CRISARTECH

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CATALOGUE CLASSIC

05/2026

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Examples of configurations

Any configuration can be customized to meet your needs

Configurations are available for **sale** or **rent**. Indicative rental rate for 1 month: 25% of selling price + 50 €

- **For VHR rallies (on public roads without recce/reconnaissance)**

Pack Starter VHR

This is the minimum recommended setup for VHR rallies: the timer is shared and mounted on the dashboard, whilst the buzzer helps the driver maintain a steady pace. The remote control allows the co-driver to easily adjust the distances. If the vehicle was fitted with sensors, these can be retained.

Selling price: **€1,189.00 incl. VAT**, including:

1 x Réf.11112 – RR412 (OBDII harness and cable clamp included)
1 x Réf.42100 – **infrared** remote control
1 x Réf.21110 – 12V power harness for classic cars
2 x Réf.22111 – 0.5m sensor harness

Pack Comfort VHR

The timer is positioned on the passenger side. The pilot has a colour screen enabling them to assist with navigation, and the buzzer helps them to regulate speed. The GPS receiver automatically synchronises the time and can take over in the event of sensor failure.

Selling price: **€2,165.00 incl. VAT**, including:

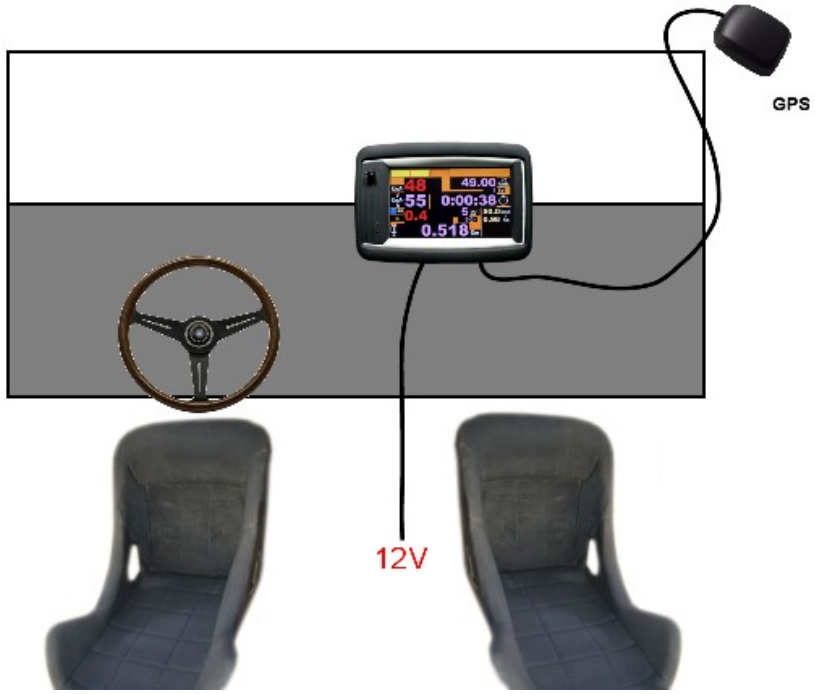
1 x Réf.11112 – RR412 (OBDII harness and cable clamp included)
1 x Réf.13210 – RP360
1 x Réf.41100 – GPS receiver
1 x Réf.42210 – **wired** remote control
1 x Réf.21110 – 12V power harness for classic cars
2 x Réf.22111 – 0.5m sensor harness
2 x Réf.43100 – inductive sensor
2 x Réf.51100 – screw-on ball behind the display
1 x Réf.52200 – medium arm
1 x Réf.52100 – short arm
2 x Réf.53100 – suction cup with ball
1 x Réf.33100 – 220V power supply

- **For VHRS rallies (on closed roads with recce/reconnaissance)**

Strong point: the GPS distance auto-correction/normalization by GPS option

Pack Starter VHRS

This is the recommended minimum setup for VHRS rallies: the timer is shared, and the buzzer helps the driver maintain a steady pace. Distances are measured and automatically corrected via GPS (based on reconnaissance runs carried out using an OBDII-compatible vehicle, wheel sensors, or files purchased from CRISARTECH). Wheel sensors are not required during the race.

