

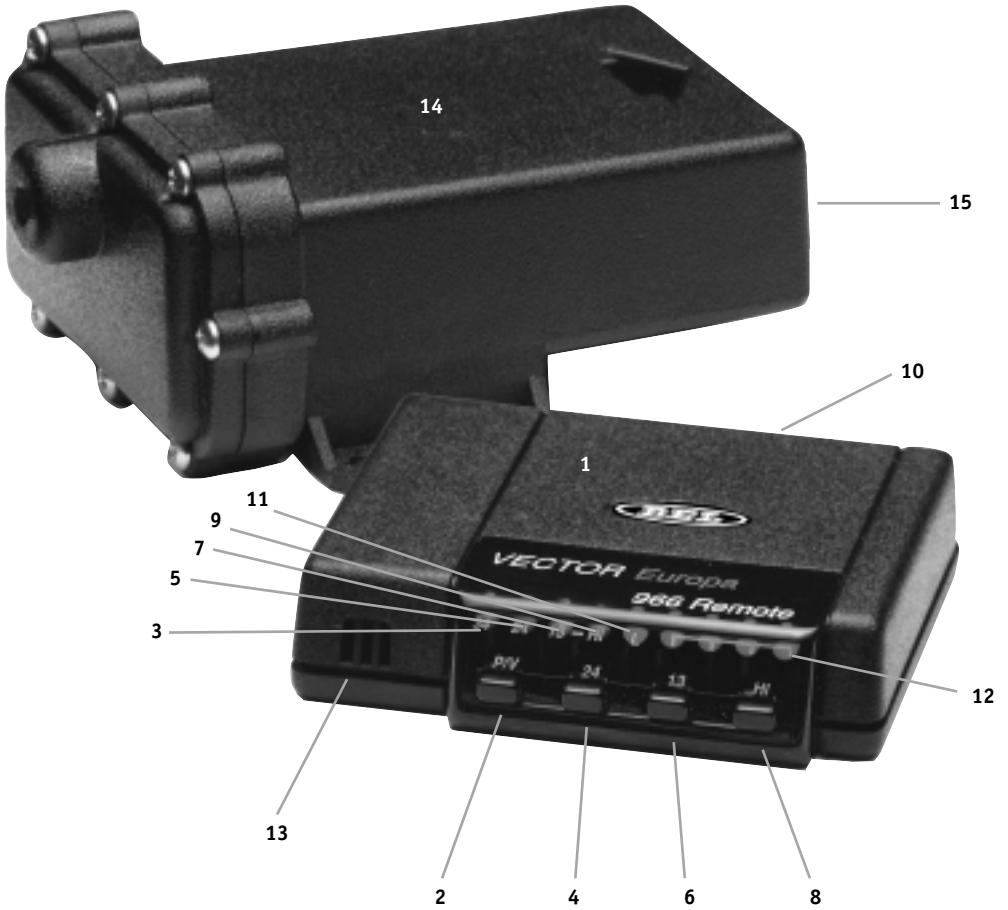
Manual - Vector Europa 966R.



# VECTOR

EUROPA 966R  
RADAR DETECTOR





**Dear motorist,**

By selecting the Vector Europa 966R you have made the best choice. In collaboration with the manufacturer BelTronics, Target Automotive has made the Vector Europa 966R suitable for the most common types of European radar speed-checking equipment. The Vector Europa 966R is the most advanced radar speed detector for European roads.

We have taken great care in compiling this manual. Nevertheless there may possibly be something we have overlooked. We welcome any comments or suggestions you may wish to send us via your supplier.

Yours sincerely,

Target Automotive



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### **1. Display. (1)**

Can be fitted virtually invisibly in any car.

### **2. Power/Volume button. (P/V)**

Press briefly to switch your Vector Europa 966R on or off. The self-test will take place automatically and the standard setting will be 34 gigahertz. See 'led 34'. By holding P/V (2) pressed in you can adjust the volume with leds (12).

### **3. 34 GHz. (3)**

Lights up green when the Vector Europa 966R is active. When detection occurs the 34 GHz led will flash. Initially the 34 GHz frequency is the standard setting. This setting will detect commonly used speed-checking equipment on motorways.

### **4. 24 GHz switch. (4)**

This switch activates the 24 GHz frequency. The green led (5) will light up when this frequency has been activated.

