

## TravelPilot DX-N

- 7 612 001 460 Black monitor
- 7 612 001 461 Upgrade without monitor
- 7 612 001 462 Silver monitor

### Installation instructions



**BLAUPUNKT**

● **BLAUPUNKT**  
**TravelPilot DX**



Congratulations on your purchase of this Blaupunkt product. Thank you for the trust you are putting into our brand!

The following installation instructions are intended to help you getting the best performance from your Blaupunkt product. To avoid the aggravation of costly mistakes and serious damage to your system, please read all of the instructions carefully before you begin.. If you're not confident that you can install the unit correctly, have it installed by a qualified Blaupunkt installation technician.

### **Installation and connection regulations**

**While connecting and installing this equipment, make sure to disconnect the negative terminal of the battery.**

**Important!**

**Observe all safety precautions provided by the automobile manufacturer (alarm systems, immobilisers, airbag)!**

**Before drilling the holes for mounting and wiring, make sure that no existing wiring or vehicle parts will be damaged (e.g. petrol tank, petrol lines).**

**Use wire bushings for all sharp-edged holes.**

**To avoid interference, make sure to lay the wiring far enough away from the wire harness.**

**Attach a fuse to the positive supply wire at a maximum of 30 cm from the battery to protect the battery and the positive supply wire in the event of a short circuit.**

**The navigation equipment is suitable for vehicles with:**

- **12 V battery power**
- **Negative pole on the vehicle body**

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## Description

The **TravelPilot DX-N** navigation system is an independent system with an integrated gyroscope. After a destination has been entered and activated, the system delivers visual driving recommendations as pictograms on a 5" colour monitor and spoken driving information via a separate speaker well in advance of any turns or changes in driving direction required. In this way, the system guides the motorist from his/her starting point on the best route to the selected destination.

All of the available functions are described in the specifications of the CD-ROM used.

## Notes on how the system functions

The **TravelPilot** is equipped with an automatic calibration feature which is required to determine the current vehicle position. Depending on the GPS reception available, the calibration is completed after the vehicle has been driven approx. 15 km. Driving along a winding route (in the city), which is indicated on the monitor on a map, accelerates the calibration.

The speedometer signal connection in the vehicle allows the system to determine the distance driven. **If there is no speedometer signal**, it will be necessary to have a route sensor installed by an authorised customer service centre.

**In this case, you will have to order a sensor kit (route sensor, magnet strips, bracket, plug and installation instructions) from your dealer.**

**Order No.: 7 607 611 093**

## Installation preparations

Before starting the installation, check to see that no parts from the installation pack are missing. .... page 11

The following steps must be completed to install the equipment:

- **Installing the navigation unit (computer)** ..... page 5
- **Installing the GPS antenna** ..... page 5
- **Installing the display (monitor)** ..... page 6
- **Installing the speaker** ..... page 6
- **Installing the operating unit** ..... page 7
- **Installing the speedometer signal wire** ..... page 7
- **Installing the back-up lights signal wire** ..... page 7

## Installing the navigation unit

### Where to install the navigation unit

#### Important!

**Before inserting the TravelPilot, you have to make sure that the gyroscope is positioned horizontally (see Fig. 7, page 17).**

The **TravelPilot DX-N** can be installed in the car radio compartment in the vehicle (installation depth 218 mm). You will need an installation bracket (order no. 8 601 310 555) (see Fig. 1 page 16).

For vehicles without a DIN compartment, a universal equipment housing has been included (see Fig. 1.1 page 16). Check to see which method of installation is required for the vehicle and, if necessary, use a vehicle-specific installation kit.

**If a tuner box or remote control is to be added to the TravelPilot at a later date, the connection wire included (8 604 492 522) could be installed at this point.**

When selecting an installation location, you must remember that the navigation unit has to be built into the vehicle body.