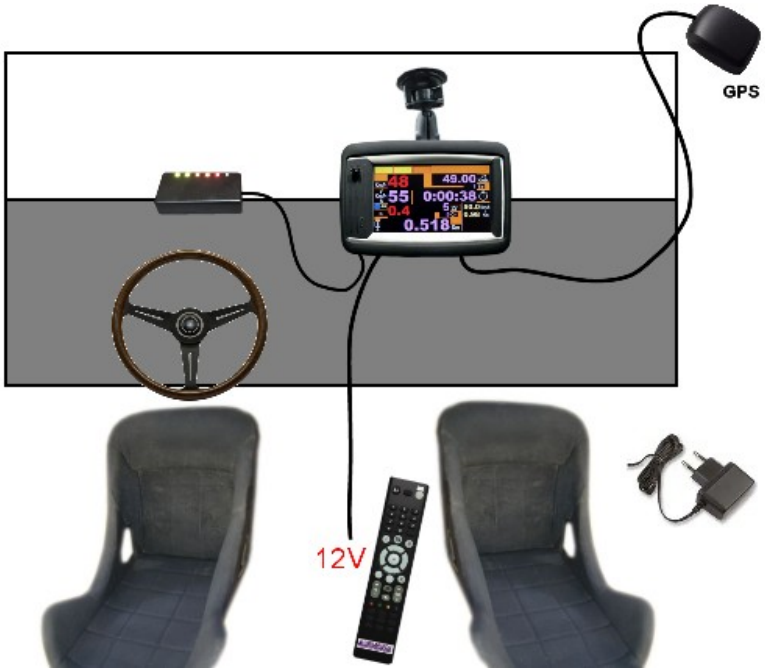


Selling price: **€1,431.00 incl. VAT**, including:

1 x Réf.11112 – RR412 (OBDII harness and cable clamp included)
1 x Réf.15210 – distance auto-correction/normalization by GPS
1 x Réf.41100 – GPS receiver
1 x Réf.21110 – 12V power harness for classic cars

Pack Comfort VHRS

The timer is positioned on the co-driver's side. The driver has LEDs on the windscreen and a buzzer to regulate without taking his eyes off the road. The co-driver has a remote control for easy operation of timer while driving. Distances are measured and automatically recalculated by GPS (based on re-connaissance with an OBDII-compatible vehicle, wheel sensors or files purchased from CRISARTECH). Wheel sensors are not required during the race.



Selling price: **€1,853.00 incl. VAT**, including:

1 x Réf.11112 – RR412 (OBDII harness and cable clamp included)
1 x Réf.15210 – distance auto-correction/normalization by GPS
1 x Réf.41100 – GPS receiver
1 x Réf.14110 – 6 Leds HUD
1 x Réf.42100 – **infrared** remote control
1 x Réf.21110 – 12V power harness for classic cars
1 x Réf.51100 – screw-on ball behind the display
1 x Réf.52200 – medium arm
1 x Réf.53100 – suction cup with ball
1 x Réf.33100 – 220V power supply

- **Premium Configuration for VHR or VHRS**

Premium configuration, suitable for all types of regularity rallies: the speed timer is located on the co-driver's side. The driver has access to a buzzer to help maintain a steady speed, a colour display and LEDs.

Selling price: **€2,798.00 incl. VAT**, including:

1 x Réf.11112 – RR412 (OBDII harness and cable clamp included)
1 x Réf.15210 – distance auto-correction/normalization by GPS
1 x Réf.41100 – GPS receiver
1 x Réf.13210 – RP360
1 x Réf.21400 – multi socket
1 x Réf.14110 – 6 Leds HUD
1 x Réf.42210 – **wired** remote control
1 x Réf.21110 – 12V power harness for classic cars
2 x Réf.22111 – 0.5m sensor harness
2 x Réf.43100 – inductive sensor
2 x Réf.51100 – screw-on ball behind the display
1 x Réf.52200 – medium arm
1 x Réf.52100 – short arm
2 x Réf.53100 – suction cup with ball
1 x Réf.33100 – 220V power supply
1 x Réf.62100 – transport case

Non-contractual prices, may vary according to supply.

The above configurations are examples only.
Compose your own configuration by calling us for a customized quote.

Devices and accessories

1) Measurement and display instruments

1.1. RR412 Tripmaster / Timer / Chrono

(Ref.11112)

Click here for a detailed product presentation

The RR412 Tripmaster / Timer / Chrono is equipped with a 4"3 TFT color touch screen.

It integrates **an interface for sensors and accessories**, including:

- an infrared receiver for infrared remote control + connector for wired remote control,
- a buzzer that responds to remote control inputs and provides precise guidance to the driver (accelerate/slow down),
- a master switch (also controls power supply to accessories),
- a USB port for updates and file exchange via a simple USB stick.

