



Illuminated signals

ROADWORKS

VEHICULE

ON-BOARD

PERMANENT

www.ttsys.eu

Your contacts illuminated signals :

Our team has the answers to your queries... +33(0)4 92 08 29 99



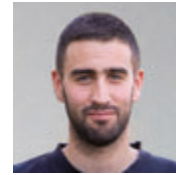
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After-Sales services
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The world changes and TTS innovates.

With over thirty years commitment to the development of new safety and signaling solutions, we continue to maintain standards whilst ensuring that innovation plays its full part. We have the resources to provide you with innovative and proven solutions for traffic management, with over 90% of the added-value achieved using manufacturing facilities in France.

Rémo CHIAVELLI
Chief Executive Officer



Made in France

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ROADWORKS

Signaling



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VEHICLE

Signaling



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ON-BOARD

Signaling



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PERMANENT

Signaling



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Design office



Integrated
welding workshop



Digital graphic
conception
workshop



Assembly
workshop

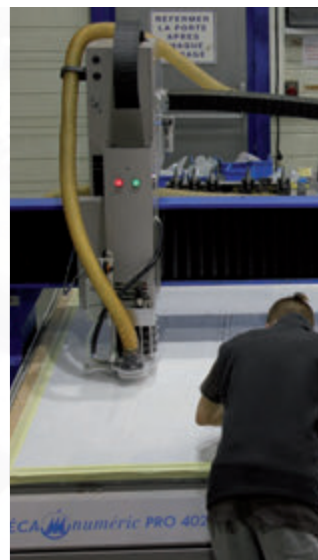
THE DESIGN BEHIND YOUR SAFETY

The human resources, the means and the technology to ensure your safety.

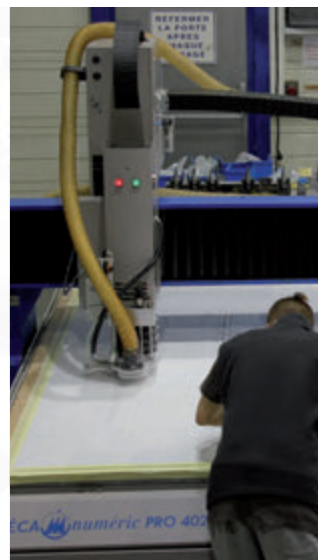
Mechanical
fabrication unit



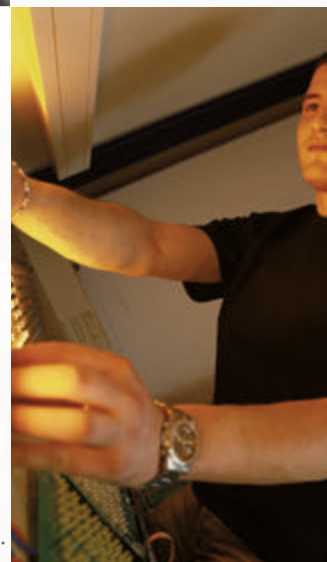
Electronics
boards
manufacturing
unit



Numerical plastic
and steel plate
processing unit



Commissioning
and After-Sales
unit



General points



We have developed a range of optics suitable for all intervention configurations.

NEW**Optic Ø 300 - The large size**

This optic is made of 225 Yellow LEDs.
Polycarbonate protection lens.
Integrated contrast screen (500x500 mm / epoxy powder coated paint).

Optic Ø 200 mm - High safety

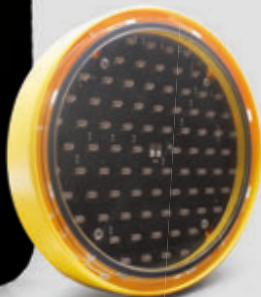
Made up of 80 high light intensity yellow LEDs. The control electronics are integrated in the optics.

Optic Ø 130 mm- The perfect format

Made up of 30 high light intensity yellow LEDs, moulded in a black polyurethane polymer resin.















Optic Ø 70 mm - The small systems

Made up of 30 high light intensity yellow LEDs, moulded in a black polyurethane polymer resin.



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THE STANDARD

Norme NF EN 12352

This standard specifies the requirements for individual electrical lighting devices known as warning lights. It specifies requirements in terms of visual, structural and functional performance levels.

- Temporary signals
 - Triangular sign, the diameter of the optics is not greater than 0.15 times of the theoretical dimension of the triangle.
 - KD and K8 sign, 2 synchronised optics of diameter 200 mm or more, placed above the sign.
 - K5C sign, optic of diameter 180 mm or more: these optics may be synchronised or streamed.

Technical guide - Traffic guidance and warning lights

Specifies the dimensions and types of optics when these are fixed to a sign.

- Permanent signals
 - Danger, 1 optic of diameter 180 mm or more, placed above the signal.
 - Prohibition (type B), indication (type C and CE), direction (type D, the use of optics with this type of signal is prohibited).
 - Guidance equipment (type J), 2 optics of diameter 200 mm or more, placed above the signal.

Tempo mobile traffic light

tempo

THE MARKET
BENCHMARK

Waiting time display

TEMPO is the only roadwork traffic light to incorporate a waiting time counter with display in minutes and seconds. Visible from a distance of 40 meters, the waiting time display discourages traffic from passing through prematurely.



Unrivalled autonomy

Never previously seen:
2 months with a 200 Ah battery.
1 month with a 100 Ah battery.



Simplified programming

Managing roadworks surrounding traffic has never been so easy, thanks to the ergonomic infra-red programming module, and the remote-control commands being clearly shown on the display.



Tempo can adapt to be used on all your sites

The key word is flexibility. In its standard version the Tempo light also offers the ability to manage alternating traffic at three and four branch crossroads. It supports the management of cross-cycles and changeover cycles on green.

➤ Alternation



➤ 3-branch crossroad



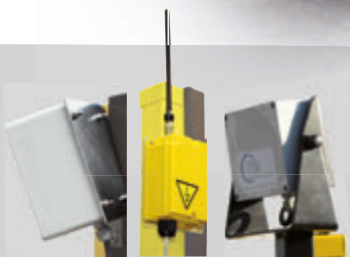
➤ 4-branch crossroad



options

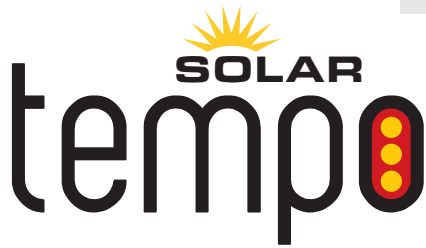
Options are available for all uses.
Learn more about the Tempo options on pages 12-13.

Tempo is also available
with optional extras



Solar power Tempo mobile traffic light

9

**Tempo changes to Green!**

As part of its continual search for innovation, we are now applying its know-how in the field of photovoltaic power for three-colour site signals.

Unequalled operational autonomy

The solar panel increases the operational autonomy of the battery, safely and at no cost.
Its tempo traffic light results in considerable savings for you in maintenance costs.

there is no ecological consideration that is too small!!

The technique :

- The 20 W photovoltaic panel supplies the battery through a charge regulator.
- Photovoltaic module unit protected by polycarbonate.

The structure :

- Painted steel case.
- Lifting handles.
- Telescopic mast.

Set of 2 solar-powered Tempo mobile traffic light

31175 Set of 2 solar-powered Tempo temporary traffic lights with remote control

Single solar Tempo mobile traffic light

30878 Single solar Tempo temporary traffic light (without remote control)

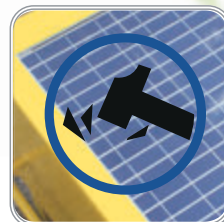
Rechargeable battery

The use of a 200 Ah battery provides optimum ballast for the light. It also allows the available power levels to be smoothed out over periods where there are lower levels of sunlight.

376 Rechargeable battery 12 V 200 Ah
Allow for one rechargeable battery per light

Specific spare parts

Spare parts for the solar-power Tempo on pages 12-13.

INNOVATION AWARD !!**Impact Polycarbonate protection**

Tempo mobile traffic light

tempo

ASCQUER CERTIFICATION
Admission n°: KR11 01
www.ascquer.fr



➡ 21698



Optional protective cage



➡ 41186

Reliability, technology and unique know-how.**The electronics :**

- Programming and management interface using an infrared link with mobile synchronisation panel.
- Module protected by a polycarbonate surface.
- Alpha-numeric display of 2 x 16 characters, of all cycle, programming and check information.
- Waiting time display.

The structure :

- Wheel-barrow box with ABS cover.
- Lifting handles.
- Telescopic mast: closed 1.55 m, open 2.50 m.

Set of 2 Tempo mobile traffic light
21698Set of 2 Tempo temporary traffic lights
with remote control

Single Tempo mobile traffic light
22563Single Tempo temporary traffic light
without remote control

Power Supplies and accessories

The 100 Ah rechargeable battery range facilitates **handling** whilst ensuring that a one-month operational autonomy is achieved.

1992Rechargeable battery 12 V 100 Ah
Allow for one rechargeable battery per light

The 200 Ah rechargeable battery range give the Tempo an operational **autonomy** of two months. Perfectly suited for use on long-term sites.

376Batterie 12 V 200 Ah
Two belts per battery are required**Battery straps****9322**Set of 2 straps
Two belts per battery are required

Our battery chargers offer quality of charge regulation, guaranteeing battery protection and a long battery operating life.

Charger for batteries from 100 Ah to 250 Ah**21551**

Charger for batteries 12 V/25 A / 300 W

Charger for batteries from 50 Ah to 100 Ah**26758**

Charger for batteries 12 V/8 A / 96 W

230 V supply

Allow for one power supply per light.

1522

Power supply 230 / 12 V

Protection cage for Tempo box**41186**

Protection cage for Tempo box

Tempo mobile traffic light - spare parts

11

1513
Black dome

1187
Red LED
electronics

1171
Ø 210 seal

1509
Red
LED light

1510
Yellow
LED light

22561
Complete
Tempo module

22562
Complete
Tempo Mast

22377
Battery box

1186
Yellow LED
electronics

40929
Tempo electronics

1514
Yellow dome

1120
Serrated roller
M10x30 Inox

14334
Plastic muff

13524
Case handle
(w/o plastic sleeve)

22383
Battery box cover
(w/o adhesive)

886
Polycarbonate lens
Ø 210

42218
Decorated
front face

22558
Tempo remote
control

22385
Tempo wheel

Electrical components for junction box

460
3-pin XLR
female base socket

1521
Spiral cable
+ 3-pin XLR socket

477
Red battery terminal

478
Green battery terminal

Before 2018 :

Since 2018:

21753
Junction box

44426
Junction box

SOLAR
tempo

Tempo Solar Specific spare parts

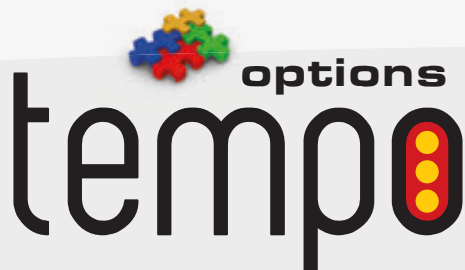
4339
Solar panel
12 V 20 W

31036
Solar battery holder
case 12 V 20 W

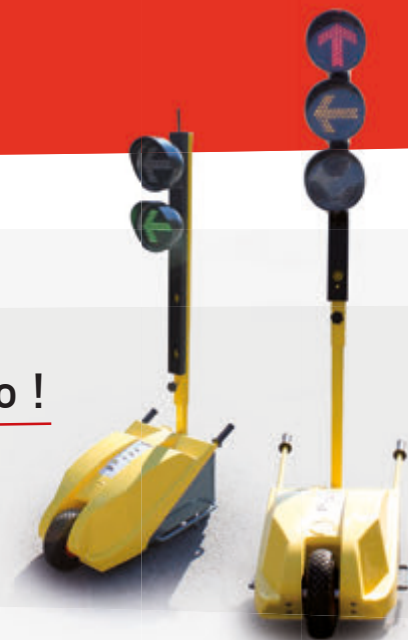
31125
Solar housing cover
12 V 20 W

31119
Charge regulator

1164
Tempo Solar
wheel



Keeping up the tempo !



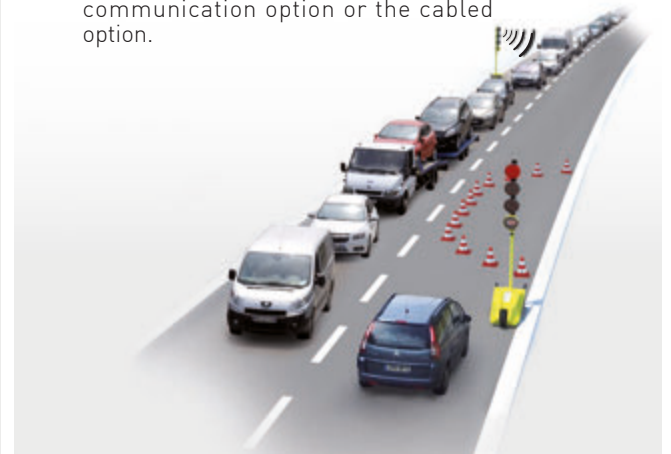
Priority direction

Detection of vehicle movement in a priority direction activates switch-over of the lights cycle (e.g. site exit, fire and rescue etc.) The lights must be synchronised using the radio link communication option or the cabled option.



Traffic regulation

Management of traffic flow time as a function of the traffic density in both traffic directions. The lights adjust to match the traffic flow (e.g. large numbers of cars in one direction in the morning, and in the other direction in the evening). The lights must be synchronised using the radio link communication option or the cabled option.