#### Installation position:

|                   |                       |
|-------------------|-----------------------|
| right / left      | min. -5° / max. +5°   |
| slope to the rear | min. -3° / max. +100° |

**A fan has been built into the back of the unit to cool it when it overheats. To allow for sufficient air circulation, make sure that the air vents are not blocked. Use only the hole strips to attach the unit to the mounting bolt.**

Make sure that there is enough room to insert and remove the navigation CD.

### Positive connection

Connect the navigation unit to continuous plus and the positive connection to the ignition.

Lay the continuous plus wire (red) to the battery (do not lay the wire directly along any wire harnesses). **Connect a fuse holder to protect the positive wire at a maximum of 30 cm from the vehicle battery** (if necessary, drill a hole in the splashback and use the necessary wire bushing). Connect the switching plus wire (black) to terminal 15 on the fuse holder (plus is switched by the ignition) behind the fuse.

### Negative connection

Screw the negative wire (brown) directly to the vehicle body. Scratch the contact points on the ground down to the metal and grease it with graphite grease (important for a good ground).

## Installing the GPS antenna

Install the antenna according to the enclosed instructions. If the GPS antenna is installed inside the vehicle, there is no guarantee that the system will function properly.

## Installing the display

### Safety instructions

**Never grease or oil the ball-and-socket joint. The monitor cable must be laid so that it is not subjected to any tensile strains or other loads.**

#### **Important!**

**Do not mount the monitor within the inflation range of the airbags (on the driver's side, the passenger side or the side airbags) or where it might strike the head or knees of anyone in the vehicle in the event of an accident!**

**Before drilling the holes for the mounting screws and wiring, make sure that no damage will be done to covered wiring, the petrol tank or fuel lines!**

### Display installation

Fig. 3 The display is mounted on the dashboard or console using the enclosed ball-and-socket base.

Fig. 4 The display is mounted directly on a console (telephone console) with the ball joint.

Fig. 5 The display is mounted using the swan neck fitting 7 612 001 204 and the ball-and-socket base. To do so, you must disassemble the rear panel of the display.

A 10 mm wide hole must be drilled at the mounting position to accommodate the cable. When the cable is installed, you must ensure it will be safe from being tugged or stretched or from being exposed to any other loads.

### Display de-installation (Fig. 6)

1. Unscrew the four screws on the back of the display and remove the rear panel.
2. Pull out the plugs **carefully** and push them through the mounting base.
3. Then use the mounting material you require.

## Installing the speaker

Install the speaker used for the spoken driving recommendations in the footwell of the vehicle.

#### **Important!**

Make sure that the vehicle operating elements remain easily accessible and are not obstructed in any way by the connection cable and the location of the speaker (gear stick, hand brake, accelerator, clutch or brake pedals, etc.)!

#### **Important!**

Before drilling the holes for the mounting screws, make sure that no damage will be done to covered wiring, the petrol tank or fuel lines!

### Installing the control unit

Mount the control unit bracket in a location where the control unit will be easily accessible, e.g. on the centre console.

#### **Important!**

Do not mount the control unit within the inflation range of the airbags (on the driver's side, the passenger side or the side airbags) or where it might strike the head or knees of anyone in the vehicle in the event of an accident!

Before drilling the holes for the mounting screws, make sure that no damage will be done to covered wiring, the petrol tank or fuel lines!

Make sure that the vehicle operating elements remain easily accessible and are not obstructed in any way (gear stick, hand brake, etc.)!

### Important installation information for the speedometer signal

**When connecting the speedometer signal, make sure to observe the following information:**

1. **Where to find the signal:** For many vehicles, the speedometer signal can be found in the vehicle-specific car radio plug. Contact the customer service of the vehicle manufacturer or an authorised navigation dealer to find out what the exact pin allocation is.
2. Do not use the speedometer signal from ABS control units or control circuits.

#### 3. **Important:**

We assume no responsibility for any equipment that is installed incorrectly and the consequences thereof!

### Connecting the speedometer signal

**Important:** This connection should be made by an authorised customer service centre.

The connection is made with the speedometer signal wire (8 618 841 988) to the vehicle-specific speedometer signal connection. (see connection diagram, page 18).