This interface, equipped with automotive-grade connectors, allows direct connection of the following **optional accessories**:

- two sensors on wheels, directly compatible with 3-wire positive impulse sensors and most 2-wire sensors on the market,
- a GPS receiver,
- a module with 6 multicolored leds displayed head-up on the windscreen (HUD),
- a large external color display for the driver (same size as this one).

The **cable clamp** is for securing all the wires to the underside of the timer.

The **cable fitted with an OBDII connector** supplied with the RR412 allows it to be connected to a modern car (approximately post-2007) for training and recce/reconnaissance.

For classic cars, separate wiring harnesses for power supply and wheel sensors must be ordered separately.

It uses CAN bus technology (a transmission network developed by Bosch for dialogue between automotive ECUs) to secure data transmission with accessories.

Pilote display for redundant system

It is possible to use a second RR412 as a 'pilot display'. The advantage of this is that it provides a **redundant system**. Indeed, should the co-pilot's timer fail, the pilot's display can take over within a few seconds.

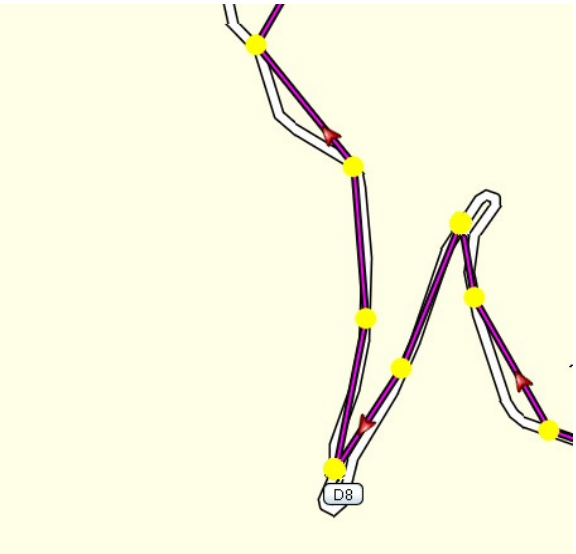
If a backup GPS receiver is connected to it, then at the moment of switchover, the receiver is already operational (it is 'warm').

This configuration requires a specific harness (Ref. 23120) described below.

1.2. Software options (programmes)

GPS distance auto-correction/normalization by GPS software

(Ref.15210)



***Developed by CRISARTECH**, this **innovative** function*

has proved its worth in the historic Monte Carlo and Tour de Corse rallies.

This software option enables automatic GPS correction of distances during the race, based on correction points taken during recce/reconnaissance. **Accuracy around 2 meters.**

Normalization consists of matching measured distances with the organisation's distances (road-book). This can be done:

- as distances are measured, in each box of the road-book,
- after the reconnaissance on a computer with a spreadsheet,
- **after the reconnaissance, directly on the device**. A graph shows the differences between the distances measured and the organizer's distances, so that any incorrectly measured points can be detected and ignored.

Note: this option requires a 10 Hz precision GPS receiver sold separately (Ref.41100).

Click here for a video presentation of the automatic correction system.

Countdown for “Italian tubes” software

(Réf.15230)

This option adds a countdown timer with a synchronization beep every second to help the driver pass a tube or other marker with precise timing. The number of beeps can be configured.

Between two reference points, before entering the final approach phase with these synchronization beeps, guidance is the same as for classic regularity (indication ‘faster’ or ‘slower’ with bar graph and buzzer).

When passing over the marker, the copilot validates the time of passage to eliminate any discrepancies and continue to the next marker with the correct timing.

The accuracy is to within a tenth of a second.

1.3. Remotes control

Infrared

(Ref.42100)

The infrared remote control with digits allows you to quickly and easily enter average distances/ speeds, or set-up distances, for example. The control pad and color-coded function keys make it easy to navigate the interface and configure the timer.

Click here for a video presentation of the remote control.

Wired

(Ref.42210)

This remote control is identical to the previous one, but offers greater operational reliability:

- no need to point it to the timer,
- no batteries, so no more stress about power (especially in winter),
- no signal interference from proximity sensors in some modern phones or cars,
- no risk of accidental tampering with your device by another competitor,
- easier to retrieve if it falls under the seat.

Interface for wired remote control

For older RR410 and RR420 timers, it is possible to connect a wired remote control by adding an interface in the form of a box that plugs into your speed controller. It connects to the socket intended for the pilot display and features a secure socket inside the box for connecting either the pilot display or the Led6 module.

(Ref.45110)

It has a buzzer that ‘echoes’ when the remote control buttons are pressed. This buzzer is also activated when the display asks you to drive faster or slower.