Remote controlled lights

K10 traffic paddle regulation poles are nowadays insufficient for proper protection of working personnel on the road because of increased accident risk and anti-social behavior. As like K10 traffic paddle, our remote controlled traffic lights are constantly adapting to the road construction movements, while assuring the security of the employees inside the protection range of the mobile traffic lights, using a radio remote control (40 meter range).



SMS Command

The operation of the lights is controlled by sending a simple SMS. After the SMS has been sent, the user receives a confirmation that the SMS has been received, and that the light has turned red. This option, especially useful on long distance worksites, allows a real communication with the traffic lights.



Tempo mobile traffic light - options

13



N°1 in terms of Modular design
Options to match every site configuration.



Contact us



Your specific offer:

Tempo adapts itself to the specific configurations of your construction sites.
Send us a description of your requirements. We'll develop the solutions that you need...



For 20 years we've been ensuring that our lights meet your specific needs.

...they have trusted us with their projects: : Atlante construction, Demathieu et Bard, Dodin Campenon, DTP Terrassement, Eiffage TP, Entreprise Girard, GTS Guintoli, Razel Bec, Roessel, SFTRF, Sobeca, Spie Fondations, Vinci Construction Terrassement, Loxam etc...

Sign lighting equipment

AK Signs with accessories

Lighting equipment composed of:
3 optics of Ø130mm/30 LEDs or Ø 70 mm/30 LEDs and a control panel.

The length of the optics leads are 1.5 m. Extensions of 5m are possible. Power-up using a 3-position sealed switch (24-hours, off, night).

1000 mm triangle sign, class 2 symbol of choice, fitted with an integral stand completely foldable.

Power supply using 4-battery housing (type 4R25).

Operational autonomy 280 hours Triangle 1000 mm.

17836 Triangle 1000 Ø 130mm/30 LEDs - classe2
4-battery housing (batteries not supplied)

Rechargeable battery power supply.

Operational autonomy 1500 hours with one 12 V 75 Ah rechargeable battery.

20238 Triangle 1000 Ø 130mm/30 - classe 2
Rechargeable battery (Rechargeable battery not supplied)



*with one Rechargeable battery of 75Ah



➔ 17836

Lighting kit, battery power supply

Power supply using a 4-battery housing (type 4R25).

Operational autonomy 280 hours.

19601 3 optics Ø 70mm/30 LEDs 4-battery housing kit
(batteries not supplied)

15702 3 optics Ø 70mm/30 LEDs 4-battery housing
(batteries not supplied)



➔ 15702



Lighting kit, rechargeable battery power supply

Rechargeable battery power supply.

Operational autonomy 1500 hours with a 12 V 75 Ah battery

19602 Kit 3 optics Ø 70/30 LEDs
Rechargeable battery (Rechargeable battery not supplied)

16891 Kit 3 optics Ø 130/30 LEDs
Rechargeable battery (Rechargeable battery not supplied)



➔ 16891

Universal attachment "clip" option

The option includes 3 clips pre-installed on optics diameter 130 mm.

29815 option includes 3 clips pre-installed



➔ 29815

Sign lighting equipment

15

Connect using one movement...

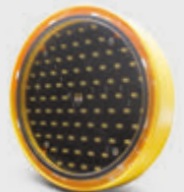
All of our optics are connected to their power supply by a jack plug



Ø 70/30 LEDs



Ø 130/30 LEDs



Ø 200/80 LEDs

Pre-equipped bar for metal sheet signs

Bar 1m50.
Operational autonomy 175 hours.

1532

Fast-fit bar for K8 sign
4-battery housing (batteries not supplied)

Bar 1m50.
Operational autonomy 937 hours with one rechargeable battery (12 V 75 Ah).

23659

Fast-fit bar for K8 sign
4-battery housing (batteries not supplied)

Dual-flash kit for sheet-metal signs

Lighting accessories made up of 2 optics of diameter 200mm/80 LEDs and a control panel. The length of the optics lead is 1.5m. Extension option available. Power-up using 3-position sealed switch (24-hr, off, night). Fixing brackets supplied.

Power supply by 4-battery housing (type 4R25).
Operational autonomy 175 hours.

16893

Dual-flash kit Ø200mm/80 LEDs
4-battery housing (batteries not supplied)

Rechargeable battery power supply.

Operational autonomy 937 hours with one rechargeable battery (12 V 75 Ah).

16894

2 optics kit Ø200/80 LEDs
Rechargeable battery (Rechargeable battery not supplied)

Lighting kit options

Jack lead extension.

22279

For optics Ø 130 mm or Ø 200 mm
length: 5 m

→ 1532



BATTERY

→ 16893



BATTERY

→ 16894



RECHARGEABLE BATTERY

→ 22279



Power supplies

More information on all power supplies on pages 22 - 23

Advance warning or signaling of road narrowing, road neutralization and diversions.**Exclusive**

The scrolling burst is preceded by
a double synchronised flash on all optics.

This method improves spatial identification for drivers.

Optic diameter 200 mm with theft-prevention attachment

Autosynchronized lamps by wired connection.
Cable (3 x 0.75 mm²). Each lamp is connected to the one in front.
The power supply is on the first light. The 200 mm diameter light has a secondary lens.

Consumption under 12 V in a flash mode is 0.06 A.

Functioning mode for a better safety.

Double command of the light source.
Synchronous flash of all the lights to help the spatial location of the bend in all its depth. Running sequence overlaid with drag effect to mark the curve.

Wiring mode.

Supplied with a separate cable with two XLR plugs, length 16 m.
Easy storage and quick implementation.

11400

Optic Ø 200/80 LEDs wired connection
Anti-theft device

Storage container 5 optics

37192

Storage container for 5 optics & cables

XLR extension

12018

XLR extension - 16m

Scrolling lighting bar 5 optics

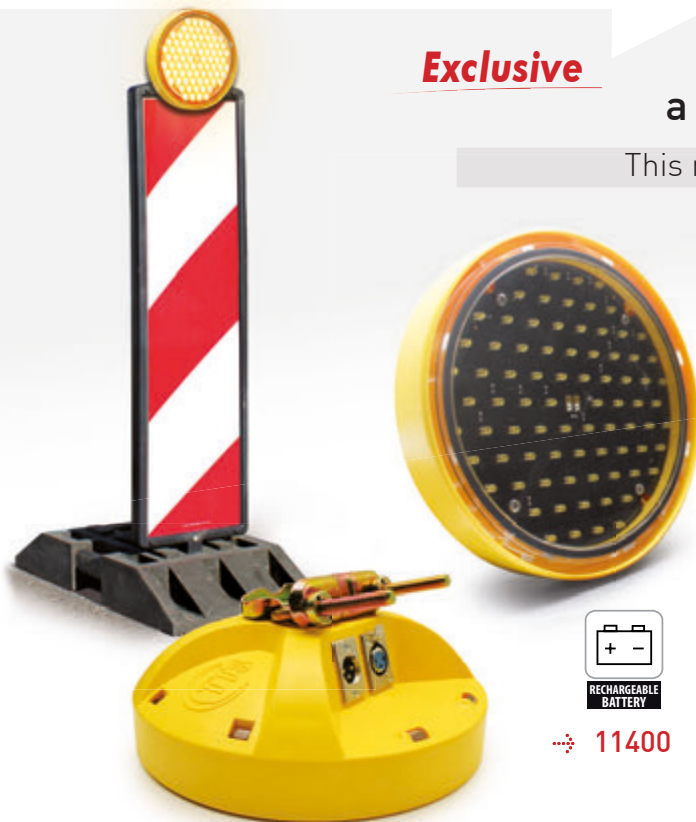
Length 1.3 m equipped with 5 optics Ø 200/80 LEDs. Left or right scrolling using switch 3 m power supply lead with XLR plug

1547

Bar with 5 optics Ø 200/80 LEDs

37121

Clamp option for universal mounting



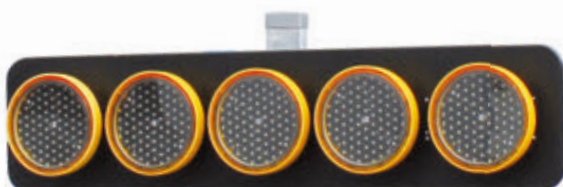
→ 11400



→ 37192



→ 12018



→ 1547



→ 37121

Ease of installation: simply switch on the optics.

The radio system can operate up to 20 heads. There is no pilot panel or master and slave lights. **Each element is automatically connected to the system when power is switched on.** Its position in the cascade is linked to the order in which the optics are switched on. Synchronisation is achieved by sending a signal which acts as a time base. 2 modes available: scrolling or synchronised double flash.



➡ 29895

Radio-synchronised optic Ø 200/80 LEDs

Lighting accessories made up of 1 optic Ø200 mm /80 LEDs and a 4-battery power supply housing and its spiral cable. *Scrolling mode recommended.*

29895 Radio-synchronised Optic 200mm/80 LEDs
& 4-battery housing (batteries not supplied)

34338 Radio-synchronised Optic 200mm/80 LEDs
+ spiral cable and XLR plug

Radio-synchronised light Ø 210/80 LEDs telescopic mast

Lighting equipment composed of a telescopic lamp Ø200 mm/80 LEDs and a 4-battery power supply housing (batteries not supplied). *Scrolling mode recommended.*

29896 Radio-synchronised Optic 200 mm /80 LEDs
telescopic mast / 4-battery housing

Radio-synchronised light Ø 210/80 LEDs

Lighting equipment composed of a lamp diameter 210 mm/80 LEDs and a 4-battery power supply housing (batteries not supplied). *Scrolling mode recommended.*

29897 Radio-synchronised light Ø 210/80 LEDs
4-battery housing (batteries not supplied)

Case of 5 radio-synchronised lights of Ø 210/80 LEDs

Set of 5 lights Ø210 mm /80 LEDs and 4-battery power supply housing, in their transportation container.

30067 5 radio-synchronised lights
in their transportation container.



➡ 29896



➡ 29897

➡ 30067



Power supplies

More information on all power supplies on pages 22 - 23



KR44 lighted arrow (8 chevrons)

The KR44 arrow is composed of an aluminum sheet with double flanged edges, matte black colored, with dimensions 1200 x 400 mm, which serves as a contrast screen for the 8 chevron LEDs.

The chevrons are 320 mm height.

The KR44 arrow is fitted with a 3 meter cable, with XLR plug connector.

The chevrons are composed of LEDs, with life spans above 100 000 hours.

The LEDs are assembled in groups of 5 elements, which greatly improves the fault tolerance of the overall lighted sign (a faulty LED only extinguishes a group of 5 LEDs maximum).

The scrolling direction, left or right, is determined by the mounting direction of the KR44 arrow.

The power supply can be delivered by a battery or a mains 230/12V power supply (power supply is not included).

The device can be mounted on its 2 holders (included), or mounted with straps fixed on its back rail (not included – the fixing dimensions are determined by your holder).

The KR44 arrow conforms to the French Interministerial Instruction.

38996

Lighted KR44 arrow
8 scrolling chevrons



KR42 Lighted arrow (11 optics)

This KR42 arrow is composed of 11 optics Ø 70 mm which are simultaneously turned on in a flashing mode.

Each Ø70mm optic contains 30 yellow high intensity LEDs, molded in a polyurethane potting.

This process makes the lighting part completely waterproof, and offers a perfect protection against corrosion and vibrations.

The scrolling direction, left or right, is determined by the mounting direction of the KR42 arrow.

The sign is fitted with a 3 meter long cable, with an XLR connector termination.

The power supply can be delivered by a battery or a mains 230/12 V power supply (power supply is not included).

The device can be mounted on its 2 holders (included), or mounted with straps fixed on its back rail (not included – the fixing dimensions are determined by the application's holder).

The KR42 arrow conforms to the French Interministerial Instruction.

40098

Lighted KR42 arrow
Blinking mode



Power supplies

More information on all power supplies on pages 22 - 23

Mobile VMS



The Variable Message Sign mounted on a mobile trolley delivers a clear signal and information to the road users. Its flexibility and ease of installation, as well as its compact overall dimensions on the roadway, allows the sign to be used in all cases.

With the use of its control unit, the sign can display a text selected from a complete listing of prerecorded messages, or any other user edited message.

Variable Message Sign specifications:

- 140 mm matrix display, for up to 10 characters.
- Yellow LEDs.
- Sun cap.
- Polycarbonate UV-resistant protection.
- Standard RAL matte black colored.
- Enclosure fitted with toggle locks.
- Fixing gear included.

Control unit specification:

- Backlighting
- Direct short keys (auxiliary, triangle, VMS).
- 99 preprogrammed messages.
- Editable text messages with the programming software (included)
- Connection with USB port for message modification

General specifications :

Voltage: 12 V.

Dimensions: 1360 x 275 x 335 mm.

Overall height: 1533 mm.

The mast can be detached from the battery compartment for transport means.

40099

Site mobile VMS
H140 matrix, 10 characters

Mobile battery box Option

NEW

The mobile battery box option facilitates the implementation of the light signaling on your site.

It is compatible with various devices such as the KR41 scrolling light bar, the KR44 and KR42 arrows, and so on. The battery can be transported over long distances without effort.

The mobile housing protects the battery against damage or theft. It can also be associated with the protective cage to enhance the security against theft.

For easy transport the battery holder is detached from the mast on which is mounted the signaling.