### Connecting the back-up lights signal wire

**Important :** This connection should be made by an authorised customer service centre.

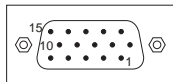
The connection is made with the back-up lights signal wire (8 618 842 033) to the vehicle back-up lights. Make sure that there are **+12V** at the connection when the vehicle is backing up (see connection diagram, page 18).

#### **Important:**

We assume no responsibility for any equipment that is installed incorrectly and the consequences thereof!

## Video input assignment

The video input socket is intended for future applications. For information on connection options, please contact a Blaupunkt dealer or our hotline. See connection diagram for assignment.




| Pin | Description     | Input / Output | Comment                                  |
|-----|-----------------|----------------|--|
| 1   | EXT_R           | E              | Red input                                |
| 2   | EXT_G           | E              | Green input                              |
| 3   | EXT_B           | E              | Blue input                               |
| 4   | V_GND           | E              | Video earth                              |
| 5   | EXT_SYNC        | E              | Synchronisation input                    |
| 6   | NC              | -              |  |
| 7   | U14             | A              |  |
| 8   | STANDARD SWITCH | E              | Low = PAL Format / High = NTSC Format    |
| 9   | EARTH           | A              |  |
| 10  | NC              |                |  |
| 11  | N. B.           |                |  |
| 12  | Switch on EXT.  | E              | Low = Off / High = On                    |
| 13  | UB              | A              |  |
| 14  | Screen switch   | A              | Low = Mirror image / High = Normal image |
| 15  | MP_U53          | A              |  |

## System test after installation

The system test allows you to test the external connections to see that they are working correctly.

Proceed as follows:

1. Turn off TravelPilot DX-N
2. Press the **i** button and keep it pressed.
3. Turn on the TravelPilot DX-N and release the **i** button when the service menu appears.
4. Using the **>** button, select the test menu  and press the **OK** button.
5. Now select the required test using the **↓** or **↑** button, press the **OK** button and follow the on-screen instructions.  
If the test was completed successfully, the menu item will be labelled with a tick. If an error occurs, an appropriate notice will be displayed.
6. Close the service menu by pressing the **↶** button.









## Calibration

After installation, the TravelPilot DX-N must be calibrated. You will find the procedure for this described in the operating instructions.

### Calibrating the Gala curve

After the TravelPilot DX-N is calibrated, the values that were determined must be transferred to the control unit software so that the Gala feature (sound-dependent volume adjustment) works correctly.

Please proceed as follows:

1. Turn off TravelPilot DX-N.
2. Press the  button and keep it pressed.
3. Turn on the TravelPilot DX-N and release the  button when the service menu appears.
4. Using the  button, select the settings menu  and press the  button. This procedure transfers the calibration values that were previously determined to the control unit.
5. Close the service menu by pressing the  button.

## Basic navigation unit

|                                    |  |
|------------------------------------|--|
| Rated voltage (Urat)               | 14 V / DC  |
| Rated current (I)                  | Typically 0.55 A (Imax 1.05 A)   |
| Stand-by current                   | Typically 0.35 A   |
| Speech output / volume             | Max. 3 Watt/4 Ohm  |
| Time to first position computation | (Warm start, memory refresh)<br>< 2 minutes; (cold start, memory clear) < 15 minutes |
| CD-ROM drive                       | For 12 cm CD to DIN EN 60908 only  |
| Operating temperature              | -15°C to +60°C   |
| Mounting orientation               | right / left<br>min. - 5° / max. + 5°<br>slope to the rear<br>min. - 3° / max. +100° |
| Width                              | 187.5 mm   |
| Height                             | 58.5 mm  |
| Depth                              | 174.4 mm   |
| Weight                             | 1.35 kg  |

## 5" colour display

|                       |  |
|-----------------------|--|
| TFT active matrix LCD | (12.5 cm diagonal)                             |
| Contrast control      | Manual on rocker                               |
| Brightness control    | Automatic by phototransistor, manual on rocker |
| Mounting              | Universal ball-and-socket joint                |
| Width                 | 148 mm (without cable and base)                |
| Height                | 105 mm (without cable and base)                |
| Depth                 | 51 mm (without cable and base)                 |
| Cable length          | 5.5 m  |

Subject to modification!