The following options are available:

- an ‘audio’ output to send the sound signal to a compatible rally intercom,
- an input for a button box or pedal (now not recommended).

Please contact us if you are interested.

1.4. Pilot display RP360

(Ref.13210)

Click here for a detailed product presentation

The **RP360** pilot display features a 4”3 TFT color screen. It acts as a repeater, displaying essential pilot data in easy-to-read characters.

This display is recommended for open-road rallies involving navigation. It allows the pilot to “take part” in the navigation, as he can see the distance clearly.

If the copilot enters in the distance to the next note in the road-book as the race progresses, the **decreasing distance is clearly displayed**, so that the pilot doesn’t have to keep asking when to turn. The pilot can take a look at the decreasing distance to avoid the big navigation trap: turning too soon.

The screen is glossy. If the rider finds the glare bothersome (for example, when wearing a white suit), we offer an anti-glare protective film (Ref. 63100 if fitted by yourself or 63110 if fitted by us).

1.5. 6 multicolored leds HUD module

(Ref.14110)

This remote module with **6 multicolored LEDs** (equivalent to more than 18 LEDs) is used for a "heads-up display" on the windshield **(HUD)**.

It is recommended for sport rallies on closed roads. There is no navigation, and the pilot must focus on the road as much as possible. The advance/delay indication is displayed by reflection on the windscreen, and is the only indication needed by the driver in this exercise. The device calculates the speed at which the pilot should drive to make up for lost time after a turn and indicates to accelerate. Then, **he instructs him to brake before catching up**, which greatly reduces the "yo-yo effect". The commands are simple and clear, allowing the pilot to concentrate on driving. He doesn't need to think about when to brake to avoid getting ahead.

Two LED modules can be connected simultaneously. One module displays the advance, the other the delay. Contact us for this specific configuration.

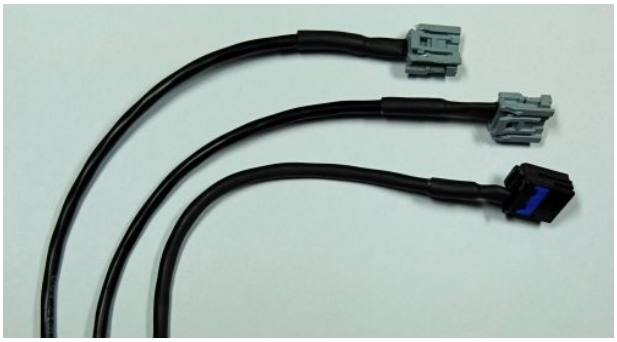
For 1/10th second accuracy without taking your eyes off the road!

Click here for a video presentation of the LED head-up display module

Note: *the new led module is plugged into the timer unit in place of the pilot display. If you wish to connect the new led module* ***and*** *the pilot display at the same time, you will need to add a multi-socket (Ref.21400).*

2) Wiring and power supply

2.1. Ready-to-plug wiring harnesses for historic vehicles



3 harnesses types available, **sold separately**:

- 12V power supply harness with connector, mounted and sheathed (Ref.21110),
- 2 or 3-wire sensor harness for right or left wheel with sheathed connector, 0.5m (Ref.22111),
- 2 or 3-wire sensor harness for right or left wheel with sheathed connector, 2m (Ref.22113).

2.2. Harness to use an RR412 as pilot display

(Ref.23120)

Harness used in configurations with redundant displays, as described above, i.e. an RR412 timer used as a pilot display.

Note: RR410 can also be used as redundant pilot displays, provided they have one of the latest versions of the interface board software. Please contact us if necessary.

2.3. 220V power supply

(Ref.33100)

220V power supply for training in your armchair (the timer has a “speed simulation” mode), or for data input at the hotel before the race.

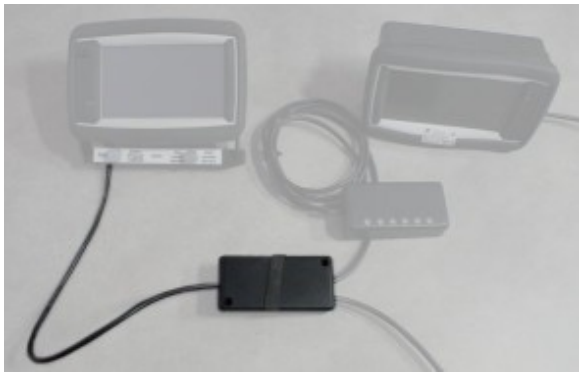
2.4. Cigarette lighter harness

(Ref.32100)

This cigarette-lighter socket can replace the 12V power supply needed for the timer, for quick and occasional installation. 4 metres long, so it fits in the boot of modern cars.