Mobile battery box Option

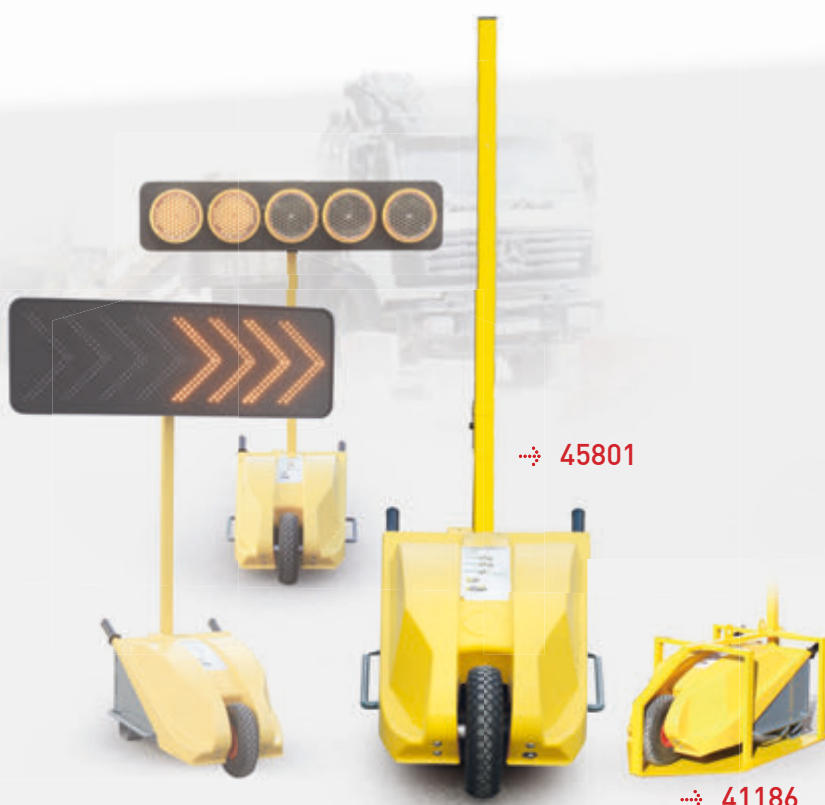
45801

Mobile battery box Option

Protection cage for mobile battery box

41186

Protection cage for mobile battery box



→ **45801**

→ **41186**



→ 14386



→ 14387



→ 1535



→ 38061

Light with 200 mm diameter optic

Single-face light with transportation handle, LED optic diameter 210 mm. Power-up using a 3-position sealed switch (24-hr, off, night).

4-battery housing, type 6 V 4R25 (batteries not supplied)

Operational autonomy in double flash mode: 255 hours

One wrench for theft-prevention fitting for 2 lights purchased.

14386

Lamp Ø210/80 LEDs

Telescopic model

Model with telescopic arm from 70 to 120 cm.

14387

Lamp Ø210/80 LEDs
Télescopique

Light with optic diameter 180 mm

Double-face light with transportation handle. LED optic with Ø 180 mm (1 LED per face). Power-up using a protected switch.

2-battery power supply housing (6V 4R25)
(batteries not supplied)

Standard model

Operational autonomy in flashing mode: 250 hours. Theft prevention fixing. **Night operation only.** One wrench for theft-prevention fitting for 4 lights purchased.

1535

Light Ø 180/2 LEDs

Wireless LEDs worksite projector

Up/down and Left/right Directable projector with a waterproof switch. Internal battery with up to 5 hours run life. Supplied with a 230/12 V battery charger and car charger.

38061

LEDs wireless portable Projector
20 W 1300 lumens with charger

Power supplies

More information on all power supplies on pages 22 - 23

Maintenance Equipment

21



AK5



AK14



AK31

Intervention Triangle

700 mm Triangle equipped with 3 LED optics with $\varnothing 70$ mm. Folding front/rear stand. Stands locked using self-tightening strap. Choice of symbol.

Power supply using rechargeable battery built into box.
Supplied with mains-charger power supply.
 Operational autonomy in double flash mode: 35 hours.



26386

Intervention triangle 700 classe 2
 With built-in rechargeable battery

6035

Class 2 road sign 400 x 150
 Single face

35265

Class 2 road sign 400 x 150
 Double face



Tripode

700mm floor standing tripod with 3 sides AK5 TZ in retro-reflective diamond grade film. Delivered with its storage bag. For other decor, please contact us.

36446

AK5 700 Tripod T2 retro-reflective diamond grade
 + PVC case

Emergency Traffic Guidance Kit

Set of 6 LED lights (allows emergency traffic guidance to be created) in their own storage and re-charging case. Mains and cigarette-lighter recharge included. 9 operating modes (fixed, flashing, turning etc.) Rechargeable blue Emergency Traffic Guidance Kit.

30096

Blue Emergency Traffic Guidance Kit
 Rechargeable

30107

Amber Emergency Traffic Guidance Kit
 Rechargeable

High Strength



230 V



Cigarette-Lighter

there is no ecological consideration that is too small!!



**Less waste, working life
in excess of five years**



→ 34853



→ 35094

Rechargeable battery and charger

34853

Rechargeable battery 6 V 4R25 5 Ah

Battery charger for 4R25 type batteries, for simultaneous charge of up to 8 batteries.

35094

Rechargeable battery charger 4R25
1 to 8 battery

Power supply and battery housing



→ 15700



→ 385

4-battery power supply housing.

(6V 4R25 batteries not supplied).

Model with control electronics in double flash mode Power-up using a 3-position sealed switch (24-hr, off, night). Connection using 3 jack points.

15700

4-battery power supply housing jack
Double flash mode

Saline battery 6 V 4R25 7 Ah

385

battery 6 V 4R25
7 Ah

Alkaline battery 6 V 4R25 9,5 Ah

390

battery 6 V 4R25
9,5 Ah

Alkaline battery 6 V 4R25 45 Ah

36029

battery 6 V 4R25
45 Ah

→ 390



→ 36029



→ 1555



Battery holder case

PVC battery holder case allowing a rechargeable battery of up to 75 Ah to be included. External connection using XLR 3 point plug.

1555

Rechargeable battery holder case

Rechargeable battery

376 Rechargeable battery 12 V - 200 Ah range

1992 Rechargeable battery 12 V - 100 Ah range

1953 Rechargeable battery 12 V - 75 Ah range

393 Rechargeable battery 12 V - 40 Ah range



→ 376



→ 1992



→ 1953



→ 393



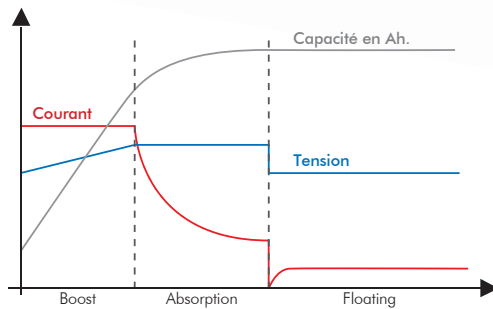
➤ 21551



230 V



➤ 26758



➤ 1522



230 V

Battery charger

Charge your batteries safely.

There is a suitable charge curve for each type of battery technology. Our chargers can be used to recharge you batteries in accordance with the manufacturers' instructions.

Regain your batteries' initial capacity whilst maintaining them in good condition.

BOOST/rapid charge - ABSORPTION/égalisation - FLOATING/maintenance. These three curves are applied automatically in turn.

Our battery chargers provide high quality charge regulation which guarantees protection and a long battery operating life.

Charger for batteries from 100 Ah to 250 Ah

21551

Charger for batteries 12 V/ 25 A / 300 W

Charger for batteries from 50 Ah to 100 Ah

26758

Charger for batteries 12 V/8 A / 96 W

Mains supply

Power supply 230 V / 12 V - 3 A in PVC housing. This housing is compatible with all safety equipment.

1522

Mains supply 230/12 V

Supply using public lighting

Case used to connect to the public lighting system. Public lighting source case.

34577

Public lighting source 7 Ah
Rechargeable battery included

1694

Public lighting source 7 Ah
Rechargeable battery included

Solar power site supply

Assembly made up of a solar panel and an accumulator case which contains the regulation electronics and the battery.

29577

Solar power kit 20 W
17 Ah

29578

Tri-flash control panel for solar power kit
17 Ah



➤ 29577



➤ 1556

Day/night control panel

Allows night-time only power-up to be achieved.

1556

Day/night control panel

General points



Intégral™

The **Intégral™** Integral system is a concept: the concept of developing a coherent and customised ready-made assembly.

Our **Intégral™** design concept will ensure that we produce the equipment that you require



Pre-assembled, ready to install.

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Control panels	p. 26 - 27
Work and searchlights	p. 28
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Scrolling light bars	p. 32
Lighted directional traffic arrows	p. 33
Mini Variable Message Signs	p. 33
The Triangles	p. 34
The Integral Classic	p. 35
The streamlined Integral Classic	p. 36 - 37
Fittings	p. 38
Vehicle screen printing	p. 39

Our human/equipment interface

The control system for the equipment has been completely redesigned. It is based on more ergonomic elements which are truly easy to use.

Control panels, which are more compact and with an improved ergonomic design. Fully configurable, they incorporate all functions.



Configure your **Intégral™** system to meet your needs: A control panel is available

Our switches

In individual modular formats, up to "n" switch elements can be assembled together. They offer two outputs protected by a 15A fuse.

In the simplest solution the switch allows equipment to be controlled individually (one switch = one item of equipment). The switch is illuminated when the equipment is in operation. Set of pictograms provided.

30216	1 Switch pack Supplied with base and set of pictograms.
30217	2 Switch pack Supplied with base and set of pictograms.
30218	3 Switch pack Supplied with base and set of pictograms.

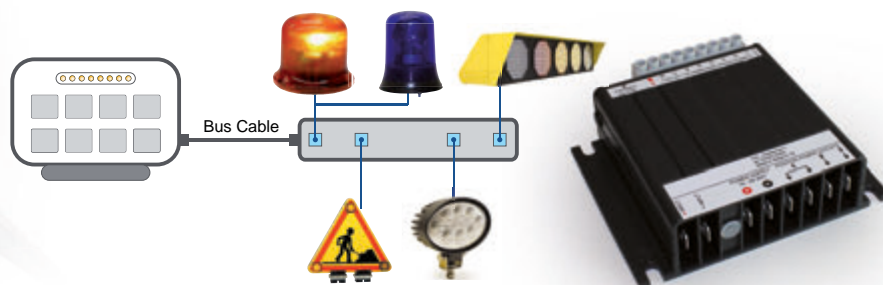
Mezzo 8 our all-in-one control unit

Mezzo 8 is a control panel which is very compact, ergonomically designed and fully configurable. The keys can be customised and back-lit, depending on the equipment that is active.

The dual-voltage power module can be used to control up to 3 self-protected on-off outputs, and 8 other sequential outputs. It offers 10 Ampere outputs for connecting large-scale, power consuming items of equipment.

26453	Mezzo 8 panel + power module + cable
--------------	--------------------------------------

 Bus Single cable only	 Quick installation	 Adjustable stand	 Back lit	 No Relays	 Collection of pictograms
--	--	---	--	---	---



Mezzo 16 our fully-equipped control unit.

The Mezzo16 is a complete control panel. It is equipped with a microphone and has a special intelligent "sound" input. The keys can be customised. They are also back-lit and therefore indicate what equipment is active.

The single-voltage power module can be used to control up to 12 on-off self-protected outputs and 8 other sequential outputs. With its very high power rating it can be connected to large-scale, power-hungry equipment.

30288

Mezzo 16 panel + power module + cable
+ public address



The sound management modules



→ 26457



→ 25688



→ 28463



→ 28464

26457

Sound generator - siren

25688

Grille loudspeaker
100 W

28463

Hands free microphone

28464

Mic/mp3 connection interface

Searchlights



41414

33898

Searchlights

To efficiently light up a working zone with the possibility of remotely directing the light beam in various desired places (from a distance of more than 25m). Our searchlights are studied to be able to give you a large use and installation flexibility.

Wireless remote control included.

41414	LED searchlights 30 W / 12 V
33898	Halogen searchlights 65 W / 12 V

Working lights

LED lights

This range of lights will guarantee low energy consumption with high light intensity (on average: 80 Lumens / 1 Watt). **Professional model suitable for extreme conditions.**



30162

30163

30164

30165

30174

30166

30167



			Working lights		Magnetic fixing kits	
Voltage	Power	Brightness	Reference	Price	Reference	Price
12/24 V	15 Watts	1150 Lumens	30162		30633	
	18 Watts	1350 Lumens	30163		30633	
	24 Watts	2000 Lumens	30164		30633	
	36 Watts	3500 Lumens	30165		37641	
	36 Watts	2160 Lumens	30174		30633	
	54 Watts	3240 Lumens	30166		30681	
	72 Watts	4300 Lumens	30167		30681	

All our LED working lights are also available with magnetic fixings



37641

30633



30681

Move your lights, not your vehicle!

Using our magnetic kit you can position the spotlight anywhere you wish on your vehicle.
5m extension supplied.
Connection on cigarette-lighter plug.

Rotating lights range

Efficient and economical

Available with different fixings, flat base, tube or magnetic (supplied with spiral cable and cigarette lighter base), our LED rotating lights have all the current benefits available on the market:

- Dual voltage 12/24 V.
- Resistant (Polycarbonate dome).
- to be used with engine off.
- Very long life.
- No maintenance (no change of bulb, belt or engine...)
- Ultra quiet.



LED range

Voltage	Fixing	Mode	Colour	Reference	Price
12/24 V	Flat	Rotating	Amber	36477	
			Blue	38515	
		Flash	Amber	38518	
			Blue	38521	
	Tube	Rotating	Amber	38513	
			Blue	38516	
		Flash	Amber	38519	
			Blue	38522	
	Magnetic	Rotating	Amber	38514	
			Blue	38517	
		Flash	Amber	38520	
			Blue	38523	



→ Flat



→ Magnetic



→ Tube

Halogen range



→ 1590



→ 1586



→ 1588



→ 2354
+1586



→ 1592



→ 1712

Voltage	Fixing	Mode	Colour	Reference	Price
12 V *	Flat	Rotating	Amber	1590	
			Blue	40721	
			Amber	1586	
			Blue	5998	
	Tube		Amber	1588	
	Magnetic		Amber	1586 +2354	
			Blue	5998 +2354	
			Amber	1712	
			Blue	1589	
			Amber	1592	
			Blue	6375	

* For 24 Volts : please contact us

Xénon range

Contact us

Connection tube



→ 1598



→ 1597



→ 1595

1595	Screw-on tube
1597	Vertical fixing tube
1598	Horizontal fixing tube

Light bars



→ 35594



→ 35604



→ 35597



→ 35603



LED light bars



Multifunction streamlined signal light bar Height 135 mm. LED lights. Central module with back-lit text (double face).