## What's included in the delivery

**TravelPilot DX-N 7 612 001 460 / 7 612 001 462**

**7 612 001 489**

**Navigation unit** with integrated gyroscope and GPS receiver



**8 627 000 013**

**GPS-antenna**



**8 618 842 735**

**5"- colour monitor black**

**8 618 842 667**

**5"- colour monitor silver**



**8 618 842 586**

**Speaker**



**8 618 840 754**

**4 m of wire for the speaker**



**8 601 360 105**

**Operating unit** incl. bracket and IR sensor (eye)



## What's included in the delivery

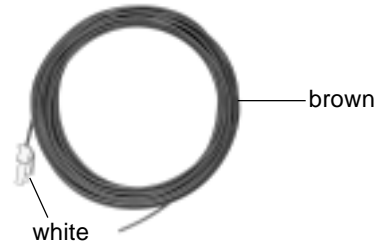
### 8 618 841 412

6 m of DC wire



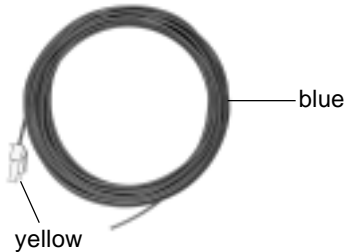
### 8 618 841 988

4 m of speedometer wire



### 8 618 842 033

4.5 m of back-up lights signal wire



### 8 604 492 513

0.3 m of connection wire (compartment C1)



## What's included in the delivery

### 8 604 492 514

0.3 m of connection wire (compartment A)



### 8 604 492 515

0.3 m of connection wire (compartment B)



### 8 606 590 212

Universal equipment housing



### 8 604 492 522

Tuner box / RC 09 connection wire



## TravelPilot DX-N 7 612 001 461

7 612 001 489

**Navigation unit** with integrated gyroscope and GPS receiver



8 601 360 105

**Operating unit** incl. bracket and IR sensor (eye)



8 604 492 513

0.3 m of connection wire (compartment C1)



8 604 492 514

0.3 m of connection wire (compartment A)



8 604 492 515

0.3 m of connection wire (compartment B)



