

Dear Readers,



After acquiring the shares of F.V.S. GmbH in Wendelstein near Nuremberg, the AVS Group is now also successfully operating in Bavaria! In addition to the usual professional traffic safety activities offered by F.V.S., we have also started production of the mobile crash barrier ProTec 120/121 in Nuremberg.

With the services it offers and with the production of its own systems, the new site thus plays a fully integrated role in the range offered by the AVS Group. Expanding our production capacities in this way makes us even better able to respond to the needs of our customers. We are very pleased that the takeover of F.V.S. GmbH has thus brought a reliable partner from the branch into the AVS Group, and we also welcome the scope this site gives us for pursuing our growth targets.



Dieter Berghaus,
CEO

Berghaus traffic light training 2018

Speed is now of the essence: our popular traffic light training courses are once more due to start again in the spring, and places on our coveted seminars are always in great demand. More than 1,700 employees from authorities, road maintenance depots, construction companies and traffic safety service providers have taken up our offer in recent years to receive training in mobile traffic light technology straight from the manufacturer.

At each of the two-day seminars, we provide participants with necessary basic know-how about mobile traffic light systems, making reference to current statutory regulations such as the TL-LSA, the ZTV-SA and the RiLSA 2015. Our experienced technicians use practical examples for writing signal timetables and for participants to practice how to implement them in the various traffic light controllers.

Course I is ideal for beginners in mobile traffic light systems or for users intending to deploy these systems primarily for alternating one-way or T-junction operation or at the most for controlling crossroads traffic situations.

For those with more advanced knowledge, **course II** consists of a user seminar for mobile crossroads system controllers in the current EPG series together with the pedestrian system FG 2, and also introduces remote control/remote maintenance for the EPB controllers.

You are invited to attend the courses in Kürten (North Rhine-Westphalia) in week 5 or in Mellingen (Thuringia) in week 10. So make the most of this offer and ensure your employees receive training straight from the manufacturer: after all, good qualifications always pay off!

The registration flyer for the courses is now available on our website. It is unfortunately not possible for us to accept registrations by phone. The courses are – as always – in German only.
berghaus-verkehrstechnik.de



Whether beginner or advanced user, we bring you completely up-to-date with the latest mobile traffic light technology here in our training room in Kürten. Our experienced technicians gladly share their practical know-how accumulated over many years and will answer any questions.

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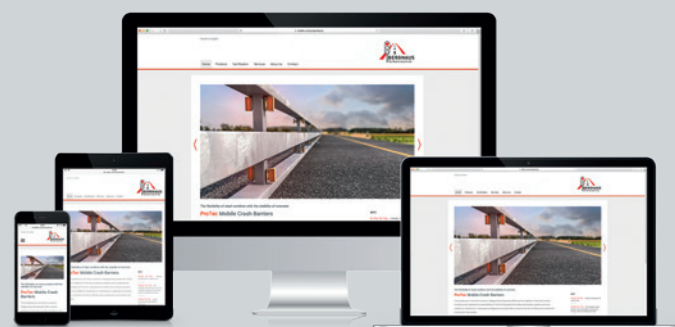
- PPP A7 Bockenem – Göttingen
- New site in Göttingen
- The Euskirchen and Dresden branches have moved

Relaunch: new look for Mobile-Schutzwaende.de

We have completely revamped our website www.Mobile-Schutzwaende.de. The homepage now has an optimised design: it is much clearer and less cluttered.

Visitors will find concise presentations of interesting information, technical data and illustrations for the mobile crash barriers in the ProTec family and can consult tables and lists, download brochures and data sheets and find out everything about the tested containment levels and effective ranges for the individual crash barriers.

Our customers use our website not just in the office or at home, so that the relaunch has focused particularly on clear presentation and easily legibility based on responsive web design. The on-screen display for our website and the corresponding resolution adapt automatically to the differing requirements of mobile devices such as smart phones or tablets. This makes it even easier and more user-friendly to surf on **www.Mobile-Schutzwaende.de** while out and about.



The welcome page of Mobile-Schutzwaende.de has a clear structure, with the new 3D illustrations as an added eye-catcher. Needless to say that the website is also available in English. Take a look and click through our new menu guide.