Voltage	Length	Number of lights	Colour of lights	Text	Reference	Price
12/24 V	970 mm	2	Amber	Yes	35594	
		4	Amber	Yes	35598	
				No	35592	
	1400 mm	2	Amber	Yes	35596	
		4	Amber	Yes	35600	
			Amber / Blue	Yes	35604	

Halogen light bars



Multifunction streamlined signal light bar Height 135 mm. Halogen lights. Central module with back-lit text (double face).

Voltage	Length	Number of lights	Colour of lights	Text	Reference	Price
12 V *	970 mm	2	Amber	Yes	35593	
		4	Amber	Yes	35597	
				Non	35590	
	1400 mm	2	Amber	Yes	35595	
		4	Amber	Yes	35599	
			Amber / Blue	Yes	35603	

* For 24 Volts: please contact us

MAGNETIC OPTION AND CUSTOMISED LIGHT BARS :

Contact us  

Light head

Light head

LED light head careened, bi-tension 12-14 Volts.

21149	light head 113x28 amber 12-24 V (1 light)
43398	light head 113x28 blue 12-24 V (1 light)
43397	light head 133x45 bicolor amber/blue 12-24 V (1 light)



→ 21149



→ 43398



→ 43397

Bicolor - amber / blue



Ultra thin



Bicolor LED



→ 36593



→ 36294

Ultra-flat light bars : ALPHA

36593

Amber ultra-flat light bar 12/24V, 355 mm
Magnetic

36294

Amber ultra-flat light bar 12/24V, 355 mm
Fixing by central bolt**Control panel not included** (to be select from page 26)

→ 39953



→ 42121

Also available in blue

Standard flat lightbars : EPSILON

This ultra low profile light bar, length 1080mm, is composed of 36 yellow power LEDs.

A blank central text space (448mm), on both sides, with editable application defined text.

39953

Flat lightbars 59 mm
36 LEDs length 1080 mm

Synchronized flash

12 blocks of 3 LEDs, 18 LEDs on the front panel and 18 LEDs on the rear panel. As well as 4 blocks of 6 wide-angle yellow LEDs (2 on each side)

42121

Flat lightbars 59 mm
60 LEDs length 1252 mm**Control panel not included** (to be select from page 26)

Special flat lightbars

We can modulate our lightbars to your needs.

Consult us for specific requirements.

We can adapt the size of our lightbars for a better fit into the vehicle, and offers you specific functioning mode, colors and polycarbonate lenses that suits your requests.

Example :

2 in 1 : a scrolling bar at the rear of the vehicle, **a lightbar** on the front and on the sides. 12 blocks of 3 yellow LEDs, 18 LEDs on the front and 18 LEDs on the back. 2 blocks of 6 wide-angle yellow LEDs on each side.

39954

Flat lightbars 59 mm
60 LEDs length 1252 mm

LED bicolore



→ 39954

Operating mode:

Flash
Scrolling
Alternative modeColor
LED
Lens

Size



N°1 on modularity
Options to fit your needs

Contact-us  



Scrolling light bar



3 position switch
on cigarette lighter plug

Scrolling light bar

A streamlined scrolling light bar 1180 mm long, with magnetic fixing kit, composed of 5 scrolling LED lights + 2 rotating LEDs lights. Supplied with cable and 3 positions cigarette lighter switch.

37091

LED scrolling light bar
+ 2 rotating LEDs lights.



23324



23324

7-LED light arrowbar
Supplied with its control box.



30222

30222

LED scrolling light bar
and 2 LED beacons

With triangle AK5 500 or 700 class 1 on lift (electric) and 2 LED beacons.

27473

LED scrolling light bar
Triangle 500

21968

LED scrolling light bar
Triangle 700

Control panel not included (to be select from pages 26-27)
(switches not compatible)



27473



Lighted directional traffic arrows

33



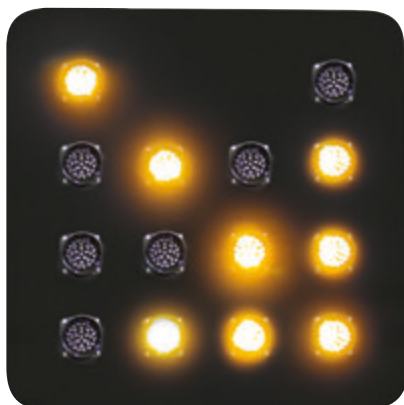
➡ 38789

These arrows are composed of 2 aluminum panels, assembled with a rubber watertight gasket. Fixing with back rails. Magnetic fixture is optional.

Control unit is not included (see pages 26-27):

The arrows can be controlled by the 2 switch pack (reference 30217, not included).

Opt for control panel Mezzo 8 (reference 26453) when a complete solution is required, with added triangles and rotating lights.



➡ 1585



Lighted directional traffic arrows (16 lights)

Blinking arrow (1000x400x50mm), 16 lights of Ø70 mm.

Arrow with low consumption LEDs, single sided.

38789

LED blinking arrow



Lighted directional traffic arrows (14 lights)

Blinking arrow (720x720x50 mm), 14 lights of Ø70 mm.

Arrow with low consumption LEDs, single sided.

1585

LED blinking arrow



Directional light arrow flashing and magnetic (8 lights)

Directional light flashing 8 lights Ø 70.

The traffic direction, right or left, is determined by the direction of installation of the luminous arrow.

Supplied with 10m cable and cigarette lighter plug.

Warning, this product cannot be used on a driving vehicle.

24006

LED flashing arrow

12 V



➡ 24006

Mini Variable Message Signs



Mini VMS

Mini Variable Message Panel for Car Rear Range, 9 characters H110 mm.

Supplied with control box and programming software.

44940

Mini VMS 9H110 mm

12 V



➡ 44940

+ qualitative triangular sign.

Great Strength +

Panel composed of 2 aluminium plates flanged edges of 1.8mm.

Longer lifespan +

Airtight and waterproof. Usable in all conditions even the most extreme.

Visibility +

Optic ø70-30 yellow high intensity LED.



➡ 1570

Double-sided LEDs Triangle

Regulatory signaling device for all vehicles and machines which are placed on the road during work or mobile road intervention.

- Two dimensions : 500 or 700 mm.
- Anodized aluminium box.
- Mounting on double-acting hinge, for a forward or backward tilt of the box.
- The lighting elements are made of three 70 mm LEDs optics on both sides.
- Dual voltage without bulb change (12 or 24 V).
- Supplied with 10 m power cord.

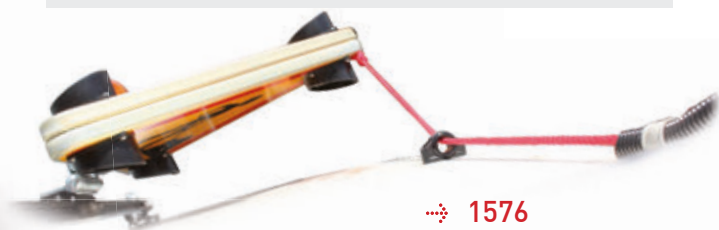
1566 Triangle AK5 500 Classe1

1567 Triangle AK5 700 Classe1



6710 Triangle AK5 500 Classe2

7723 Triangle AK5 700 Classe2



➡ 1576

Manual kit

1576 Manual kit

Single-sided LEDs Triangle

1570 Triangle AK5 500 Classe1 - With rails fixed on the back

1571 Triangle AK5 700 Classe1 - With rails fixed on the back

Create your own **Integral™** unit or select a standard configuration :



→ 1957 Triangle 700



→ 1959 Triangle 700

2 elements configuration

Pre-equipped assembly including:

1 roof rack. 2 halogen rotating beacons with connection tubes.
1 LED triangle 500 or 700.

1956

Configuration n°2
Triangle 500

1957

Configuration n°3
Triangle 700

Control panel not included (select from page 26)

3 elements configuration

Pre-equipped assembly including:

1 roof rack. 2 halogen rotating beacons with connection tubes.
1 LED triangle 500 or 700.
2 LED lights.

1958

Configuration n°4
Triangle 500

1959

Configuration n°5
Triangle 700

Control panel not included (select from page 26)

Options

Choice of options for your Integral system

1576

Manual kit

35341

Two amber halogens beacons.
(For other beacons please contact us)

37866

8-LED arrowbar

→ 35341



→ 37866



➡ 29112



➡ 29963

Painted metal body

Colour (RAL) of your choice!

All painted work have a professional finish with a powder coating. The use of a polyester powder paint allows us to offer the best features of resistance to atmospheres.



Intégral™ Streamlined Classic

Manual Lift

1 triangle 500 or 700 LEDs. 1 power supply cable length 10 m with cigarette-lighter plug 1 magnetic fixing kit.

29112

With triangle AK5 500

29113

With triangle AK5 700

Electric Lift

1 triangle 500 or 700 LEDs. 1 power supply cable length 10 m 1 magnetic fixing kit.

Supplied with a 1 switch pack

It is necessary to add the optional adhesive fixings for the streamlined integral – reference 29053.

29963

With triangle AK5 500
Electric Lift

29964

With triangle AK5 700
Electric Lift



Without a rack it is immediately suitable for all vehicles

Universal system "ALL IN ONE" Removable or Fixed



Create your own **Intégral™** system

Intégral™ Streamlined Classic options

2 LEDs beacons kit.

29030 Optional 2 rotating beacons with amber LEDs.
(For other beacons please contact us)

2 halogen beacons kit.

29061 Optional 2 halogen beacons.
21 W amber

2 lights kit

30223 Optional 2 15 W LED spotlights
(For other lights please contact us)

Manual kit

1576 Manual kit.

Optional roof rack fixings

38492 Optional roof rack fixings

Adhesive fixings kit

29053 Optional adhesive fixings
(Manual / Electrical)

Removable : Magnetic
Fixed : Adhesive



Universal adhesive system

→ 38410



Adhesive fixing kit for Streamlined Integral

System without need of drilling

Fits all brands and types of vehicles.

38410

Adhesive fixing kit for Integral Classic
3M adhesive tape

System requiring drilling

Roof bar with drilled fixing system.

4765

Drilled fixing kit
K1P1 rack

Whatever your vehicle, a suitable system is available .

Contact us  



Roof rack for vehicles

Complete kit (pair of fastenings + roof bar)

Please specify the correct vehicle type and its year of manufacture (fixings may vary from one year to another).



1614	Renault Master / Mascotte
1615	Renault Clio
1616	Renault Kangoo
2232	Renault Master Mascotte (Benne)
5283	Renault Trafic / Opel Vivaro
1617	Peugeot Boxer / Citroën Jumper
1618	Peugeot Expert / Citroën Jumpy
1620	Peugeot Partner / Citroën Berlingo
24568	Fiat Doblo
20998	Fiat Fiorino
2231	Mercedes Vito
23077	Mercedes Sprinter / VW Crafter
14301	Opel Combo
1622	Iveco Daily
24436	Nissan Cabstar / Renault Maxity

Vehicles with roof gutters

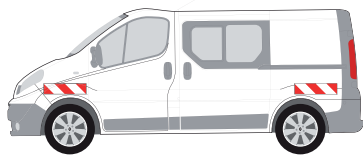
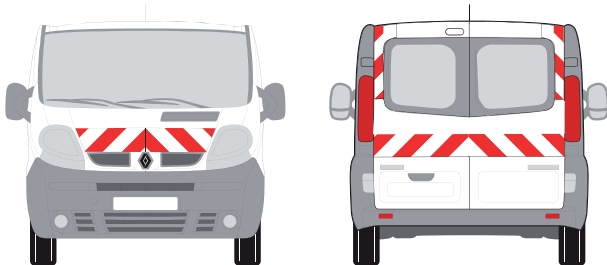
Complete kit for vehicles equipped with roof gutters.
1 pair of adaptors and a 1750 mm roof bar.

1607

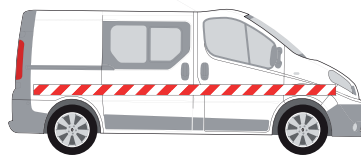
Standard gutter-system roof-rack



A cut perfectly adapted to the vehicle



Minimum lateral



Maximum lateral



→ 12866

Order of 6 November 1992 published in the journal officiel of 3 January 1993

Article 2 : approves the new requirements in book 1 of the inter-ministerial instructions on road signals shown under the heading "Part 8": temporary signals.

Article 122C booklet part 8e : mobile equipment.

Mobile equipment forms an obstacle which must be made particularly obvious. Vehicles which regularly work on the roadway must carry signals in accordance with the requirements of the order of 20 January 1987.

Requirements of the Order of 20 January 1987 :

Minimum surface area per vehicle, 0.80 m².

Front : 0,16 m² - **Rear :** 0,32 m².

Right side +left side : 0,32 m².

Homologated by DSCR, under the TPESC number shown on each white stripe.

Pre-cut kit

Appropriate for the vehicle, available in class 1 and class2.

Please contact us.

Box of 2 rolls

Includes the left side and right side roll.
Red and white traffic guidance.

1966

Rolls Classe1

2 rouleaux 9 m / largeur 0,14 m

1967

Rolls Classe 2

2 rouleaux 9 m / largeur 0,14 m

Magnetic strip

1972

Magnetic "service" strip Class 1

50x15 cm

1973

Magnetic "service" strip Class 2

50x15 cm

Municipal Police vehicle screen-print

Decree no.2005-425 of 28 April 2005
(published in the journal officiel of 7 May 2005).