## What's included in the delivery

**8 606 590 212**

Universal equipment housing



**8 604 492 522**

Tuner box / RC 09 connection wire



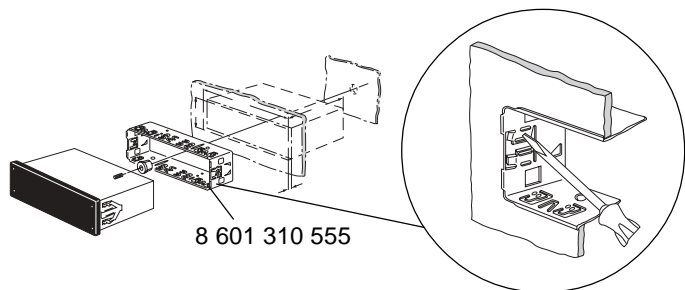


Fig. 1

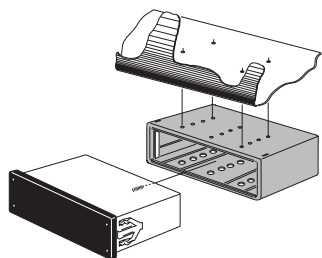


Fig. 1.1

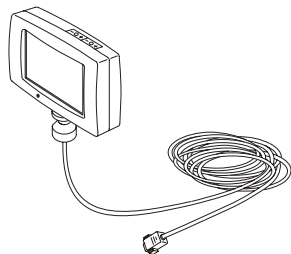


Fig. 2

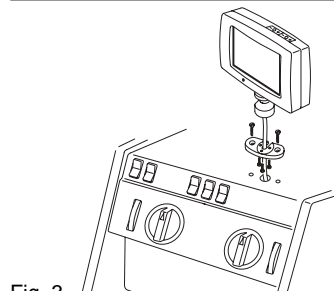


Fig. 3

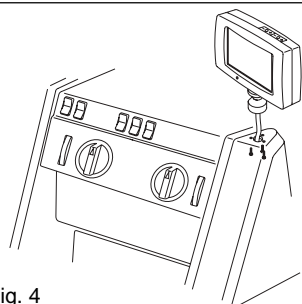


Fig. 4

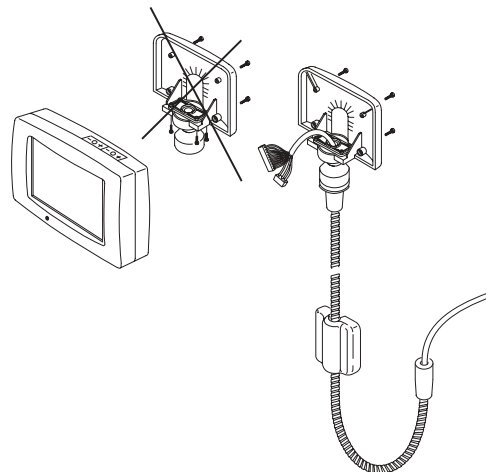


Fig. 5

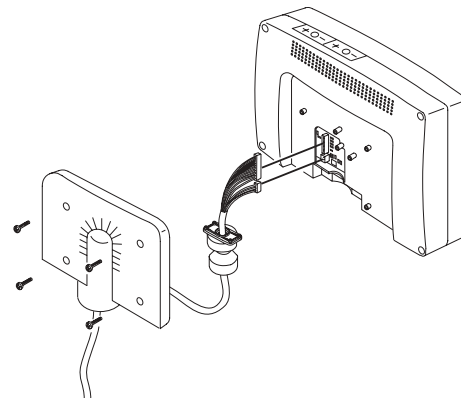


Fig. 6



# Assembly illustrations

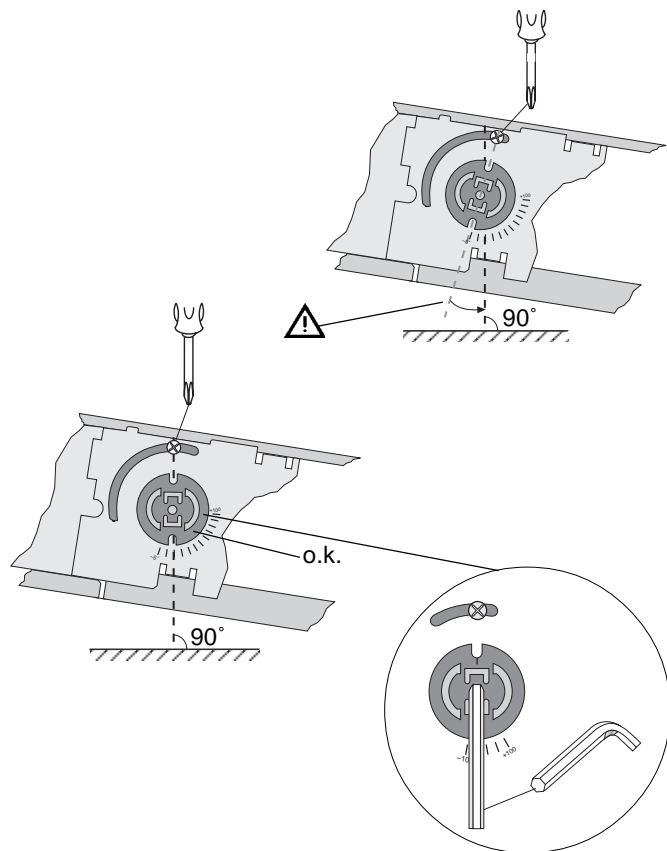
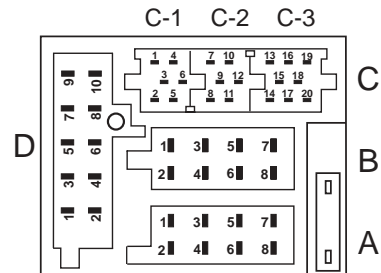