On detection the 24 GHz led (5) will flash. This frequency is used not only on motorways but also on secondary roads.

### **5. 13 GHz switch. (6)**

This switch activates the 13 GHz frequency. The green led (7) will light up when this frequency has been activated. When detection occurs the 13 GHz led (7) will flash.

### **6. High switch. (HI)**

This is used to increase the reception sensitivity of the 13 GHz frequency. The HI led (9) will light up to confirm operation. The Vector Europa 966R only gives an audible alarm on detection of 13 GHz signals if the signal strength is greater than two leds (12). This standard setting avoids false alarms. You can increase sensitivity for the 13 GHz frequency using the HI-switch.

### **7. External port.**

Your supplier will be able to explain all the expansion possibilities for your Vector Europa 966R.

### **8. Laser Led. (L)**

The red led (11) lights up when any optional equipment fitted transmits signals via the external port.

### **9. Signal strength. (12)**

These red leds light up one by one to indicate the strength (distance) of the radar source.

In the case of laser detection only the first and last leds light up (alternately).

### **10. Audio Alarm Speaker. (13)**

Gives different audible warning signals for the various frequencies (13, 24 or 34 GHz) or laser check. You will soon learn to recognise these frequencies by glancing to check which leds are illuminated. You can adjust the volume of the audible signals with button P/V. The first time you 'hold the button in' the signal will get louder. For a softer signal, release button P/V briefly and then press and hold it in again. The signal strength corresponds with the four leds (12).

### **11. Antenna. (14)**

This contains the electronics with which the radar signals are received. For fitting refer to the installation instructions.

### **12. Antenna opening. (15)**

See installation instructions

### **Automatic self-test and memory of Vector Europa 966R.**

When P/V is pressed the Vector Europa 966R immediately performs a self-test. This test causes the 34-GHz led and the signal-strength leds (12) to light up. The operation of all warning signals (13) for 13, 24 or 34 GHz and laser is checked. The Vector Europa 966R's power circuit is also checked.

For your convenience the Vector Europa 966R automatically remembers your settings when it is switched off.

### **The ESP (Enhanced Signal Processing) chip.**

Your Vector Europa 966R is equipped with an ESP chip. This prevents frequent false alarms and/or the unit being affected by your GSM phone.

The Vector Europa 966R is perfectly tuned for the European situation. Please note: In France and Belgium the use of radar-detection equipment is prohibited and can attract a substantial fine. The advantage of the Vector Europa 966R is that it can be installed virtually invisibly (in contrast to windscreen-mounted detection equipment). It is therefore unlikely that you will be 'caught' unawares. However, you may choose to leave your Vector Europa 966R at home when travelling abroad.

In most European countries the use of radar-detection is not prohibited. Like your radio, a detector is an ordinary receiver.

### **You are probably familiar with them:**

- a. Checks using static boxes (often in a concealed position next to the road)
- b. Or using stationary vehicles or trailers
- c. Or using hidden equipment mounted in a post.  
Often, if you exceed the maximum speed limit, you are also photographed and stopped immediately.

On European motorways the standard equipment used is 34 and 24 GHz. In a few cases older equipment is still used, which operates on 9.41, 9.9 or 13.450 GHz. Such equipment is no longer in production and will therefore disappear completely in due course.

## The most common checks.

1.

### Stationary speed radar, measuring the speed of vehicles moving away.

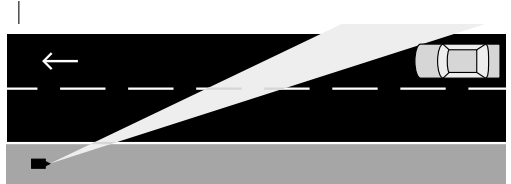
The Vector Europa 966R will warn you between 200 and 300 metres.



2.

### Stationary speed radar, measuring the speed of approaching vehicles.

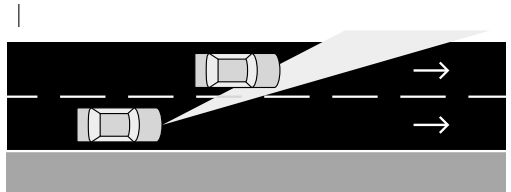
The Vector Europa 966R will warn you between 300 and 700 metres.



3.

### Mobile measurement of vehicles moving away.

The Vector Europa 966R will warn you between 200 and 300 metres.