• **Front :** 800 x 400 mm 'Police Municipale' with red margin and blue text screen printed on 2 lines.

• **Rear :** 3-colour badge 96 x 120 mm. Strip 720 x 90 mm 'Police Municipale' with red margin and blue text screen printed on 1 line, class 2.

• **Side :** Blue strip 14 x 120 mm.

Triple 'Gitane' stripe 120 x 14 mm.

Triple 'Gitane' stripe with red 'Z' 14 x 120 mm.

3-colour badge 240 x 300 mm.

12866

VL Kit 'Police municipale'

Screen printing for other types of vehicles available.













General points

***A major development in on-board equipment...***

- HIGH SPEED raising (3 sec)
- ULTRA HIGH STRENGTH Structure (stainless steel)
- For use at HIGH SPEEDS (150 km/hr)



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 Control panels	 p. 42 - 43
 General description	 p. 44 - 45
 On-board range	 p. 46 - 49
 FLR Trailers	 p. 50 - 51
 VMS Trailers	 p. 52
 PICTOGRAM Trailers	 p. 53

Intégral™ Dynamic

The Dynamic Integral, is a concept: all our safety equipment are integrated in a coherent and customized signaling device.

The Dynamic Integral, it is the insurance to get the equipment you need. Our control units and our interfaces will allow you to easily integrate all of your vehicle and on-board signaling projects.

Our compact and ergonomic control units are fully configurable. The keys are backlit.

Two sizes of control units: 4,3" and 7" in diagonal, suitable for light or heavy duty vehicles.

OS embedded Linux, C/C++, reliability and stability of software. Dialogues with secure high-speed CAN bus.



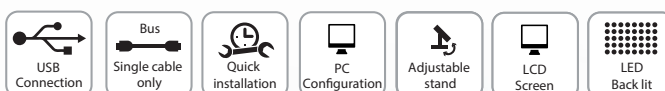
Control panels

ALTO 4.3"



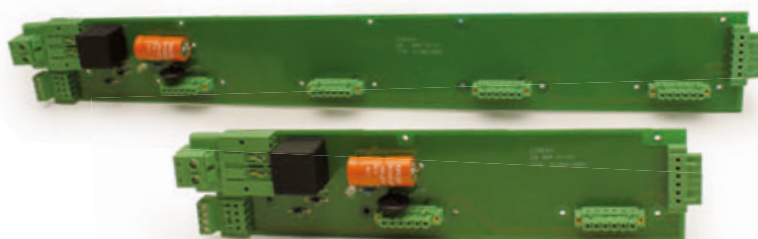
The **ALTO 4.3"**, 11 cm diagonal control panel is particularly suitable for light goods vehicles: Kangoo, Nemo, Berlingo, Jumpy, Partner, Expert, Doblo, Fiorino, Scudo etc. It has a 16/9 screen - 480x272 pixels - high luminosity 400 cd/m², +/-60° angle for unmatched ease of use. Guaranteed to operate between -30°C and +75°C the **ALTO 4.3"** is made for use in all difficult environments. It includes all commands for VMS, triangles, lifting, gyro auxiliaries, working lights, scrolling light bars etc.

32702

Control panels
ALTO 4.3"

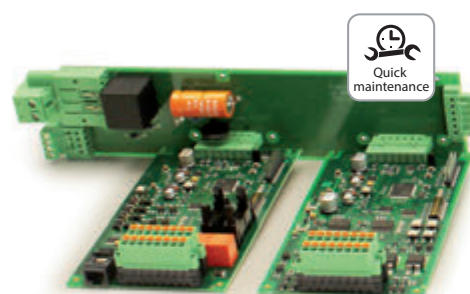
80 Amp BUS, reliability, modular design

The **Integral™** Dynamic is the first signal system to have a complete modular BUS with electrical and data connection. With no more hard-to-extract cables, the BUS 80A provides guaranteed reliability and ease of maintenance. This expandable BUS on one hand distributes electrical supplies of up to 80A and on the other hand high flow CAN. It incorporates a general cut-out relay. There are two configurations available: 2 slots and 4 slots.



Management boards

The **Integral™** Dynamic is the first signaling system to have a set of management boards which meet the needs of all applications in a standard and modular manner. Functions relating to VMS, lifting, auxiliary, scrolling light bars, FLU and analogue and digital inputs can all be combined thanks to the three base boards of the Integral Dynamic.



ALTO 7"

The **Alto 7"**, 18 cm diagonal control panel is particularly suitable for heavy goods vehicles: Trafic, Master, Jumper, Boxer, Ducato etc.

It has a 16/9 screen - 800x480 pixels - high luminosity 400 cd/m², +/-60° angle for unmatched ease of use.

Guaranteed to operate between -30°C and +75°C the ALTO 7» is made for use in all difficult environments.

It includes all commands for VMS, triangles, lifting, gyro auxiliaries, working lights, scrolling light bars, FLU etc.

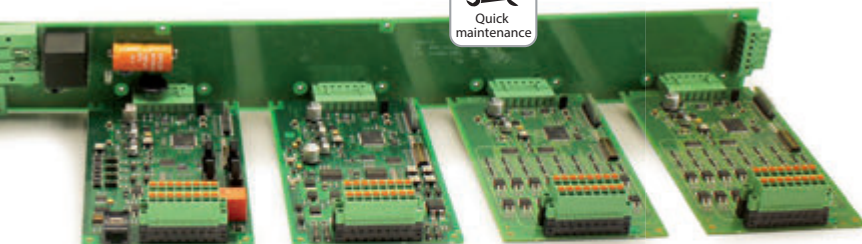
The **Alto 7"** has, as standard, a dual port for front and rear cameras. With a GSM modem, you will even be able to transit real-time images to your regulation PC.

34023

Control panels
ALTO 7"



Wide angle camera



USB Connection



General description

Our Dynamic **Intégral**™ concept includes our entire range of certified displays in 7x5 matrix form or as a continuous matrix. The certification requires full control over photometric and thermal parameters and makes our displays **the highest performance displays** on the market.



VMS for light goods vehicles

For equipping your light goods vehicles, we recommend character heights : **H160 and H200 mm** as 8 to 10 characters with spacing or 12 characters as a **continuous matrix**.

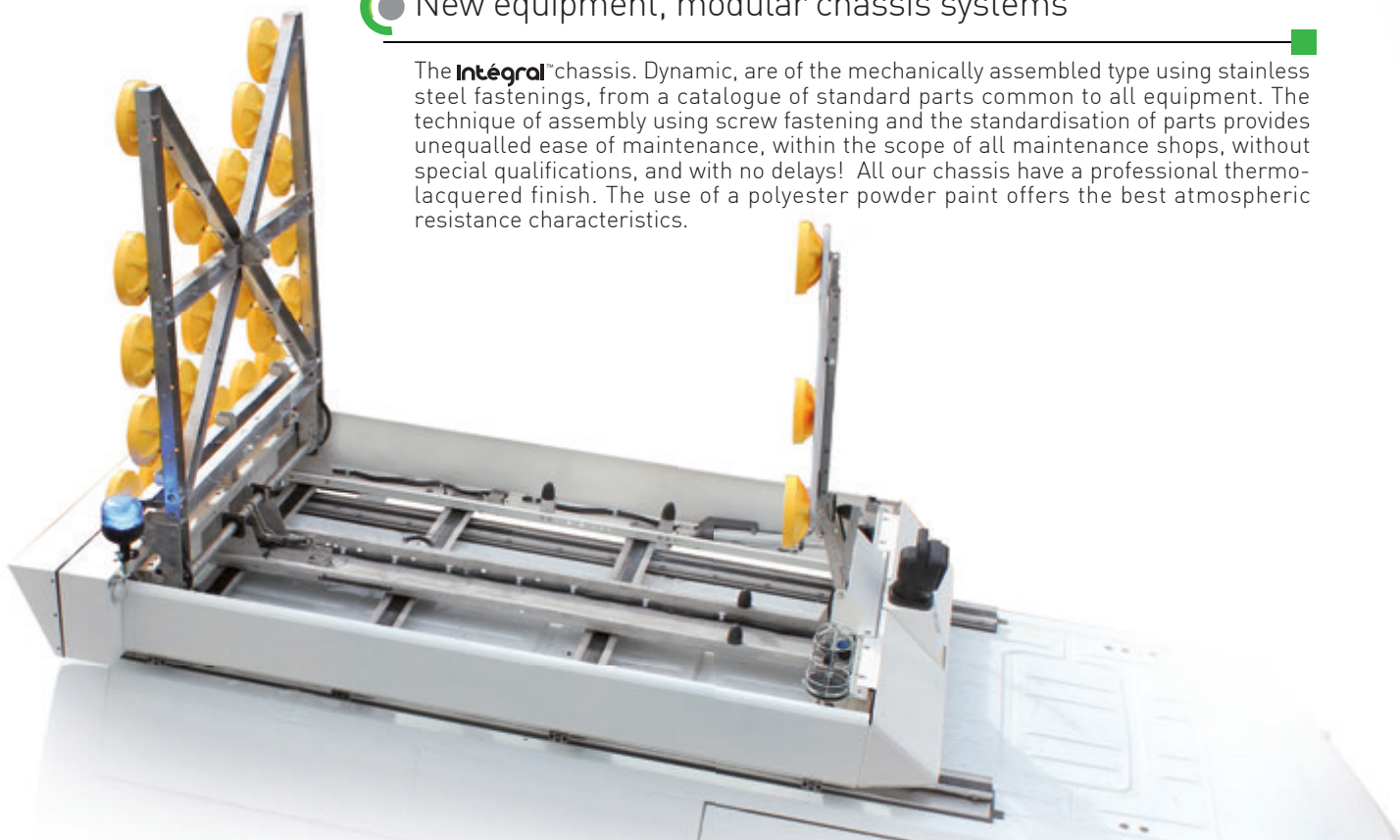


VMS for heavy goods vehicles


For equipping your heavy goods vehicles, we recommend character heights : **H200 and H250 mm** as 9 to 10 characters with spacing or 12 characters as a **continuous matrix**.

New equipment, modular chassis systems

The **Intégral**™ chassis. Dynamic, are of the mechanically assembled type using stainless steel fastenings, from a catalogue of standard parts common to all equipment. The technique of assembly using screw fastening and the standardisation of parts provides unequalled ease of maintenance, within the scope of all maintenance shops, without special qualifications, and with no delays! All our chassis have a professional thermo-lacquered finish. The use of a polyester powder paint offers the best atmospheric resistance characteristics.



Satisfaction guaranteed

Our Integral Dynamic concept offers you the  equipment **guarantee** Range of displays **certified by ASCQUER** to standard EN12966. Photometric testing, colorimetric testing, EMC, vibration testing, severe testing regimes: all to ensure **your safety**: demand this compliance label.

For equipping your goods vehicles, we recommend character heights:

H160, H200 and H250 mm of 8 to 10 characters, regulatory spacings. **Or continuous matrix characters** for optimised display.

EC certified to standard EN12966

Please visit the website: www.ascquer.fr



Match Speed with Safety

High speed lifting

Ultra-rapid deployment of the illuminated Emergency arrow and the ability to do this at high speed!
Gone are the times when patrol units had to slow down and stop to deploy its signal system.

- Deployment of the high-speed FLU takes less than 3 seconds.
- Deploy your equipment at high speed (up to a relative speed of 150 km/hr).
- Reinforced chassis and fastenings, stainless steel and aluminium materials

A 1250 triangular dynamic matrix sign:

Triangle pictogram lifting system

For the larger triangular signs of 1250 mm, we offer you a matrix panel that can display the complete range of type A Signs.

Designed on the basis of a dual color matrix, the dynamic panel gives the road users the right information according to the road situation.



On-board range



VMS - Variable Message Sign

Our variable message signs installed directly on-board vehicles are equipped with high light intensity LED displays. Created to provide temporary mobile signaling on roads and motorways, they provide road users with information on traffic conditions.

- VMS: new generation energy-saving displays, choice of various sizes H160, 200, 250 mm (4 to 5 LEDs per point) from 8 to 12 characters.
- Automatic luminosity switch-over by Day-Night cell.
- Standard RAL paint finish of choice
- Latest generation ALTO control panel with update via USB key.
- Options available on request (beacon, spotlight, rearview camera etc.).



VMS + Triangle 500 / 700

- VMS: new generation energy-saving displays, choice of various sizes H160, 200, 250 mm (4 to 5 LEDs per point) from 8 to 12 characters.
- Automatic luminosity switch-over by Day-Night cell.
- Triangle 500 – 700 double face:
 - Aluminium sign, turned over dropped edge.
 - Adhesive class 2, symbol of choice.
 - Equipped with 6 optics diameter 70 mm with 30 LEDs.
- Lifting using electrically operated cylinder with integral end-of-travel sensor.
- Standard RAL paint finish of choice.
- Latest generation ALTO control panel with update via USB key.
- Option available on request (beacon, spotlight, rearview camera etc.).

Safety auxiliaries available as options

A wide range of additional accessories allowing you to create equipment that fully meets your requirements: Beacons, spotlights, anemometer, rearview camera, siren etc.

Please contact us to configure your on-board equipment.





VMS + Triangle 1000 / 1250

- VMS: new generation energy-saving displays, choice of various sizes H160, 200, 250 mm (4 to 5 LEDs per point) from 8 to 12 characters.
- Automatic luminosity switch-over by Day-Night cell.
- Triangle 1000 – 1250 double face:
 - Aluminium sign, turned over dropped edge.
 - Adhesive class 2, symbol of choice
 - Equipped with 6 optics of diameter 200 mm with 80 LEDs, protected by polycarbonate lens.
- Lifting using electrically operated cylinder with integral end-of-travel sensor.
- Standard RAL paint finish of choice.
- Latest generation ALTO control panel with update via USB key.
- Options available on request (beacon, spotlight, rearview camera, anemometer etc.).



