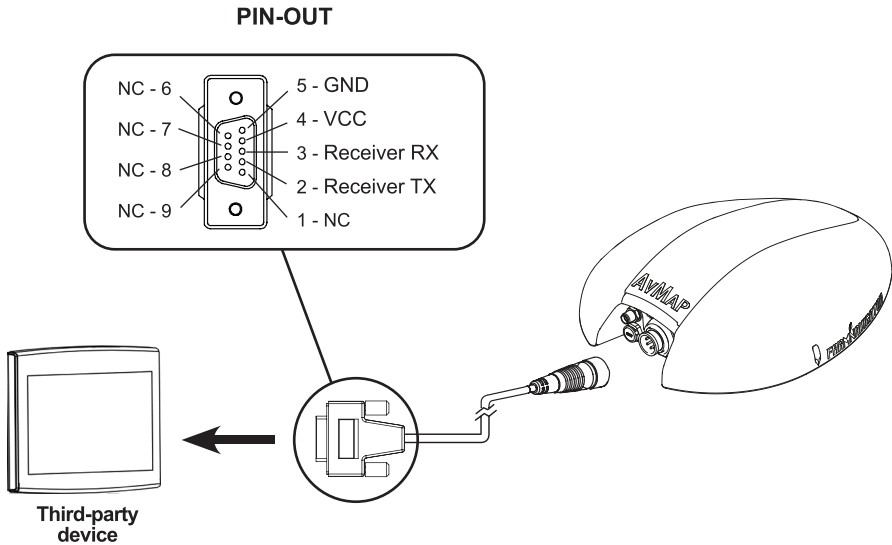
## 4. How to use the receiver with third-party devices

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The receiver can be used with any third-party device compatible with serial communication and NMEA 0183 messaging (RS232 protocol).

### 4.1 Third-party devices connection scheme

To connect the receiver to a third-party device, simply connect your device to the DB9 connector end of the Power & I/O cable according to the pin-out presented below.



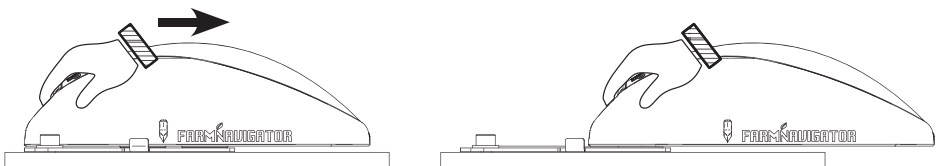
### 4.2 NMEA Baud rate

This receiver can output standard NMEA messages at different baud rates. The default setting is at 115200 bps which is the most commonly used by third party displays. For any other specific setup, please refer to your distributor/reseller or to [www.farmnavigator.com](http://www.farmnavigator.com).

## 5. How to properly remove the receiver

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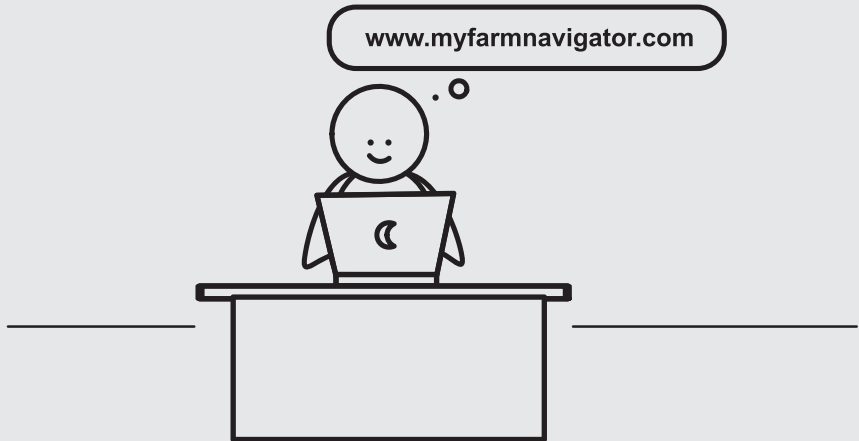
To remove the receiver from the steel bracket pull it as presented below. Always stay alert and focused on keeping your hands safe.



# **How to activate All in One RTK**

## **A. Register All in One RTK to get instant access to Internet services**

In order to register your All in One RTK, access [www.myfarmnavigator.com](http://www.myfarmnavigator.com) website and complete the registration in few simple steps. Once it has been registered successfully, your All in One RTK starts sharing information with the remote server.



## **B. List of countries where the Internet services are supported**

Andorra, Austria, Belgium, Bulgaria, Cyprus, Croatia, Denmark, Estonia, Finland, France, Greece, Germany, Hungary, Iceland, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Czech Republic, Romania, UK, Spain, Slovakia, Slovenia, Sweden, Switzerland.