Save the Date!

INTERTRAFFIC 2018 in Amsterdam

With around 800 exhibitors from 47 countries and more than 30,000 trade visitors from 134 countries (as of 2016), the INTERTRAFFIC Amsterdam is the world's largest and best known international innovation platform for sustainable mobility solutions, products and services in the fields of infrastructure, traffic management and traffic safety as well as parking.

Please save the date of this important event in your calendar now already today, as the next INTERTRAFFIC will be held over four days from **20 to 23 March 2018** at the RAI Exhibition and Convention Centre in Amsterdam.

As a renowned, innovative manufacturer of mobile traffic technology, it goes without saying that for years now we have been attending this international trade fair that is held every two years in the Netherlands. Our exhibition stand is right next to the main entrance in Hall 1 and provides you with

all the latest news about mobile traffic technology; interested trade visitors can also take a look at mobile traffic light systems and mobile crash barriers from our extensive production and delivery range. You are cordially invited to visit us at our **exhibition stand 01.410** in Hall 1: we are looking forward to seeing you again in Amsterdam and to lots of interesting talks.

The next issue of Berghaus News will give a preview of our trade fair presentation. Let us surprise you!

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Mobile traffic light system MPB 44 M/S – for controlling up to 12 groups

The mobile traffic light system MPB 44 M/S is tested as per TL-LSA type class D and is used for flexible control of maximum 12 signal groups. The special design with master controller and slave signal heads makes it ideal for many different traffic situations. It is ideal for example for controlling pedestrian crossings with request feature while dealing at the same time with vehicle-actuated alternating one-way traffic, T-junctions and crossroads, and even possibly with an additional turning lane, flashing light or waiting signal.

The MPB 44 M/S series is based on the mobile traffic light system MPB 4400 that has been popular for many years and proven its worth with outstanding practical service. This means our customers do not have to change over to a completely new system: depending on the features, already existing signal heads can be integrated immediately in the MPB 44 M/S system.

Compilation of the signal timetable programs is also the same as for the MPB 4400 series. The great advantage is that everyone who has worked with this traffic light in the past can operate the new MPB 44 M/S traffic light system straight away. In other words, staff won't need extra training or have to learn how to work with a new system. This is good news particularly for those of our customers who have become familiar with using the reliable MPB 4400, in some cases for more than 20 years.

The MPB 44 system consists of a master controller „M“ and individual signal heads „S“ mounted directly to the masts. The signal heads are equipped with Berghaus LED and 42V technology for a central power supply and are available as 2-aspect pedestrian heads and 3-aspect carriageway heads.

If necessary, all carriageway heads can be equipped with directional radar detectors for vehicle-actuated traffic light control. Similarly, our PB-CAM can also be fitted to the

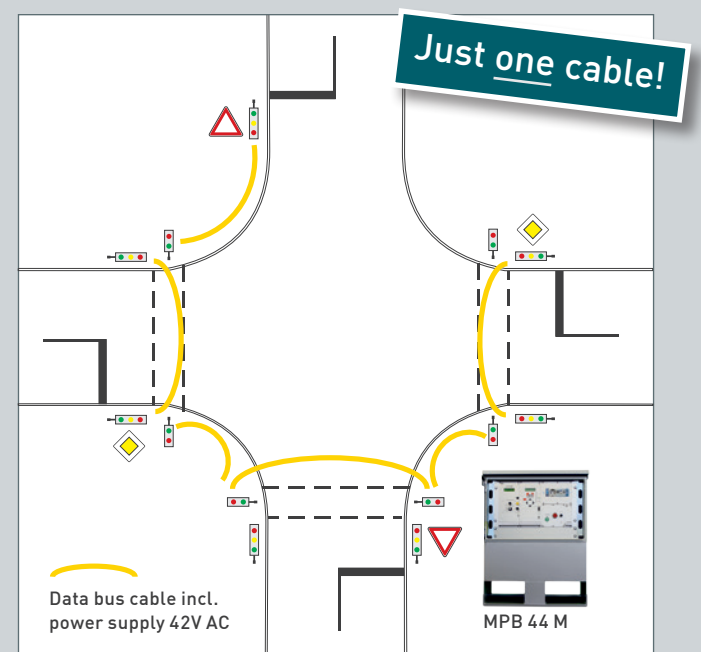
MPB 44 S signal heads as video detectors for traffic telematics. Request buttons can be installed at these signal heads to turn them immediately into a request traffic light for pedestrians. No additional wiring to the controller is needed for these buttons.