VMS + 16 optics Arrow

- VMS: new generation energy-saving displays, choice of various sizes H160, 200, 250 mm (4 to 5 LEDs per point) from 8 to 12 characters.
- Automatic luminosity switch-over by Day-Night cell.
- Triangle 500 – 700 double face:
 - Aluminium sign, turned over dropped edge.
 - Adhesive class 2, symbol of choice.
 - Equipped with 6 optics diameter 70 mm with 30 LEDs.
- Arrow type KR42: 16 optics of diameter 70 mm with 30 LEDs, in networks of 5, moulded in resin, making it fully water-tight.
- Lifting using electrically operated cylinder with integral end-of-travel sensor.
- Standard RAL paint finish of choice.
- Latest generation ALTO control panel with update via USB key.
- Options available on request (beacon, spotlight, rearview camera, anemometer etc.).

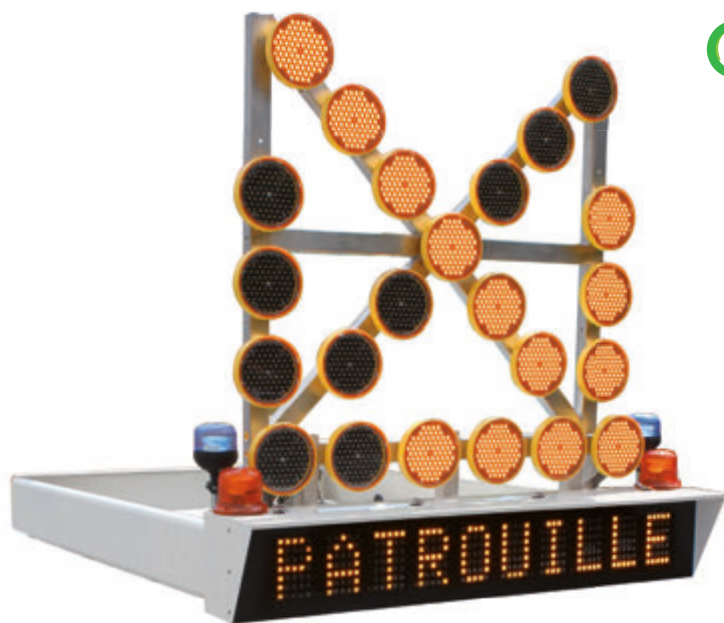


On-board range



VMS + 1250 Triangle Pictogram

- VMS: new generation energy-saving displays, choice of various sizes H160, 200, 250 mm (4 to 5 LEDs per point) from 8 to 12 characters.
- Automatic luminosity switch-over by Day-Night cell.
- Triangle 1250 :
Two-colour graphic matrix.
For the display of type A "large" signs.
- Lifting using electrically operated cylinder with built-in end-of-travel sensor.
- Standard RAL paint finish of choice.
- Latest generation ALTO control panel with update via USB key.
- Options available on request (beacon, spotlight, rearview camera, anemometer etc.).



FLU - Illuminated Emergency Arrow

- VMS: new generation energy-saving displays, choice of various sizes H160, 200, 250 mm (4 to 5 LEDs per point) from 8 to 12 characters.
- Automatic luminosity switch-over by Day-Night cell.
- FLU type KR43: 23 optics of diameter 200 mm with 80 LEDs, protected by polycarbonate lens.
- Lifting using electrically operated cylinder with built-in end-of-travel sensor.
- Standard RAL paint finish of choice.
- Latest generation ALTO control panel with update via USB key.
- Options available on request (beacon, spotlight, rearview camera, anemometer etc.).

Safety auxiliaries available as options

A wide range of additional accessories allowing you to create equipment that fully meets your requirements: Beacons, spotlights, anemometer, rearview camera, siren etc.

Please contact us to configure your on-board equipment.





FLU + Triangle 500/ 700

- VMS: new generation energy-saving displays, choice of various sizes H160, 200, 250 mm (4 to 5 LEDs per point) from 8 to 12 characters.
- Automatic luminosity switch-over by Day-Night cell.
- Triangle 500 – 700 double face:
 - Aluminium sign, turned over dropped edge.
 - Adhesive class 2, symbol of choice.
 - Equipped with 3 or 6 optics of diameter 200 mm with 80 LEDs, as networks of 5, protected by polycarbonate lens.
- FLU type KR43: 23 optics of diameter 200 mm with 80 LEDs, protected by polycarbonate lens.
- Dual independent lifting using electrically operated cylinder with built-in end-of-travel sensor.
- Latest generation ALTO control panel with update via USB key.
- Standard RAL paint finish of choice.
- Options available on request (beacon, spotlight, rearview camera, anemometer etc.).



Briefcase FLU

- VMS: new generation energy-saving displays, choice of various sizes H160, 200, 250 mm (4 to 5 LEDs per point) from 8 to 12 characters.
- Automatic luminosity switch-over by Day-Night cell.
- Triangle 1000 – 1250 double face:
 - Aluminium sign, turned over dropped edge.
 - Adhesive class 2, symbol of choice.
 - Equipped with 3 or 6 optics of diameter 200 mm with 80 LEDs, protected by polycarbonate lens.
- FLU type KR43: 23 optics of diameter 200 mm with 80 LEDs, as networks of 5, protected by polycarbonate lens.
- Dual independent lifting using electrically operated cylinder with built-in end-of-travel sensor.
- Standard RAL paint finish of choice.
- Latest generation ALTO control panel with update via USB key.
- Options available on request (beacon, spotlight, rearview camera, anemometer etc.).



FLR Trailers



Galvanised 750 kg chassis

The 750 kg chassis made entirely of galvanised steel can be towed by a light vehicle with no special licence required. It is equipped as standard with an adjustable-height draw-bar and a self-braking system.

Long operational autonomy

With its 2 batteries each of 200 Ah, the FLR Trailer can achieve a record operational autonomy of 150 hours.

100% LED technology

The optics of diameter 200 mm are made up of a lighting element with 80 high-luminosity yellow SMC 5 mm LEDs. This lighting element is integral with an ABS bowl. The front part is protected by a transparent lens made of polycarbonate (high impact resistance). There is guaranteed water-tightness between the polycarbonate lens and the bowl provided by a circular seal. The assembly is fully dismountable.

The control cabinet

Our local control cabinet. A digital display enables a clear real time communication between the user and the equipment. LED indicators are displaying the actual message at the back of the trailer, even from long distance.

FLR Trailer

New generation trailer with LED optics, specifically designed for traffic guidance of mobile sites and urgent work on roads and motorways.

Structure:

- Single axle chassis 750 kg.
- Manual stabilisers - Parking brake, adjustable draw-bar.
- Large capacity service chest.
- 25 flashing optics of diameter 200 mm.
- 2 flash optics of diameter 300 mm.
- 1 B21 sign of diam 1250 class 2, motorised and disengageable.
- Red and white chevrons class 2.

Operational autonomy:

- Long operational endurance:
- 150 hours with 2 batteries 12 V - 200 Ah.

Low maintenance costs:

Due to LED optics, no bulbs to change.

Simplified controls:

The control module provides one-touch control of your signals.

Modular design:

- Generator set.
- Charger for 12 V battery.
- Electrically operated stabilisers.
- Control panel on unit or remote operation using a radio or cable link.
- Inertial braking.

Power:

Batteries / charger for 12 V batteries / mains lead reel / generator set available as option.

25878

Single axle trailer.

FLR radio control panel as option

29178

Radio control panel

Electric stabilisers available as option

4 electric stabilisers, located under the trailer, allowing full and easy access to the upper plate.

10305

4 electric stabilisers kit



29178



10305

VMS Trailers



VMS Trailer

This variable message sign on-board a trailer is equipped with high light intensity LED displays. Created to provide temporary mobile signaling on roads and motorways, they provide road users with information on traffic conditions.

Structure:

Self-braking chassis / single axle 750 kg (Towable weight 830 kg) made of galvanised steel / manual stabilisers / parking brake / adjustable draw-bar.

Display:

1, 2, 3 or 4 lines of 12 characters.
Characters Hc200-4, matrix 7 x 5 / 4 yellow LEDs per point / Red and White chevrons class 2.

Simplified controls:

In local mode messages are selected using the ALTO 4.3" control panel.

In remote mode, communication using GSM network, radio etc.

Automatic luminosity management.

Programming:

Programming using a laptop PC / software provided on CD ROM. No connecting cable between the PC and the trailer. Messages updated via the USB key.

Access code to ensure security of your message programming.

Modular design:

Generator set / charger for 12 V battery / electrically operated stabilisers / inertial braking / GSM modem.

Power:

Batteries / charger for 12 V batteries / mains lead reel / generator set available as option.



ALTO control panel
See pages 42 et 43.



32775

Single axle trailer 750 kg

Single axle trailer, 4 lines of 12 characters, character height 200 mm, 4 LEDs per point.



Bichrome Picto Trailer

Assembly of a fixed part (A14 steel panel with warning arrows, and a matrix panel with a high intensity LED display), on-board a trailer.

Structure: Single axle chassis of 750 kg.
Manual stabilizers / Parking brakes / Inertial braking / Adjustable height drawbar.
4 stands for manual stabilization.
Hot-galvanized steel structure, chassis and mechanisms.
Semi-automated jockey wheel lifting, spring blocking, and reinforced tyre wheel.

Picto Bichrome display: Bichrome matrix display box, size 1550x1550 mm.
56x56 points resolution (3136 yellow LEDs and 3136 red high intensity LEDs).
Display of panel codes A, B and KD in 1250 mm.

Energy: 12 V operation.
Electricity generators. Plug for charging on mains voltage.
Electricity distribution panel with circuit breaker and fuse.

Control electronics: Coating protected control board, mounted in waterproof cabinet.

Control unit: Message selection with thumb wheel.
Automatic light intensity adjustment (day/night cell).

Programming: : With portable computer (not included).
Software is provided on CD ROM with a linking cable.

39767

Picto Bichrome trailer, single axle



Animated matrix trailer

Assembly of 2 variable message signs, equipped with high light intensity LEDs, on-board a trailer.

Structure :

Single axle chassis 1300 kg.
Manual stabilisers / Parking brake / Inertial braking / Adjustable height draw-bar.

Fixed lower part display

Monochrome graphic 128 x 96 point matrix.
Used to display text, KD signs, animations.

Moving upper part display:

Two-colour graphic 48 x 48 point to 64 x 64 point matrix.
Used to display "normal to very large" range signs of type A, B and KD.

Control:

On site, by laptop PC or thumb-wheel.
Remotely, by GSM link, radio etc.

Programming from a PC:

Software provided on CD ROM.
Files backed-up on hard disk.
Programming of messages, animations, signs from a library.
Multi-level access code for security of programming.

Modular design:

Generator set / batteries charger / electrically operated stabilisers / GSM modem...

Power:
230 V.

13763

Pictographic single axis trailer

General points



Ever more economic and environment friendly equipment & power supplies

Supply using public lighting:

Connection to a public lighting pylon with differential protection. **Little civil engineering work required.**



There is no ecological consideration that is too small!



CONTENTS

 Sign lighting equipment	 p. 56
 Curve light-signaling	 p. 57
 Enhanced signaling	 p. 58 - 59
 Dynamic enhanced signaling	 p. 60 - 61
 Permanent signal options	 p. 62 - 63
 Power supplies	 p. 64 - 65
 Adaptive traffic lights	 p. 66 - 67
 Radar speed sign	 p. 68
 Short Stop Terminal	 p. 69
 Traffic control lights	 p. 70
 Island point warning lights: Eclipse	 p. 70

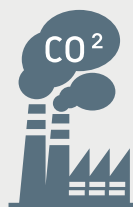
Stand-alone photovoltaic power supply

This is an independent and low-cost method of power supply.
No civil engineering, connection or subscription costs.

Example of economic and environmental summary for two 1000 mm LED triangles over 10 years:



**850 KW/h not saved,
 5000 € saving on** electricity
 consumption and subscription
 costs.



**390 Kg of CO²
 not emitted**



NEW

Intensify all Danger, Prohibition and , Information signs.

Inert signals are not always enough for passing on information to road users. Increasingly either illuminated enhancements or one or more «flashing» lights are used in association with these signals **in order to attract the attention of road-users.**



→ 5559

→ 1684
→ 1686
→ 3156

Optic Ø300

Optic Ø300 mm with 225 yellow LEDs, (others colors on-demand). Fixing on double rail on front surface
Polycarbonate protection lens. Integrated contrast screen (500x500 mm / epoxy powder coated paint).

1684	Optic Ø300 mm/225 LEDs 230 V Flashing mode
1686	Optic Ø300 mm/225 LEDs 230 V Double-flash mode
3156	Optic Ø300 mm/225 LEDs 12V Model for Public Lighting Source or solar power supply
5559	Shield for Ø300mm optic



→ 879

→ 1665
→ 1666
→ 1660

→ 35629

Optic Ø200

Optic Ø200 mm with 80 yellow LEDs. Fixing using rear plate (mast of diameter 60 to 168 mm).

1665	Optic Ø200mm/80 LEDs 230V Flashing mode
1666	Optic Ø200mm/80 LEDs 230V Double-flash mode
1660	Optic Ø200 mm/80 LEDs 12V Model for Public Lighting Source or solar power supply
879	Shield for Ø200 mm optic
35629	Contrast screen for Ø200 mm optic * 350 x 350 mm

*Designed for ø76 mm mast maximum, for larger size please specify on order.

Optic Ø130

Kit with 2 optics Ø130 mm with 30 yellow LEDs. Double-flash operating mode.