Fig. 7

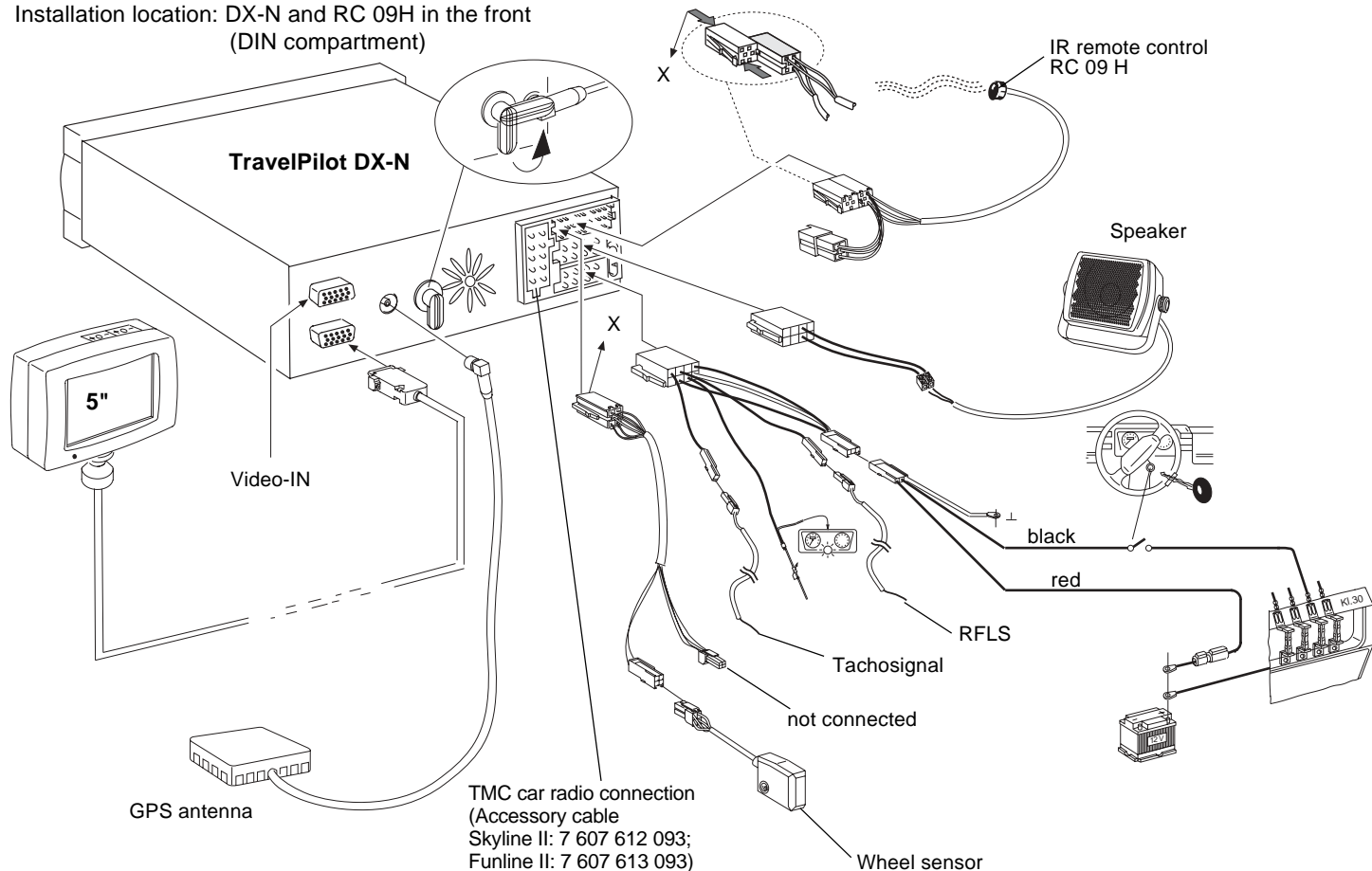


| A |                | B |                  |
|---|----------------|---|------------------|
| 1 | Gala/Tacho     | 1 | -                |
| 2 | -              | 2 | -                |
| 3 | RFLS           | 3 | -                |
| 4 | Dauerplus +12V | 4 | -                |
| 5 | -              | 5 | Lautsprecher LF+ |
| 6 | Beleuchtung    | 6 | Lautsprecher LF- |
| 7 | Zündung        | 7 | -                |
| 8 | Masse          | 8 | -                |

| D  |           |
|----|-----------|
| 1  | GND       |
| 2  | Data Out  |
| 3  | Data In   |
| 4  | Mute (AR) |
| 5  | -         |
| 6  | -         |
| 7  | Line GND  |
| 8  | -         |
| 9  | Line Out  |
| 10 | -         |