All signal heads are equipped with their own PCB that also registers all additional items of equipment that are connected up to the system. The signals are actuated centrally via the data bus from the MPB 44 master controller.

Controller MPB 44 M already contains the 1st traffic light control and is therefore supplied ex works with a special carriageway signal head.

Data exchange between the master controller and the individual slave signal heads shares use of the single cable with the central 42V power supply from the controller, thus clearly reducing the amount of wiring needed on site. No extra cables are needed for the power supply, detectors, buttons and data bus so that this one-cable solution saves lots of time and money when installing and dismantling the traffic light systems.

If under exceptional circumstances there is no mains voltage available at the roadworks, all components can also be operated quite separately with 12V batteries at the controller and at the individual traffic lights. Depending on the specific application, up to four signal groups can



Wiring diagram: data exchange together with central power supply for all traffic lights (up to 12 signal heads) using just one common cable from the MPB 44 M controller.

be programmed directly at the controller without needing any additional tools – quickly and easily using the handbox interface integrated in the master, which will already be familiar from the MPB 4400. For programming up to 12 signal groups, the corresponding interface for connecting a laptop is already an integral feature in the master. The controller therefore also offers a freely accessible 230V service socket to warrant laptop operation with mains voltage at all times. Programming with the laptop follows the usual procedure with our graphic software program AmpelTools.

The MPB 44 M controller also includes the 230/42V transformer for central power supply to all signal heads, a residual current-operated device (RCD), the emergency off switch for the complete traffic light system, the connection for an external printer or laptop (USB and serial port) and the connection for our SMS messaging module. The controller is also equipped ex works with a connection for an external operating device for selecting manual operation, continuous red, flashing, lamps off and automatic, with cable or radio remote control for example. A synchronous input is also available to coordinate progressive signalling, together with an output for a parallel signal head.

The digital AC meter fitted in the front panel of the MPB 44 M controller can be used at any time to see quickly how high the 230V energy demand is – ideal for settling costs on the rare occasions when a private mains connection has to be used.

Would you like to know how to integrate your existing MPB 4400 traffic light systems in the new MPB 44 M/S system? We will gladly advise you. Please ask for your individual quotation.



MPB 44 M: compact master controller for actuation of up to 12 signal groups, including integrated 42V transformer for central power supply to all MPB 44 S-signal heads.



MPB 44 S signal head for controlling pedestrian and carriageway traffic with integrated control and switching power supply 42/12V.

2 in 1: LED prewarner with additional overhead sign 6 metres high

The new Berghaus TOP-LED 2 offers two mobile LED prewarners in one: we have now combined the many varied possibilities offered by our mobile LED prewarner MV-LED with the advantages of the TOP-LED overhead sign on one chassis as TOP-LED 2.

The user is now free to decide whether to operate TOP-LED 2 just as a normal LED prewarner on the side of the road or, depending on the traffic situation, to extend the projecting arm with LED signs at a height of six metres above the carriageway. Particularly on multilane highways, this ensures that adequate warning is also given to road users on the outside and middle lane, whose view of roadside LED prewarners on the hard shoulder is often concealed by trucks in the slow lane.

In addition to the back of the LED prewarner, the complete surface of the overhead LED sign can be used in landscape format for traffic signs, texts, information and moving images. It is thus possible to show signs above the carriage for more than just two lanes. The LED display signs have gone through lighting tests as per EN 12966 and are also available in RGB design on request.

The scope of supply includes German-language editing software for users to create road signs, pictograms, symbols and

texts as well as running continuous text, for compilation on the PC. Berghaus TOP-LED 2 is mounted on a hot-dip galvanised trailer with inertia brake and parking brake. The standard version of the tandem trailer has a height-adjustable drawbar with exchangeable DIN eye and ball-type towing device. This means TOP-LED 2 can be towed either by car or truck. The overhead LED sign is set up and lowered with a hydraulic lifting and lowering device. Hydraulic supports ensure the system is set up quickly and safely on site. The system has been successfully stability-tested at wind speeds of up to 85km/h.