2306	Bi-flash kit Ø130 mm/30 LEDs - 230 V Equipped with a control / 230/12V power supply box.
35837	Bi-flash kit Ø130/30 LEDs - 12 V Model for Public Lighting Source or solar power supply



Options

Speed or presence detection radar, timer etc.
Adapt equipment to meet your needs, options pages 62 and 63.

Specific signaling solutions : DANGEROUS CURVE

Scrolling optic by wired connection

Optic Ø200 mm with 80 yellow LEDs.

Functioning mode for a better safety.

Synchronous flash of all the lights to help the spatial location of the bend in all its depth. Running sequence overlaid with drag effect to mark the curve.

Automatic luminosity switch-over by Day-Night cell.

Power supply + electronics integrated in the optic.

35932

Optic Ø200/80 LEDs scrolling 230V
Wired connection

3511

Optic Ø200/80 LEDs scrolling 12V
Wired connection

Mains power supply or solar power supply : Contact-us.

Chevron PPRF BTR synchro

The enhanced Police sign (PPRF) in the BTR range, has a low thickness and is made up of two aluminium signs with folded dropped edges, assembled using an elastomer seal.

The symbol is reinforced with yellow LEDs

Double command of the light source.

Synchronous flash of all the lights to help the spatial location of the bend in all its depth. Running sequence overlaid with drag effect to mark the curve.

Contact us:

All sizes (600x600 / 800x800/...).

Different power supplies (230 V, Public lighting, Solar power).

Communication of your choice (wireline, radio, GPS).

Spacecurv

Spacecurv is the dedicated solution for signaling and ensuring safety at dangerous bends. Some bends possess specific characteristics associated with the roadway, the environment and alignment which make them hazardous areas.

Spacecurv is a dual illuminated signal with an optic Ø300 mm (370 LEDs) and J4 Chevron enhanced with LEDs.

Control cabinet which allows adjustment of all sequence settings associated with the site: illumination mode and time, cyclic offset, scrolling speed.

1693

Spacecurv

❖ 1693

Power supplies

To power your equipment see the various power supplies available on pages 64 and 65.





PPRF BTR Range

The enhanced Police sign (PPRF) in the BTR range, has a low thickness and is made up of two aluminium signs with folded dropped edges, assembled using an elastomer seal.

Epoxy paint finish, silver-grey colour (metal).

It is equipped with 3 m of cable.

Rear fixing using double rail.

The adhesive is class 2.

The border is enhanced by two rows of red LEDs (for C signs: one row of blue LEDs).

The symbol is enhanced by yellow LEDs on the border (for C signs: one row of white LEDs).

The sign may be powered by a 230 V or a 12 V supply.


12 V panels must be linked to a solar power supply or supplied using public lighting.



Small

Normal

Large

	Small	Normal	Large
 A category	700	1000	1250
 B category	650	850	1050
 C category	500	700	900

All sizes and formats:

Contact us

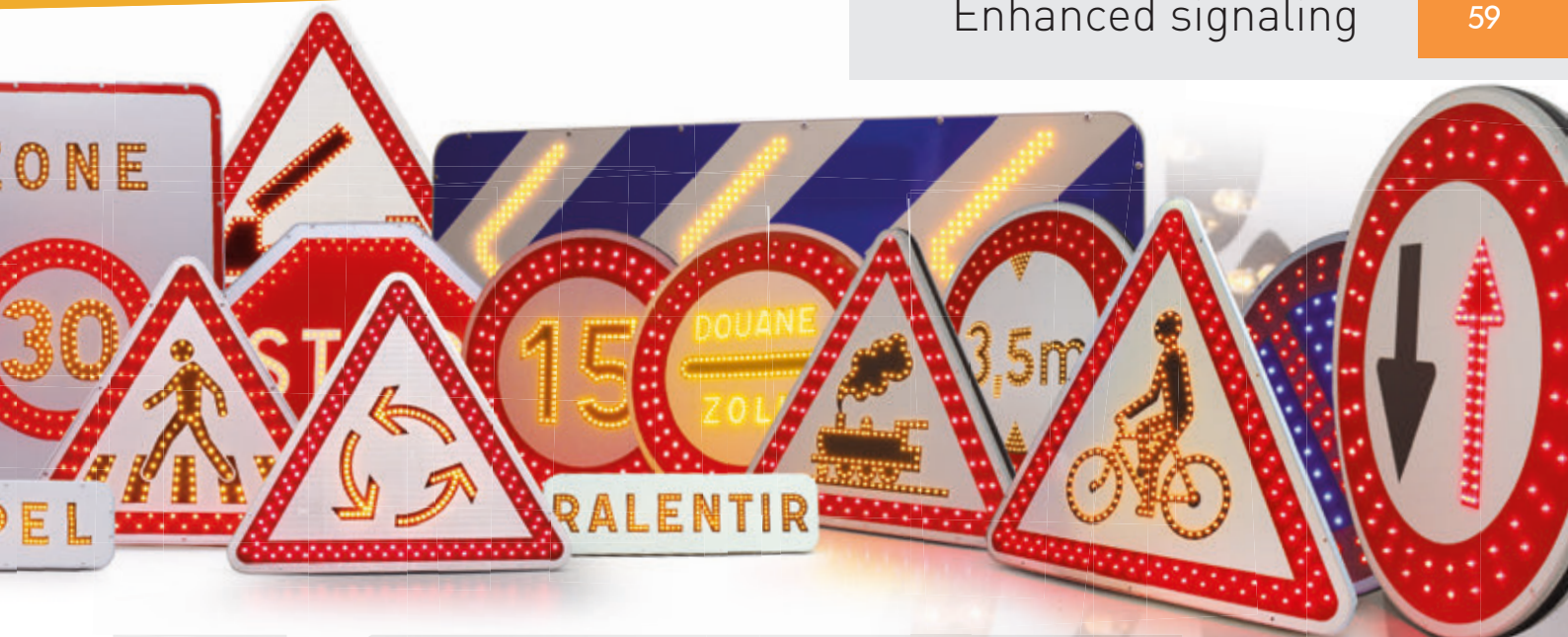


Options

Speed or presence detection radar, timer etc.

Adapt equipment to meet your needs, options pages 62 and 63.





Advantages

- Low-thickness box (5cm) in the shape of the sign.
- No savings on the number of LEDs.
 - Border formed of 2 rows of LEDs.
 - The symbol is enhanced as standard by LEDs.
- 3M certified class 2 film.
- Optional extras may be added at any time.
- High output 5mm LEDs.
- Less and simpler maintenance required.
- Visible: Prevents familiarisation effects.
- Reliable: Operational life in excess of 100,000 hours.

Power supply 230 V

38312

Power supply 230 V
for PPRF BTR

Power supplies

To power your equipment see the various power supplies available on pages 64 and 65.



Dynamic enhanced signaling



1 panel for 1 symbol

Flashing mode



1 panel 2 symbols

Alternating Operating mode

We ensure that the information displayed to road users is the most accurate, while optimizing visual impact thanks to a continuous alternance of symbols.



PPDY BTR range

The Dynamic sign (PPDY) in the BTR range, has a low thickness and is made up of two aluminium signs with folded dropped edges, assembled using an elastomer seal.

Epoxy paint finish, silver-grey colour (metal).

It is equipped with 3 m of cable.

Rear fixing using double rail.







The symbol is outlined with red LEDs on the outside and yellow LEDs on the inside.

The lifetime of a LED is greater than 100 000 hours. Red and yellow LEDs are connected in networks of 5 LEDs, ensuring continuous operation of the lighting element.

The road sign must be equipped with a power supply: 230V, street lights or solar power.

This type of sign can be manufactured with the road symbol of your choice, and can be supplied with 2 alternating symbols.

Flash mode operation

Symbol sign	Dimensions (mm)	△ and/or ○	and/or □	Text	
	700 x 700	700	650	700	-
	900 x 900	1000	850	900	-
	700 x 900	700	650	700	1 line (8 letters)
	900 x 1150	700	650	700	2 lines (2 x 8 letters)
	900 x 1150	1000	850	900	1 line (8 letters)
	700 x 350	-	-	-	2 lines

All sizes and formats:

Contact us



Options

Speed or presence detection radar, timer etc.

Adapt equipment to meet your needs, options pages 62 and 63.





Our range of LEDs illuminated reinforced Road signs is expanding with **the dynamic BTR Sign** *Innovative design, new features*

Let's not make any savings on security!

This is the reason why we had the idea of creating the Dynamic BTR sign. Today the LED illuminated reinforced road signs range expands with the "PPDY BTR".



Single or double symbols

This type of sign is entirely adaptable to your needs. Up to 2 alternating symbols of your choice.



Superior visual impact

The reinforcement of the symbol by LEDs, and its square /rectangular shape on a black background allow for a better visual impact of the symbol.



Low Case thickness (50mm)

It is made for a better integration in urban areas.
The rim and the symbol are reinforced by LEDs on a matt black background.



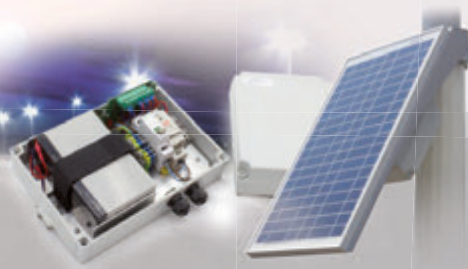
Power supply 230 V

42581

Power supply 230 V
for PPDY BTR

Power supplies

To power your equipment see the various power supplies available on pages 64 and 65.





Permanent Signals option

The most suitable equipment for the highest levels of safety!

Speed Detection Radar

Radar detects an approaching vehicle. Detection of excessive speed triggers operation of the sign.

Common application: Entering a built-up area.



Remote control start-up

Operation of the sign is initiated manually using a remote control. This system results in optimum impact of the sign when it is of greatest use.

Common application: School areas.



Ensuring safety of moving pedestrians

Activation of the pedestrian control initiates the illuminated enhancement on both signs. Pedestrians are therefore safe to move, safe in both directions of traffic.



Outline detector

An outline detector is placed on the side of the road, before the sign. If the height limit is reached, the illuminated enhancement of the maximum dimensions sign is activated.

Common application: Tunnels.



N°1 in terms of Modular design Options for creating special signals



Contact us



Your specific purpose:

Send us a description of your requirements.
We'll develop the solutions that you need...



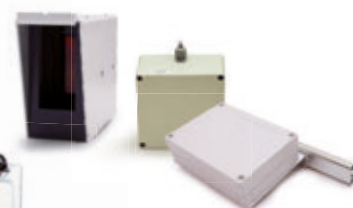
Control options

Radio remote control
Call push-button
SMS



Detections Options

Speed Radar
Movement Detection Radar
Outline detector



Timer options

Weekly
Annual



Power Supply Options

Solar, Public lighting, 230 V, Differential cut-out



Software development options

Customised specifications...



Synchronisation options

GPS, radio synchronisation

Radar

Speed Detection Radar

35485

Low power consumption radar 230 V
Max range 80 m

24221

Low power consumption radar 12 V
Max range 80 m

Movement Detection Radar

29395

Movement Detection Radar
Max range 40 m max, 12 and 230 V

Clock

22018

Weekly timer 230 V

445

Weekly timer 12 V

31840

Weekly timer 12 V
Pour kit solaire 20 W 17 Ah

On quotation

(to be adapted to the power supply) + programming kit

Annual timer

We have been adapting our illuminated signals to meet your specific needs for 20 years

Our design bureau monitors the latest technological developments daily so that we can create the best signal systems to meet your needs.

Alternative power supply solutions.



Table of power supply options

	Public Lighting Source Power		
	Standard	Clock*	Radar
Permanente optic			
Optic 200/80 (réf. 1660)	7 Ah (réf. 34577)		
Optic 300/225 (réf. 3156)			
Enhanced signaling BTR			
Triangle 700	7 Ah (réf. 34577)		
Triangle 1000			
Round 650			
Round 850			
C20 700			
C20 900			
Dynamic BTR Sign			
Contact us			

* operational for 4h per day

Supply using public lighting

The Public Lighting Source power supply is a panel which is used for charging (at night, when public lighting is operational) a Rechargeable battery which provides the equipment with power.

34577	Public Lighting Source Box 7 Ah Rechargeable battery included
1694	Public Lighting Source Box 17 Ah Rechargeable battery included
1695	Public Lighting Source Box 34 Ah Rechargeable batteries included

Differential circuit breaker

3117	30 mA differential circuit breaker
-------------	------------------------------------

Attention: Some towns for energy saving concern, turn off streetlights at night.

In this case, the SEP (public lighting system) sizing has to be subject to a specific study.

Solar power supplies (photovoltaic)

65


• Economy :

Ease of installation, no major civil engineering required, no administrative procedures, no meter connection costs, no overall power consumption.

• Preservation of the environment:

Clean and renewable energy, no CO2 emissions.

• Reliability:

The operating life of solar panels is estimated to be 20 years.

• Energy Independence :

The sun is a reliable and constant source of power.

There is no ecological consideration that is too small

Table of power supply options:

Solar power supply (photovoltaic)

The solar panel is used to charge a battery which powers the equipment. The solar power kit includes the solar panel and the rechargeable battery housing.