| C  |              |    |                       |    |   |
|----|--------------|----|-----------------------|----|---|
| C1 |              | C2 |                       | C3 |   |
| 1  | Wheel sensor | 7  | CAN High              | 13 | - |
| 2  | Wheel sensor | 8  | CAN Low               | 14 | - |
| 3  | FB GND       | 9  | +12V Permanent        | 15 | - |
| 4  | -            | 10 | +12V switched (RC 09) | 16 | - |
| 5  | -            | 11 | PPM (RC 09)           | 17 | - |
| 6  | -            | 12 | PPM-GND               | 18 | - |
|    |              |    |                       | 19 | - |
|    |              |    |                       | 20 | - |

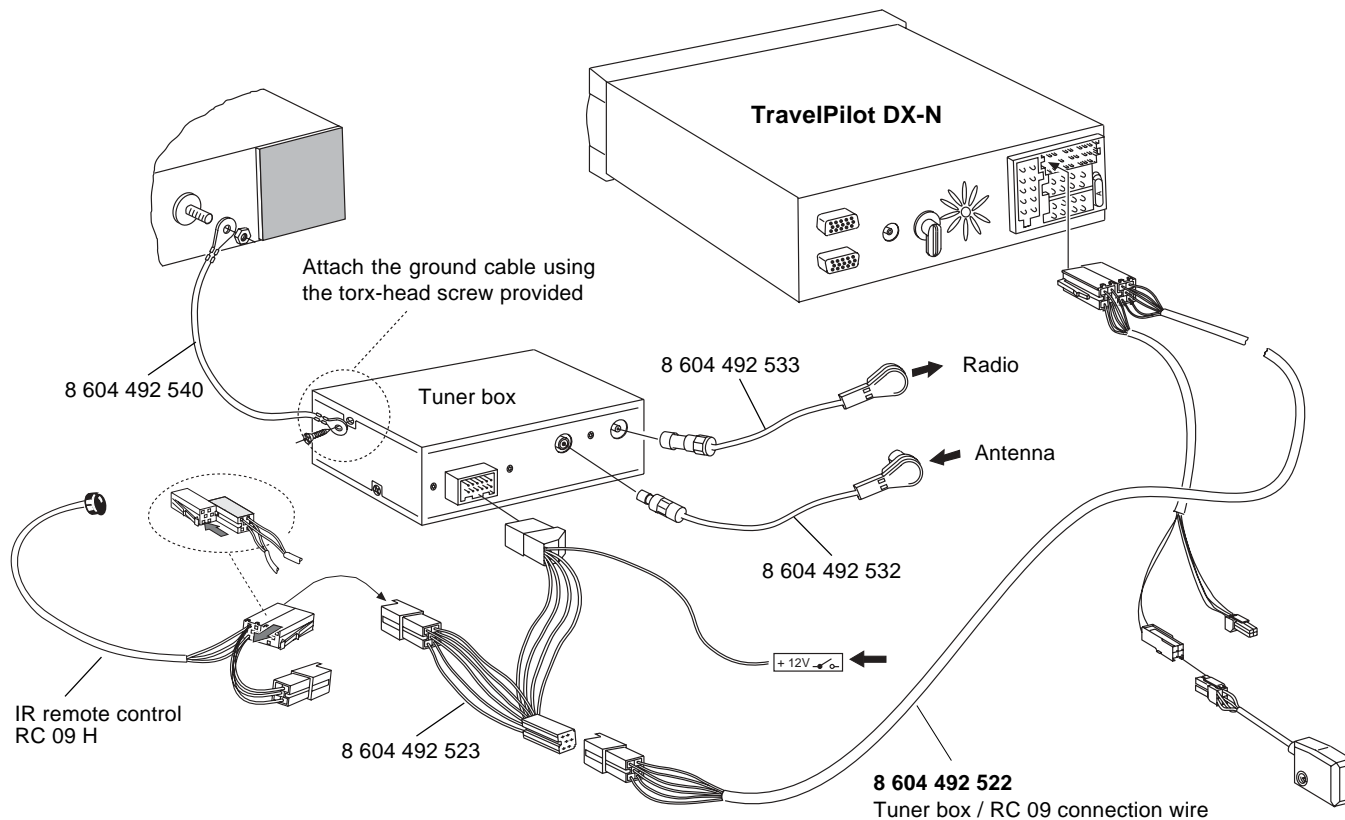
Installation location: DX-N and RC 09H in the front  
(DIN compartment)