The TOP-LED 2 mobile prewarner by Berghaus lets you give road users clearly visible warning in good time about one-day roadworks, emergency and hazard situations at roadworks and temporarily changed road layouts, thus making an active contribution to the safety of road users and workers on construction sites and hazard situations.



Particularly at one-day roadworks or when accidents happen on multilane highways and motorways, traffic safety depends on making road users well aware of the changed situation and approaching roadworks. Depending on the specific situation, Berghaus LED-TOP 2 can be used as mobile LED prewarner or, if necessary, with projecting arm and additional overhead sign at a height of six metres across multilane carriageways.



New edition: Sign Scout, your practical aid

After being briefly out of print, the 7th updated edition of our popular and often sought-after Sign Scout is now available once more. In a slightly larger format with altogether 64 pages, it features around 600 illustrations and descriptions of all the road signs that are currently valid in Germany according to the new Road Sign Catalogue (VzKat 2017). It also provides useful practical tips and instructions for simple, robust roadworks signage and for mobile traffic lights.

The Sign Scout makes it easy for example to find the necessary Berghaus sign stands for verified sturdy installation according to the stipulations of the TL Mounting Devices, to go with the road signs specified in the Highway Code or in the traffic regulation plan. The system is simple to understand with coloured dots for clear and correct allocation and selection of the right mounting device.

We also give a brief look at our extensive product range from A to Z, with mobile traffic light systems and mounting devices, mobile crash barriers, mobile warning trailers and LED prewarners through to double LED warning lights, made in Germany.

On request, we will gladly supply our customers with free individual copies of the 7th edition of the Sign Scout while stocks last, although we do make a nominal charge for larger quantities of this practical pocket aid.

If you are a company dealing in traffic technology or a service provider for traffic safety systems and want to give your customers your „own“ Sign Scout, it is naturally also possible to produce our Sign Scout in an individual cover customised for your company while keeping the same contents. Minimum quantities in this case amount to 1,000 each.

F.V.S.: new in the AVS team



AVS The Traffic Safety Professionals are once again expanding their network, receiving active support for their nationwide German service team. Since May, our long-standing partner F.V.S. GmbH from Wendelstein near Nuremberg has come under the umbrella of the AVS Group.

The renowned specialists from Franconia have been operating as traffic safety professionals for nearly 40 years in Bavaria and Baden-Württemberg. F.V.S. GmbH was founded by Peter Berghaus as the company's Nuremberg branch way back in 1978. 10 years later, the company was taken over by Mr. Benaburger as sole partner, who continued to steer the company on a successful expansion course. There has therefore always been friendly business contacts between F.V.S. and Berghaus. The F.V.S. colleagues are fully equipped with mobile traffic lights and mobile

crash barriers by Berghaus and AVS, so that smooth, comprehensive collaboration is now all the easier.

With a skilled workforce of around 60 employees, a fleet of about 40 vehicles, 40 mobile warning trailers and LED prewarners together with stocks of more than 60km mobile crash barriers, F.V.S. is a strong, expert partner for traffic safety. Together with the colleagues at F.V.S., we look forward to working together and to expanding the AVS Group with its new site in Bavaria. Welcome to the AVS team!

Just a small part of the extensive F.V.S. fleet on the company premises in Wendelstein. Clearly visible: the rails for the gantry crane covering the entire storage area for really easy loading and unloading e.g. of beacon base plates, sign stands and mobile crash barriers.



Next major project for AVS: upgrading the A7 motorway between Bockenem and Göttingen



Photo: Lower Saxony State Authority for Road Construction and Transport.

The official groundbreaking ceremony for the six-lane upgrade of the A7 motorway between Bockenem and Göttingen in Lower Saxony took place on 12 September. In future, the A7 between these two junctions will be maintained and operated in the framework of a public/private partnership (PPP) over a period of 30 years.