Warning: when racing, we strongly advise against using a cigarette-lighter harness because of the risk of accidental disconnection.

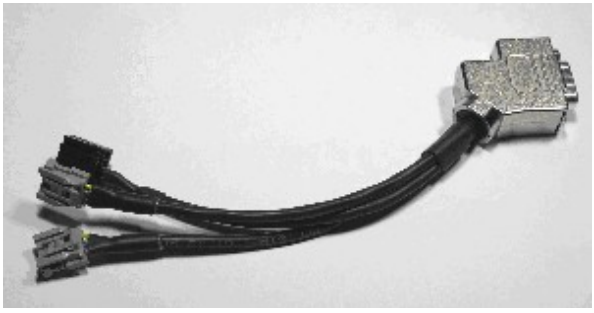
2.5. Multi-socket for pilot display + 6 led module



(Ref.21400)

Multi-socket to connect simultaneously pilot display and 6-LED module to RR410/412/420.

2.6. Blunik adapter harness



(Ref.24200)

This harness allows you to quickly connect a tripmaster in place of a Blunik device for tests, demonstrations, small rallies, etc.

Warning: **this harness is not recommended for major rallies**, as it uses the Blunik connector, which is not automotive-grade. What's more, both wheel sensors are powered by a single wire. As a result, in the event of a short-circuit in one sensor, the second will also fail (with direct connection of the sensors to our devices, each sensor has its own protected power supply).

2.7. Y-power harnesses for Tripy

Fitted with the connector required by Tripy to power the geolocation/chrono system, they allow the power supply to be shared between a timer and a Tripy.

Y-power harness 12V RR4xx towards Tripy

(Ref.21300)

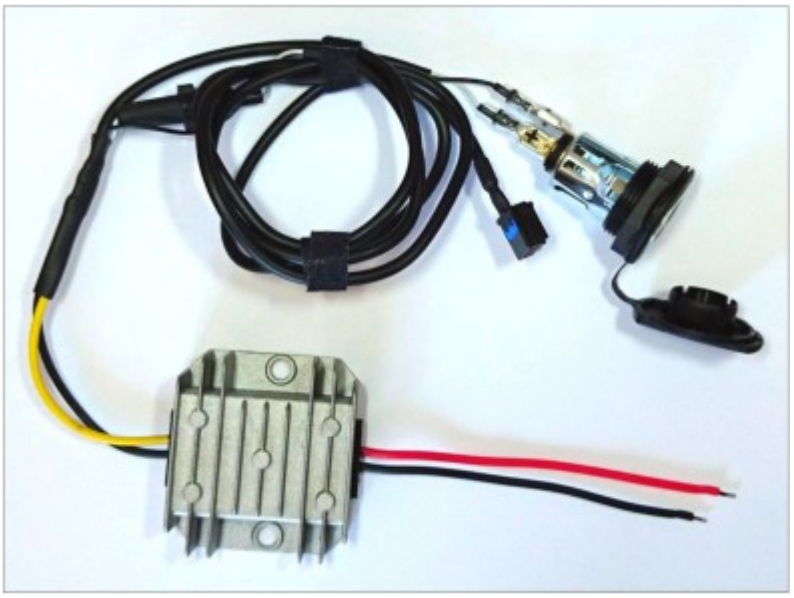
It allows the power supply from the timer to be shared with a Tripy device.

Y-power harness 12V Tripy towards RR4xx

(Ref.21310)

It allows the power supply from the Tripy device to be shared with a timer.

2.8. Power converter for 6V car, with cigarette lighter socket



(Ref.31110)

This converter provides a **12V power supply** for:

- tripmaster and its accessories,
- wheel sensors,
- cigarette lighter socket for recharging phone, GPS, etc. Maximum 2A. Protected by fuse to prevent overloading the plug and switching off the timer.

Note: *The timer can no longer detect low voltage car battery alerts.*

3) Sensors and detection devices

3.1. GPS receiver and GPS mount

Waterproof precision 10 Hz GPS receiver

(Ref.41100)

One of the advantages of our Tripmaster / Cadencer / Chrono is that it can take advantage of a precision 10 Hz GPS receiver to:

- Synchronize time to official time within 2 hundredths of a second. Can be set to "UTC" or to an organizer's clock, with remarkable precision.
- Measure distances accurately (outside dense forest and tunnels). It can take over from faulty wheel sensors (with no loss of distance when switching), or replace wheel sensors altogether if the co-pilot has frequent correction points.
- Automatically correct distances (see this option in catalog §1.2). In this case, wheel sensors are no longer required.