# Connecting the sensors

Installation location: DX-N in the car boot

TMC tuner box and RC 09H in the front (DIN compartment)



| <b>Country:</b>         |       | <b>Phone:</b>    | <b>Fax:</b>      | <b>WWW:</b>   |
|-------------------------|-------|------------------|------------------|---|
| Germany                 | (D)   | 0180-5000225     | 05121-49 4002    | <a href="http://www.blaupunkt.com">http://www.blaupunkt.com</a> |
| Austria                 | (A)   | 01-610 390       | 01-610 393 91    |   |
| Belgium                 | (B)   | 02-525 5454      | 02-525 5263      |   |
| Denmark                 | (DK)  | 44 898 360       | 44-898 644       |   |
| Finland                 | (FIN) | 09-435 991       | 09-435 99236     |   |
| France                  | (F)   | 01-4010 7007     | 01-4010 7320     |   |
| Great Britain           | (GB)  | 01-89583 8880    | 01-89583 8394    |   |
| Greece                  | (GR)  | 0800-550 6550    | 01-576 9473      |   |
| Ireland                 | (IRL) | 01-4149400       | 01-4598830       |   |
| Italy                   | (I)   | 02-369 6331      | 02-369 6464      |   |
| Luxembourg              | (L)   | 40 4078          | 40 2085          |   |
| Netherland              | (NL)  | 023-565 6348     | 023-565 6331     |   |
| Norway                  | (N)   | 66-817 000       | 66-817 157       |   |
| Portugal                | (P)   | 01-2185 00144    | 01-2185 11111    |   |
| Spain                   | (E)   | 902-120234       | 916-467952       |   |
| Sweden                  | (S)   | 08-7501500       | 08-7501810       |   |
| Switzerland             | (CH)  | 01-8471644       | 01-8471650       |   |
| Czech. Rep.             | (CZ)  | 02-6130 0441     | 02-6130 0514     |   |
| Hungary                 | (H)   | 01-333 9575      | 01-324 8756      |   |
| Poland                  | (PL)  | 0800-118922      | 022-8771260      |   |
| Turkey                  | (TR)  | 0212-3350677     | 0212-3460040     |   |
| USA                     | (USA) | 800-2662528      | 708-6817188      |   |
| Brasil (Mercosur)       | (BR)  | +55-19 3745 2769 | +55-19 3745 2773 |   |
| Malaysia (Asia Pacific) | (MAL) | +604-6382 474    | +604-6413 640    |   |

**Blaupunkt GmbH**

CM/PSS 2 8 622 402 141 D (GB)

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