## Your photo can be taken in a flash!

The Vector Europa 966R offers no guarantee against fines. The Vector Europa 966R will promptly identify virtually any radar check. But it does not protect you against inconspicuous police patrol vehicles or against cameras that operate via 'loops' in the road surface.

## Is the Vector Europa 966R ready for the future?

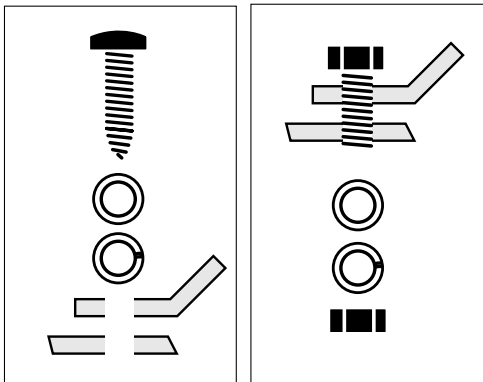
The frequencies currently used in radar traps are unlikely to change quickly. Because of the high cost of the equipment, it will not be easy for the authorities to change to replacement frequencies. In this regard, therefore, you will be able to continue to use your Vector Europa 966R for several years.

### The Vector Europa 966R package contains:

**The antenna** • 4 metres of antenna cable • 3 Tie-wraps • An antenna-mounting bracket • A signal reflector.

**The Display** • A power cable with fuse • A plastic holder • A dashboard frame • A frame template • A spare fuse.

**Sundry materials** • 7 machine screws • 2 self-tapping screws (10 mm) • 4 self-tapping screws (18 mm) • 2 round-head screws (18 mm) • 7 black nuts • 2 silver nuts • 7 O-rings • 7 lock washers.

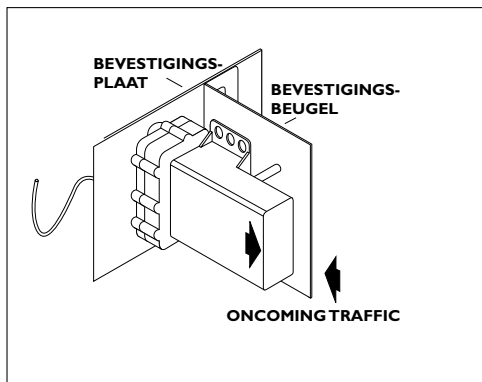


If you are familiar with automobile electronics: it will take a little time, but you can install the Vector Europa 966R yourself. For anyone else: consult your supplier for professional installation.

### Step 1 Positioning the antenna.

First check all components. The best position for the antenna is behind the front grill or in one of the spoiler air intakes. Make sure that the unit has a free 'view' of the road. The arrow on the antenna must point in the driving direction and must not be obstructed by metal obstacles. Plastic, provided that it does not contain carbon, will not affect the antenna. N.B.: certain metallic paints may reduce the efficiency.

Depending on the possibilities, use the machine screws (A) or the self-tapping screws (B).



## Step 2

### Fitting the antenna.

Drill two or four holes as desired in the mounting plate and fit the antenna using the machine screws or self-tapping screws. The antenna should preferably be positioned vertically.

If it is difficult to mount the antenna directly on the vehicle, the mounting bracket supplied should make it possible to find a suitable place for the antenna. Remember the driving direction (arrow) and to position the antenna vertically.

## Step 3

### Fixing the antenna cable.

Find an existing cable run and use the tie-wraps to secure the antenna cable. Avoid moving parts or parts that become hot.

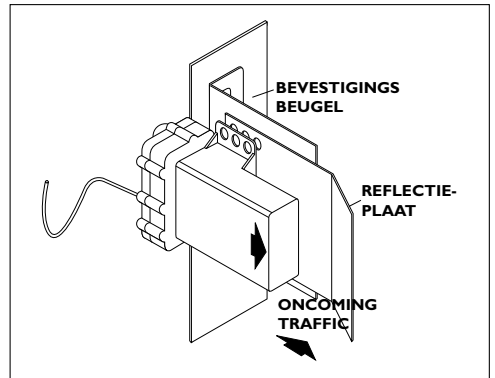
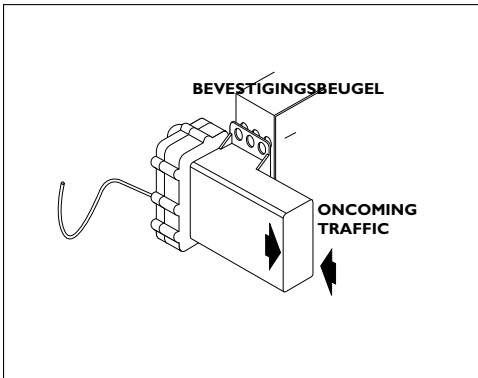
Use preferably one of the existing openings in the bulkhead through which to feed the cable to below the dashboard.