The waterproof external GPS receiver is separate from the unit, so it can be placed on the roof for optimum reception. The receiver is fitted with a cable approx. 3 m long.

All our precision GPS receivers can **simultaneously receive 3 of the 4 main satellites constellations**, as selected by the user:

- GPS (USA)
- Beidou (China)
- GLONASS (Russia, not recommended since 2022)
- Galileo (Europe)

GPS antenna mount

(Ref.56000)

Where it is not permitted to position the receiver outside the vehicle (such as at the Monte Carlo Historic Rally), we recommend placing it under the windscreen, at the top, near the rear-view mirror.

This mount allows you to easily position the receiver with the antenna pointing skywards, and to fit and remove it with ease. Its steel base plate aids in the reception of signals from satellites.

3.2. Wheel speed sensors and magnets

"Nomad" wheel speed sensor

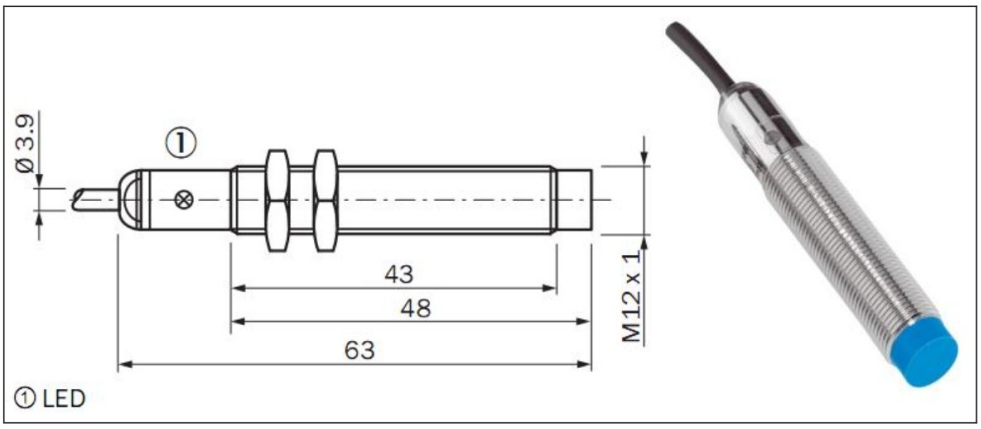
(Ref.43300)

It can be fitted to any vehicle in just a few minutes. If the rocker panel isn't accessible for attaching the bracket, it can be attached underneath the car, or left unattached for short distances:

Note: however, great care must be taken when centring the plate, otherwise the cable will quickly become damaged!

The internal magnetic sensor is reliable and accurate (4 pulses per revolution, giving a resolution of approximately 50 cm).
The mounting kit includes double-sided adhesives, repositionable cable ties and a tape measure.

Inductive wheel speed sensor



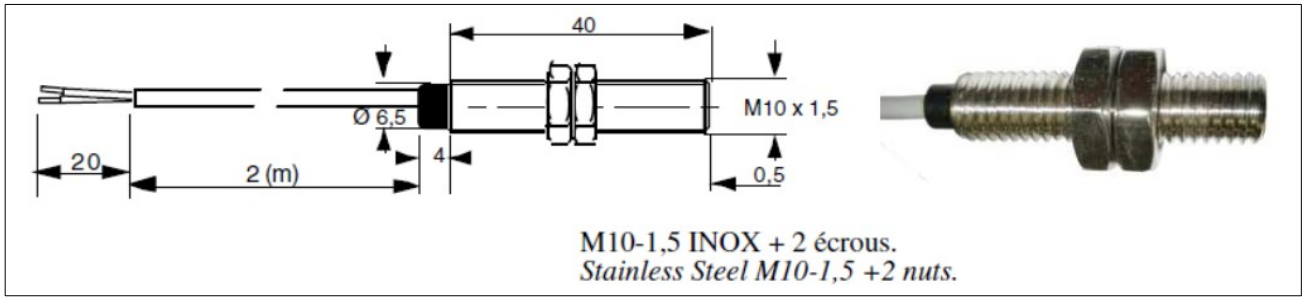
(Ref.43100)

3-wires type sensor, targets screw heads or any other ferromagnetic "target" up **to 8mm** (2 times more sensitive than standard sensors)**.**

Cable length: 5 m.

Lights up when it detects the "target". Protected against reverse connection and short circuits.