Contact [support@avmap.it](mailto:support@avmap.it) for info about Internet services in other countries.

## **C. NTRIP client**

The NTRIP Client is the software element used by the receiver to get the RTK correction from the Internet. The NTRIP client can be configured directly through the G7/G12 display (refer to the user manual for detailed instructions) or with a PC, using AvMap's All in One RTK configuration cable kit and the All in One RTK configuration tool provided along with it (details available in the All in One RTK configuration cable kit quick guide).

In both cases you will need these mandatory data about your RTK service provider:

- IP
- Port
- Username
- Password
- Mountpoint

Please refer to your distributor/reseller for NTRIP client specific setup.

## 6. Product conformity information

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### 6.1 Simplified EU declaration of conformity

Hereby, AvMap Srlu, Viale Zaccagna, 6 54033 Carrara (MS), Italy declares that the radio equipment in the following table is in compliance with Directive 2014/53/EU.

All in One RTK	UXAGRK00AM
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The full text of the EU declaration of conformity is available at the following internet address:  
**eudeclaration.avmap.it**

### 6.2 Simplified UK declaration of conformity

Hereby, AvMap Srlu, Viale Zaccagna 6, 54033 Carrara (MS), Italy declares that the radio equipment in the following table is in compliance with the relevant statutory requirements:

All in One RTK	UXAGRK00AM
----------------	------------

The full text of the UK declaration of conformity is available at the following internet address:  
**eudeclaration.avmap.it**

## 7. Safety Information

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AvMap disclaims any liability deriving from an improper use or installation of the product in a way that may violate the regulations and safety.

It is highly recommended that the installation of the product will be performed by a qualified maintenance technician. Consult the Installation manual for a correct installation procedure.

## 8. Technical specifications

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### Physical and Electrical:

- Dimensions: 184 x 152 x 55 mm
- Weight: 240g without cable
- Metal bracket
- Built-in magnets for easy mounting
- Power & I/O cable: 4 m Conxall - DB9
- Triaxial accelerometer
- Gyroscope
- Waterproof: IP67
- Supply voltage: 10-35 Vd
- Operating temperature: -20°C / +60°C
- Storage temperature: -30°C / +70°C
- Power consumption: 125 mA max @12VDC (~ 1.5 W)
- 2 Leds indicators
- TLC connector for external GSM antenna
- Goretex protective vent
- 4G cellular modem

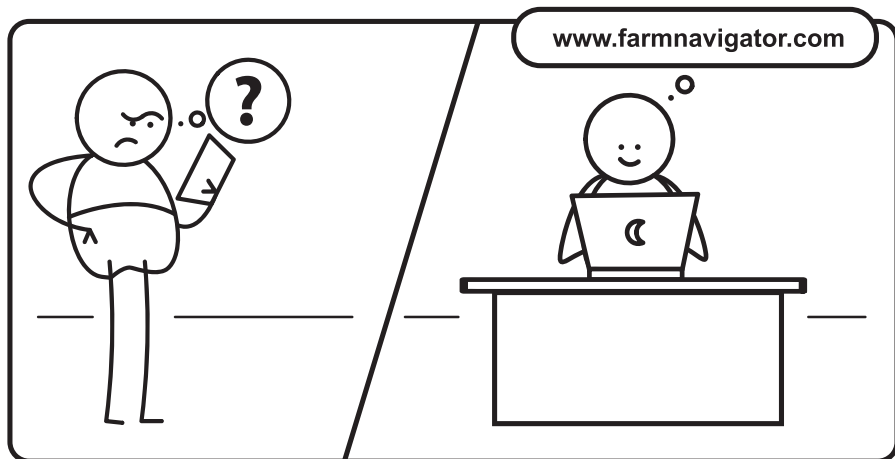
### Communication and Connectivity:

- GNSS Receiver: GPS + GLONASS + GALILEO + BEIDOU + SBAS
- GNSS frequency band: L1, L2
- GNSS rate: configurable (up to 10Hz)
- RS232 baud rate: configurable (115200 default)
- RS232 protocol: NMEA0183 configurable (GGA, GLL, RMC, GSA, GSV, VTG, ZDA, GST)
- Integrated NTRIP client
- Integrated IoT client
- Automatic FOTA Updates
- Telemetry
- BLE

### Performance

- RTK accuracy +/- 2 cm
- Terrain compensation
- 1 Year of Internet services included\*
- Sensors data fusion

\*Refer to paragraph "How to activate All in One RTK" for list of countries where Internet services are included.



# FARMNAVIGATOR

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