## Step 4

### Fitting the display.

There are three possibilities for fitting the display:

- a. Below the dashboard or in a compartment. The plastic holder and the tape supplied will hold the display in place.
- b. In the dashboard using the dashboard frame



c. With the optional slide. When you leave your car you can then take the display with you easily. As already mentioned: In France and Belgium the Vector Europa 966R is prohibited. If you use the slide, it is easy to remove the unit quickly.

**a. Below the dashboard or in a compartment**

Fix the plastic holder using 2 small holes (2.5mm) and the self-tapping screws. The display fits into the slots in the holder. Fitting is even simpler if you use the double-sided tape supplied: stick the tape at the point at which you want to position the display. Then stick the display to the tape and you're ready. Make sure that there is enough space at the back for the antenna cable.

**b. In the dashboard with the dashboard frame.**

Find a flat area on your dashboard. Use the frame sticker as a template to drill the holes and to saw out the section into which the display will then fit exactly. Secure the frame with the self-tapping screws. When cutting out the section be sure not to damage any wiring behind the dashboard. Insert the antenna cable before fitting the display.

**c. With the optional slide.**

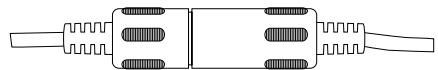
We prefer use of the slide. This then means that the display can be removed

easily when you leave your vehicle. It also offers significant advantages when travelling in countries in which radar detectors are not permitted. Fitting is self-explanatory.

**Step 5**

**Inserting the antenna cable into the display.**

Insert the antenna cable connectors into the back of the black 5-pole plug on the supply cable.



Pay attention to the colour codes. Click the black plug into the back of the display.

**Step 6**

**Connecting earth and power supply.**

The black (earth) wire must be connected to the chassis. The red (12V) wire must be connected to the 12V power circuit.

Make sure that you connect to a switched power circuit (power off when the ignition key is removed).

**No contact!**

If for some reason there is no longer contact between the antenna and the display, an audible warning will sound once a second.

## Warranty

Complete your warranty card and send it in, together with a copy of your purchase receipt.

**Target Automotive guarantees the correct operation of the Vector Europa 966R.**

### Provided that:

- a. You are the first owner and have sent us the warranty card plus purchase receipt
- b. The unit has not been incorrectly used or damaged in an accident and that no work has been performed on the Vector Europa 966R other than as described in this manual, and that the serial number has not been removed or altered.

### Service.

- a. If you are uncertain whether the unit is operating correctly, first run through the checklist on this page.
- b. If the problem persists, you may call Target Automotive for advice on 0031 (0)35 603 53 55.
- c. In the case of serious problems your supplier will arrange for your Vector Europa 966R to be returned and/or will carry out repairs.

## Checklist.

### The display bleeps every second.

There is no contact between antenna and display. Repair the connection.

### No sound or too soft.

Hold the P/V button in for longer. The four red leds (12) indicate the volume.

### Does not respond to certain types of radar.

Select the 24 GHz (5) and/or 13 GHz frequencies (7).

### Frequent false alarms on the 13 GHz frequency.

Switch off the HI switch (9).

**Receiver:**

Double Conversion Compheterodyne(r)

**Frequencies:**

13.45 en 24.125 GHz are selectable.  
The 34.3 GHz frequency is the standard  
(default) setting.

**Antenna:**

Die-cast horn with integrated transition to  
Microstrip Mixer.

**Power supply:**

13.8 V DC Nominal

**Consumption:**

12 V, 100mA - 220mA

**Dimensions:**

Antenna l<sub>x</sub>w<sub>x</sub>h 98x80x45mm  
Display l<sub>x</sub>w<sub>x</sub>h 58x71x17mm

**Weight:**

Antenna 200g  
Display 45g

**Temperature range:**

-10°C - +65°C