Magnetic wheel speed sensor



(Ref.43200)

2-wires sensor, ILS technology (polarity-free), stainless steel body, requires **a minimum of** 1 magnet, 2 being better and 4 being optimal.

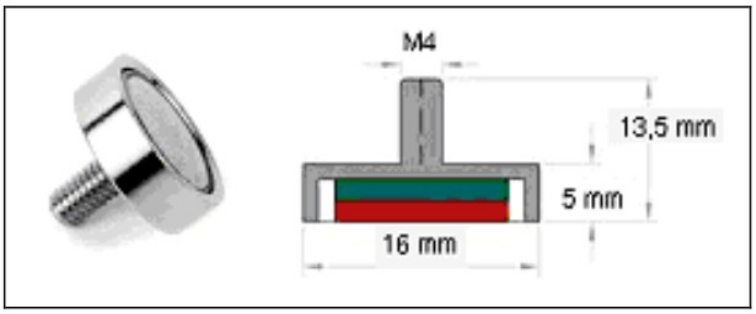
Cable length: 2 m.

Not protected against short-circuit.

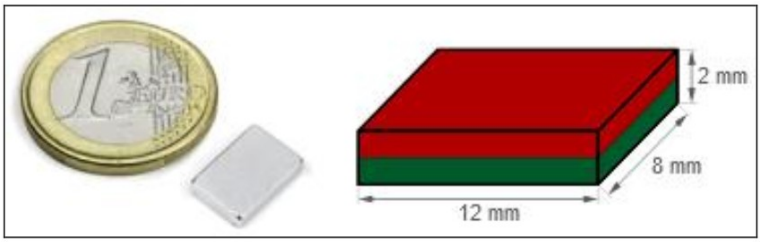
Neodymium magnet

Very powerful and compact magnet, available in three versions:
Caution: max. temperature 80°C

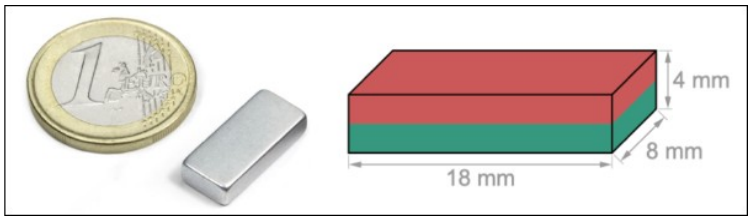
- **In stainless steel pot**, with M4 stud, approx. 12 mm air gap, with above sensor (Ref.44210).



- **Glue-on model (12x8x2 mm)**, approx. 10 mm air gap with above sensor (Ref.44220).
  Ideal for sticking onto gimbal heads, for example.

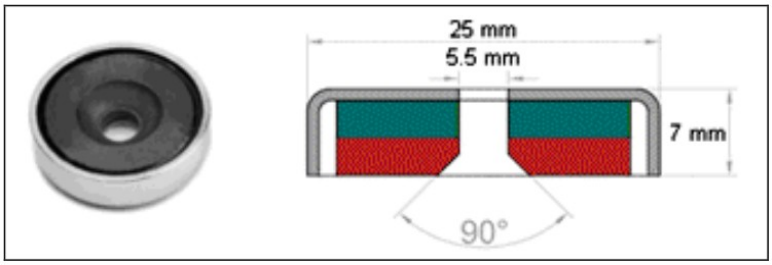


- **Glue-on model (18x8x4 mm),** approx. 12 mm air gap with above sensor (Ref.44230).
  Ideal for sticking into wheel rims, for example.



Ferrit magnet

Caution: max. temperature 250°C



Powerful magnet, approx. 12 mm air gap, with above sensor (Ref.44110).

4) Mounting and support

RAM suction cup holder + 1” ball

(Ref.53100)

Fast, reliable installation thanks to the power of the suction pad.

RAM 1” mounting ball

RAM 1" mounting ball

Ball attached to the rear of a RR412 or RP380

Several possible uses:

- Screwed to the dashboard, the ball can be used without the suction cup. The device is used with a suction cup during reconnaissance or training, then with this support during the race, screwed into the race car (Ref.53220).
- Screwed behind the timer or the pilot display (supplied with screws) (Ref.51100).

RAM aluminium arms

Available in **3 different lengths** (ball to ball):

Short arm (4.45 cm)
Advised for pilot display

(Ref.52100)

Standard arm (7.62 cm)
Advised for timer

(Ref.52200)

Long arm (13.20 cm)

(Ref.52300)

RAM roll bar support

Allows the unit to be attached to the car's roll bar, model may vary according to availability.