35637	Solar Power 10 W 7 Ah Battery supplied
23278	Solar Power 20 W 17 Ah Battery supplied
28616	Solar Power 40 W 34 Ah Batteries supplied
28664	Solar Power 60 W 60 Ah Battery supplied
32692	Solar Power 100 W 60 Ah Battery supplied
33402	Solar Power 150 W 120 Ah Batteries supplied
30872	Solar Power 200 W 120 Ah Batteries supplied

	Solar power supply		
	Standard	Clock*	Radar
Permanent optic			
Biflash kit 130/30 (réf.35837)	10 W 7 Ah (réf. 35637)		20 W 17 Ah (réf. 23278)
Optic 200/80 (réf.1660)			
Optic 300/225 (réf. 3156)	20 W 17 Ah (réf. 23278)		40 W 34 Ah (réf. 28616)
Enhanced signaling BTR			
Triangle 700	20 W 17 Ah (réf. 23278)	20 W 17 Ah (réf. 23278)	40 W 34 Ah (réf. 28616)
Triangle 1000	40 W 34 Ah (réf. 28616)		
Round 650	20 W 17 Ah (réf. 23278)		
Round 850	40 W 34 Ah (réf. 28616)		
C20 700	20 W 17 Ah (réf. 23278)		
C20 900	40 W 34 Ah (réf. 28616)		
Dynamic BTR Sign			
Contact us			

* operational for 4h per day

Increased security for all !

For inhabitants of sensitive areas,
Stop speed exceedings! Create the better behaviours!

The traffic lights are permanently on red, and switch to the green light when a vehicle arrives at the authorized speed.

This operating mode incites a virtuous driving behavior, and encourages prudent attitudes on the road.
They are installed at a zebra crossing or near a school area.

Pedestrian movement behavioural lights

Includes: 2 three-colour lights of diameter 200 mm, 2 three-colour lights of diameter 100 mm, 2 pedestrian push-button boxes, 2 radars, 1 control panel, 2 masts.

25009	Bi-directional stop-light with pedestrian movement control
29883	Bi-directional stop-light Public Lighting Source with pedestrian movement control
32408	Bi-directional stop-light solaire with pedestrian movement control

Options

35389	Class 2 sign C50 500 x 500mm «within speed limit = green light»
40610	Optic Ø 210 Red cross 12 V
1678	Optic Ø 210 Red cross 230 V

Behavioural Mobile lights

A mobile version of the behavioural adaptive light.

- Module protected with a polycarbonate face.
- Telescopic mast: closed 1,55 m, open 2,20 m.
- Wheel-barrow box with ABS cover.
- Lifting handles.

38512	One behavioural Mobile lights Battery operated
37744	C700 Class 1 Sign «Speed restriction is respected» = green light»



STOP at excessive speed

the only effective solution to dangerous drivers.

Excessive Speed = red light

Acceptable Speed = green light

Make your town safe

To counter excessive speeds and to produce a change in drivers' behaviour, the use of three-coloured lights controlled by speed is shown to be a particularly effective solution. When a high speed is detected upstream, this type of light punishes dangerous behaviour and, of course, likewise encourages careful attitudes.

They are to be installed on a main road, perhaps only on a pedestrian crossing or at the entrance to a school.

Operating mode

Safety mode : whilst awaiting detection the lights are on red. In the event of excessive speed being detected the radar activates the system to keep the lights at red. If non-excessive speeds are detected they change to green. This mode accentuates the encouragement of acceptable behaviour.

These equipments can be powered on 230 V,
solar energy or street lighting system.



Radar speed sign



EASY

The solution is simple and compact

 Easy radar speed sign

Front panel protected by a polycarbonate face. Rear rail mounting for 140 mm maximum masts (fixings not supplied). Speed display in a «fixed» mode, with 250 mm high characters, in red and green LEDs. Possible speed display from 1 to 99 km/h. Dimensions : 425 x 380 x 127 mm.

The panel can be powered with 230 volts, with street lighting system or with solar energy.

43415Radar speed sign 2H250 12V Easy
LEDs R/V - box 425 x 380 x 127 mm**43662**

Option: Easy supply 230 V

43663Option: Easy supply SEP(public lighting)
Battery supplied**43665**Solar kit 40W 34Ah fixed mode
Batteries supplied**9317**

Option: radar speed sign mobile panel



For any other informational radar option
(data collection, matrix text)

Contact us  









These equipments can be powered on 230V,
solar energy or street lighting system.



Short Stop Terminal

69

The Short Stop Terminal is **the ideal solution** for the management of limited-time parking places.

-  Favours the local business.
-  Perfectly identified.
-  Very visible due to its big size.
-  Put into service without major civil engineering work.
-  Proven technology.
-  In the colors of your city.

TTS Short stop terminal

This device allows a large number of vehicles «rotation» on the same parking place. Short stop terminals contribute to reduce the traffic of vehicles searching for a place, which also reduces noise and pollution.

Our terminals authorize the parking for a limited time, ranging from 10 to 40 minutes.

They can be with or without count down time, manage a simple or a double place, and function on 230 V ou public lighting system.

These terminals can be equipped with an optional clock, or with an «SMS sending» option (after the authorized parking times is exceeded).

Our minute short stop terminals are customized with the logo, the text and the town chosen colors.

The **detection and management system** does not require complex programming. With a single setting requiring no adjustments, the desired parking time is easily set either in the factory or by the client themselves.

The short-stay terminal is equipped with the latest design of electromagnetic detector.

Standard version or simple count down or double place

Voltage	Number of places	With time count-down	Single-sided	Reference
230 Volts	1	No	Yes	23372
230 Volts	2	No		38336
230 Volts	1	Yes		31330
230 Volts	2	Yes		31331
12 Volts*	1	No		24458
12 Volts*	2	No		36124
12 Volts*	1	Yes		40932
12 Volts*	2	Yes		40933

*It is necessary to add the adequate power supply to the terminal.

Crossing traffic light



Eclipse



Crossing traffic light Ø210

Polycarbonate assembly equipped with 2 optics Ø200 mm: one red, one green.

Crossing traffic light - LEDs light

1706 Crossing traffic light Ø210 - LEDs 12 V

2329 Crossing traffic light Ø210 - LEDs 230 V

Crossing traffic light - E27 Light bulb.

2331 Crossing traffic light Ø210 - E27 Light bulb 12 V

2330 Crossing traffic light Ø210 - E27 Light bulb 230 V

38525 E27 Light bulb LEDs 230 V

Crossing traffic light Ø100

Polycarbonate assembly equipped with 2 optics of diameter 100 mm: one red, one green. LED light source, E27 230V bulb. Fixing system using inserts.

42531 Crossing traffic light Ø100 LEDs 12 V

15856 Crossing traffic light Ø100 LEDs 230 V

Specifics crossing traffic light

Bicolor crossing traffic light. ABS optic Ø210 mm. Optic built of 80 red LEDs and 81 green LEDs.

33950 Bicolor optic Ø210/12 V Red / Green

30915 Bicolor optic Ø210/230 V Red / Green

Red cross / green arrow

ABS optic Ø210 mm. Cross built of 53 red LEDs. Arrow built of 60 green LEDs.

37679 Optic Ø210mm/12 V Red cross / Green arrow

24718 Optic Ø210/230 V Red cross / Green arrow

1678 Optic Ø210/230 V Red cross

1677 Optic Ø210/230 V Green arrow

Road island edge warning lights

The rows of LEDs on the circumference operate as fixed locating lights. The central part operates as a flashing light during bad weather.

Bowl diameter 250 mm made of grey-painted aluminium, IP55. 300 yellow LEDs arranged in 2 parts (crown ring and central part).

1707 Eclipse lights

GENERAL SALES CONDITIONS

Article 1 - General points

The present sales conditions apply to all our sales except for public contracts and sales to local authorities, which, due to their nature or measures that are in force, are the subject of specific conditions.

Article 2 - Orders

All orders must be confirmed in writing (letter, email or fax). Confirmed orders cannot be subsequently modified. Any later modification will be invoiced as an addition. Duly recorded orders can only be cancelled with our written agreement.

Article 3 - Prices - Lead-times and delivery

- Our reference prices are set each year in our catalogue.
- Our lead-times are given for indication only. Delays which might occur will not give rise to any indemnity on our part, nor will they be the motive to refuse goods.
- Unless otherwise stated, our tariffs are excluding departure taxes, packaging and transport invoiced as additions. Goods are dispatched in accordance with the standard conditions of the transport service providers. Urgent or special deliveries are to be the subject of a specific agreement and the purchaser will be invoiced for these as an additional service.
- Our goods, even those dispatched «free», whether delivered by ourselves or third parties, always travel at the risk and peril of the receiving party to whom they belong. In the event of apparent defects or missing items, make all necessary observations, check the consignments on arrival and if necessary take recourse against the transport service provider who alone has responsibility.
- As a result, the consignee must, at the time of acceptance, check the products and formulate precisely on the carrier's voucher any defects or deficiencies found and, if necessary, refuse the goods.

Any unspecified reserves such as «Subject to unpacking, damaged boxes, or damaged goods» will not be accepted.

The recipient must also confirm by registered mail these reservations to the carrier no later than 48 business hours after receipt of the goods, and send a copy of this letter to: Traffic Technologie Système, Quality Department, ZI 1 avenue 2ème Rue BP594 06516 Carros Cedex, recalling the references on the delivery note.

Article 4 - Conditions for settlement

- For all our «account» client, the payment deadlines are set at 45 days from the invoicing date.
- No discount for early payment.
- During the completion of an order or contract, we reserve the right to demand any guarantee of payment in the event of new information about the situation of our client being brought to our attention (non-payment by due date to ourselves or to a third party, negative opinion following an examination of financial documentation etc.).
- All sales to clients without an account with us are payable with the order.

Article 5 - Penalties

- Late payment interest equal to the official lending rate plus 7 points will be applied as a penalty once the due payment date has passed. This will apply to the full amount remaining due.
- In the event of failure to pay on one or more of the due instalments, bills of exchange, promissory notes, the other instalments will become immediately payable, even if they have given rise to bills of exchange.
- One-off indemnity for recovery costs 40 € (ART D441-5 of the French Commercial Code)

Article 6 - Warranty

- Before installation or use, the delivered product must be stored in their original packaging under cover, protected from water or humidity, corrosive products, excessive heat or cold temperatures.
- Our clients expressly agree to scrupulously follow the advice for use provided for each type of product in our catalogue. We will not accept any responsibility and will not implement any warranty in the event of the advice for use not being followed.
- The warranty commences on the day of delivery. Equipment must be returned carriage paid, with all references relating to the fault as well as the invoice number. The re-dispatch of equipment after repair is made carriage-paid for equipment under warranty. The warranty ceases to be applicable if the equipment has undergone any non-authorised intervention, or if elements disturb the normal operation of the equipment.
- The standard warranty is for 12 months.
- Our warranty is strictly limited to the replacement of equipment deemed to be defective.

Article 7 - Retention of title

- Products are sold with retention of title.
- The seller retains title to the products until the payment of the purchase price made effectively and in full by the purchaser.

In the event of default of payment at the due date, the seller may reclaim the products and cancel the sale. Cheques and bills of exchange are only considered to be payments once they have been effectively deposited. Until that time the retention of title clause is to apply in full. These arrangements are not to be an obstacle to the transfer, on delivery, of the risk to the products that are sold. The purchaser agrees not to transform or incorporate the said products or re-sell them, or use them as collateral, until the purchase price is paid in full, on pain of immediate reclamation of the products by the seller.

Article 8 - Derogations

No derogation to the general sales conditions may be made without written confirmation on our company's headed paper.

Article 9 - Disputes

All disputes relating to our sales, even in the case of warranty related claims or multiple defendants, are to come under the exclusive competence of the French Commercial Court within whose jurisdiction the registered office of Traffic Technologie System falls.

Other activities of TTS



Intelligent Transport Systems



Innovative supervision solutions for city parking



Parking Systems Signaling

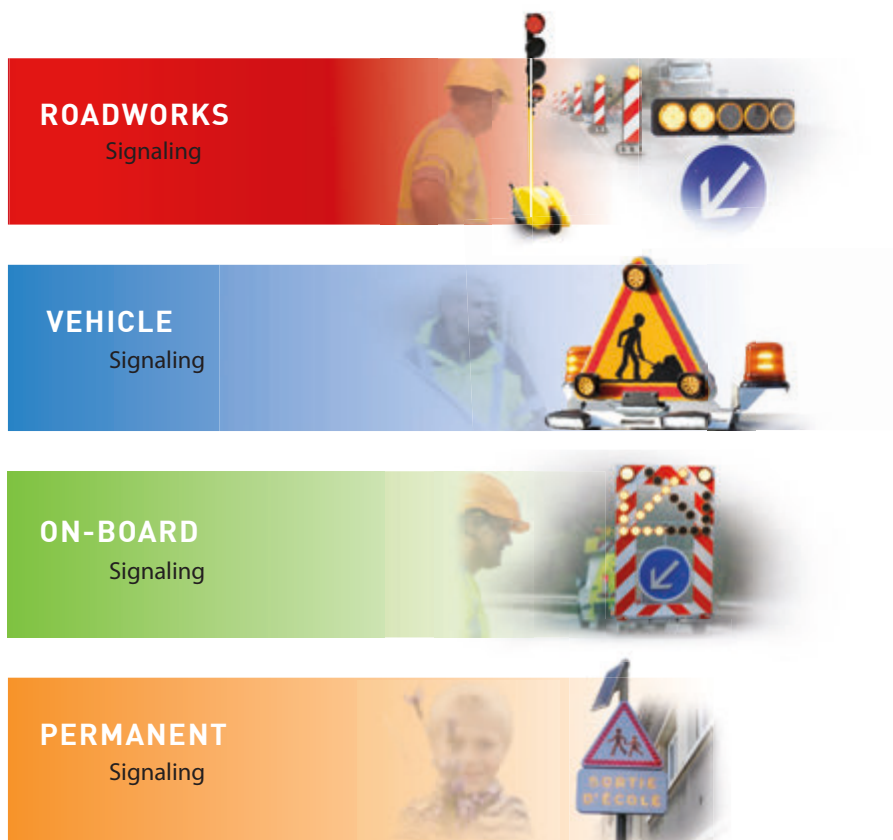


Digital Display Systems



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Made in France