The private contractor „Via Niedersachsen“ is also responsible for the six-lane upgrade between the Seesen and Nörten-Hardenberg junction; this section was awarded as an „availability model“ (V-model). The overall length of the complete section is nearly 60km, including around 29km for the hitherto four-

lane upgrade section. The traffic safety contract was awarded to AVS Lehrte GmbH. Over the next four years, our AVS experts will guide road users safely through the roadworks, while at the same time facilitating protected work procedures behind the crash barriers. To hinder flowing traffic as little as possible, the

roadworks are being set up with 2+2 and 4+0 road layouts, without traffic interruptions at all if possible.

In addition to the road itself, the 29km of six-lane upgrade work on the A7 motorway also includes constructing or extending 37 bridges (including one large bridge and two crossing facilities for wild animals), upgrade/modification work to three junctions, upgrade work to two parking areas and around 4,400 running meters of noise barriers and walls. The project should be finished probably during 2021.

Time and again the AVS Traffic Safety Group finds itself being called upon as a reliable partner for traffic safety in major projects implemented in the framework of public/private partnership models. In the past these have included the long-lasting, long-distance major PPP roadworks on the A1 between Hamburg and Bremen, on the A5 between Baden-Baden and Offenburg, on the A9 upgrade project between Hermsdorfer interchange and Hof, on the A7 between Hamburg and Bordesdholm, together with this latest current project on the A7 between Bockenem and Göttingen.

Every day, the AVS road safety experts guide thousands of road users safely through roadworks. You too can benefit from our decades of experience as traffic safety professionals and use the nationwide complete service that we offer for safe roadworks all from a single source!

New AVS site opened in Göttingen

Three new AVS trucks, countless pallets with brand-new TL safety beacons, many kilometres of lane marking foil and mobile crash barriers are ready and waiting for use.

The 14th site for the AVS Traffic Safety Group has now been opened in Göttingen, on Reinhard-Rube-Straße 11 in the suburb of Weende. Under the auspices of AVS Lehrte GmbH, a Service Centre has been set up not far from Göttingen-Nord motorway junction, with six new employees already being hired from the surrounding area. This will now be the basis for AVS Lehrte to provide active support for the road safety aspects of the PPP project on the A7 motorway. Throughout the construction period, it must be possible for road traffic to continue using the motorway safely – and this is where the AVS teams from Lehrte and Göttingen come in.

In addition, the Göttingen colleagues will also perform road safety work on state and federal highways from Seesen down to the state border with Hessen, adjoining on to the AVS sites at Lehrte and Kirchheim.

AVS Dresden branch has moved



The large number of major projects and the corresponding growth in workforce and material for the Dresden branch made it necessary to find larger premises in the greater area of Saxony's capital city.

After a lengthy search and fairly complex conversion work, mid July the AVS team under branch manager Gerhard Seel was able to move from the now inadequate site at the airport to the commercial estate at Ottendorf-Okrilla. The new Dresden branch of AVS Mellinger GmbH is just 10km from the old site, conveniently located directly on the A4 motorway and near the A13 and the Dresden-Nord motorway interchange. At the new site Am Hügel 1, the approx. 30

AVS colleagues can now enjoy the generously sized offices, appropriate staff restrooms and breakrooms as well as sufficient storage and shed space with a workshop. There is also plenty of outside space available for storing the nearly 40 vehicles, trailers, mobile warning trailers and material stocks for mobile crash barriers. The premises are plenty big enough for further growth.



New site for AVS Euskirchen



In summer 2017, AVS Euskirchen moved to new modern, generously designed premises with plenty of storage and shed space as well as lots of suitable outside storage areas, offering the employees appropriate and attractive working conditions.

Compared to the old site, the premises on Alfred-Nobel-Straße 52 have nearly tripled the office floor space and outdoor storage areas, with additional outdoor premises available next door as an ideal option. As well as creating better working conditions for the employees, the new location comes with a long-term lease and plenty of opportunities for further growth, thus giving staff additional

motivation together with positive, secure prospects for the future. The Euskirchen branch of AVS Overath GmbH with a workforce in excess of 30 employees and a large, modern fleet is one of the larger branches in the AVS Group. Its main activities consist in road safety projects for major motorway roadworks in southern North Rhine-Westphalia and northern Rhineland Palatinate.