(Ref.53300)

Examples of possible configurations:

- Rigid suction cup mount with double ball joint and standard aluminium arm for RR412.

- Rigid suction cup mount with double ball joint and short aluminum arm for RP360/380.

5) Protection and storage

Protective cover for RR410/412 or RP380

(Ref.61100)

Protects the screen during transport and hides it when needed.

Transport case

(Ref.62100)

To store/transport :

- RR410/412/420 (without protective cover),
- RP360/380 (without protective cover),
- two suction cup holders,
- remote control,
- Various accessories (OBDII harness, GPS receiver, Led6 HUD module, etc.).

Shockproof, waterproof, can be secured with a padlock.
Dimensions: 336 x 300 x 148 mm
Weight: 1.6 kg empty

Rates

Ref.	Designation	Price without tax	Price with French tax	Qty	Total
11112	RR412 "classic" tripmaster/timer for regularity rallies with OBD harness	912.50 €	1 095.00 €		
15210	Option: distance auto-correction/normalization by GPS	137.50 €	165.00 €		
15230	Option: countdown for italian tubes	79.17 €	95.00 €		
42100	IR remote control with digits	41.67 €	50.00 €		
42210	Wired remote control "classic" with digits	70.83 €	85.00 €		
45110	Interface for wired remote control "classic"	91.67 €	110.00 €		
13210	RP360 "classic" pilot display (new generation TFT colour 4.3")	395.83 €	475.00 €		
63100	Anti-glare screen protector for the RP360	6.67 €	8.00 €		
63110	Anti-glare protective film applied to the RP360	12.50 €	15.00 €		
14110	6 multicolored leds HUD module	220.83 €	265.00 €		
21110	12V power harness for VH "classic" (with assembled and sheathed connect.) 1 m	13.33 €	16.00 €		
22111	2 or 3 wires wheel sensor harness "classic" (with assembled, sheathed connect.) 0.5 m	11.67 €	14.00 €		
22113	2 or 3 wires wheel sensor harness "classic" (with assembled, sheathed connect.) 2 m	12.50 €	15.00 €		
23120	Harness to use "classic" RR410/412 as pilot display	29.17 €	35.00 €		
33100	220V power to use outside of vehicle	27.50 €	33.00 €		
32100	Cigarette lighter harness	40.00 €	48.00 €		
21400	Multi socket for pilot display + 6 leds module simultaneous use	48.33 €	58.00 €		
24200	Blunik adapter harness	70.83 €	85.00 €		
21300	"Y" harness for Tripy power supply from RR4xx power supply	27.50 €	33.00 €		
21310	"Y" harness for RR4xx power supply from Tripy power supply	27.50 €	33.00 €		
31110	Power converter for 6V car with protected 12V-2A cigarette lighter socket	70.83 €	85.00 €		
41100	Waterproof precision 10 Hz GPS receiver "classic"	129.17 €	155.00 €		
56000	GPS antenna mount under the windscreen	50.00 €	60.00 €		
43300	"Nomad" wheel speed sensor	216.67 €	260.00 €		
43100	Inductive wheel speed sensor (without connect., aim for the screw heads...)	55.00 €	66.00 €		
43200	Magnetic wheel speed sensor (without connect., need magnet)	45.00 €	54.00 €		
44210	Neodym magnet in Ø16mm pot with M4 threaded rod	4.17 €	5.00 €		
44220	Neodym magnet to stick - 12 x 8 x 2 mm	1.67 €	2.00 €		
44230	Neodym magnet to stick - 18 x 8 x 4 mm	2.50 €	3.00 €		
44110	Ferrite magnet Ø25mm (high temp.) with fixing hole	4.17 €	5.00 €		
53100	RAM suction cup + 1" ball plate	26.67 €	32.00 €		
51100	RAM 1" ball plate to screw behind display (with screws)	13.33 €	16.00 €		
52100	RAM short arm 4.45 cm	20.00 €	24.00 €		
52200	RAM medium arm 7.62 cm	21.67 €	26.00 €		
52300	RAM long arm 13.2 cm	30.83 €	37.00 €		
53300	RAM 1" ball roll bar support	45.83 €	55.00 €		
53220	RAM 1" ball plate to screw on board (without screws)	10.83 €	13.00 €		
61100	Protective cover for RR4xx or RP380	37.50 €	45.00 €		
62100	Reinforced, waterproof transport case	120.83 €	145.00 €		
	TOTAL				

Order form to be completed and sent to CRISARTECH **with your full contact details (telephone number, email address, billing and delivery address) to**: order@crisartech.com