

# BERGHAUS NEWS

Traffic Technology • Mobile Crash Barriers



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2016 Intertraffic

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## Your entrance ticket to the INTERTRAFFIC 2016



Are you planning to attend the INTERTRAFFIC in Amsterdam and would you like to visit our stand to find out about all the latest products from Berghaus Traffic Technology and AVS Traffic Safety Professionals?

Then we will gladly deal with your admission, and cordially invite you to the trade-fair, as this year once again we have a number of free tickets for our loyal customers.

Would you like to take up this sincere invitation?

Then please use the registration link on our homepage

[berghaus-verkehrstechnik.de](http://berghaus-verkehrstechnik.de)

to register free of charge directly with the trade-fair organiser RAI by 28 March.

We look forward to seeing you at our exhibition stand **01.410 in hall 1!**

An entrance fee of €40 will be charged for online registrations made after 28 March or later registrations without an invitation from an exhibitor. RAI will be charging admission of €70 on the trade-fair days.

## New: safe city roadworks with ProTec 50 City



New mobile crash barrier ProTec 50 City: ideal choice for professional traffic safety in urban settings. Handy element length of 2 m and low weight of 23.5 kg per metre makes it ideal for flexible use.

At the INTERTRAFFIC in Amsterdam, for the first time we will be presenting the latest innovative addition to the ProTec family: ProTec 50 City. This is the "handy" version of the proven ProTec 50 mobile crash barrier, rated specifically for use in the urban setting.

As with all ProTec crash barriers, reflectors are fastened at regular intervals on both sides at the top and bottom of the elements, thus eliminating the need for additional yellow road markings parallel to the barrier.

The wide water opening prevents any dangerous accumulation of rainwater at the barrier. The low element weight of just 23.5 kg per metre and the easily handled element length of 2 metres make this crash barrier ideal for city use. The planning-relevant width of just 10 cm is even narrower than a road marking line. Although intended for urban use, the ProTec 50 City has been successfully tested under the same strict conditions

of DIN EN 1317 that apply to motorway crash barriers. Although completely without ground anchoring, ProTec 50 City passed the impact tests at 80 km/h with containment level T1, effective range W2 and an ideal impact force level of "A".

When considering these excellent test results, it is also worth bearing in mind that the speed limit through urban roadworks is usually much lower and often reduced to 30 km/h. Any vehicle impact at this reduced speed means that the road restraint system offers even greater safety for road users and workers at the construction site. The narrow mobile crash barrier ProTec 50 City is the ideal choice for professional traffic safety in the urban setting.

No matter what the specific situation, with mobile crash barriers in the ProTec family you will always be on the safe side!

## New: roadworks maintenance with Service Control GPS

Punctually for the INTERTRAFFIC, we present the new Service Control GPS with innovative technology in an even handier design.

The Service Control GPS allows for comprehensive control of all maintenance criteria demanded in point 7 (6) ZTV-SA 97 in next-to-no time, with reliable recording of your daily inspection trips. The system gives you counterfeit-proof documentation stating the date, exact time and GPS coordinates, together with the work performed. You can thus reliably prove at any time that and when you fulfilled your inspection obligations and that the road signs, markings, directing elements, traffic systems, lighting systems and roadrestraint systems at the roadworks have been checked beyond any shadow of doubt. During every inspection, the respective CURRENT status of the traffic safety measures is registered using the menu, with electronic documentation of the maintenance work that has been performed. Service Control GPS also gives customers or awarding



Exact documentation of your roadworks maintenance

road construction authorities reliable proof that the controls specified in the framework of the road safety obligations have been regularly fulfilled on site.

The new handy Service Control GPS comes in a robust housing with IP code 65. The innovative OLED graphic display is always easy to read. The charge status and satellite signal strength are clearly shown, while the integrated clock and GPS module is responsible for precise position tracking. It is easy to change over to the new system because the RFID reader also reads the Berghaus roadworks ID chips that have been used up to now.

Four soft keys permit intuitive use of the Service Control GPS, which can save up to 499 maintenance assignments. Digital signatures have been set up for counterfeit-proof data storage and printout. Long operating phases are ensured by the Li-Po high-powered battery. The accessories include a vehicle battery charger with holder so that the Service Control GPS has a defined position in the maintenance vehicle and is always ready to use.

## Overview: safely through the roadworks with mobile ProTec crash barriers



**ProTec 50**

With just 10 cm planning-relevant width, the new ProTec 50 is the narrowest mobile road restraint system by Berghaus up to now, and also the lightest, weighing just 28.7 kg per metre. Containment level T1/W2, ASI value A. All crash barriers in the ProTec family are always connected by a force-fit transition – naturally also as a cross-system solution or connected to stationary road restraint systems.



**ProTec 100**

The compact mobile crash barrier ProTec 100 fulfils containment level T3/W2 with an outstanding ASI value of 0.2 (A). Only 12 cm is needed as planning-relevant width. Another advantage of all ProTec barriers is that the flexible reflectors are protected in recesses and can't be torn off by passing vehicles. Furthermore, they are always fitted at the same height on all ProTec systems.



**ProTec 120 / ProTec 121**

The ProTec 120 mobile crash barrier manages with a planning-relevant width of just 14 cm in containment levels H1/W5 and T3/W2.

The new model variant ProTec 121 with the same dimensions has been successfully tested with T3/W1.

All ProTec systems have a wide opening to let water through, preventing any puddles from accumulating at the barrier.



**ProTec 50 City**

The new mobile crash barrier ProTec 50 City is the ideal choice for professional traffic safety in the urban setting. The "handy" element length of 2 m, a planning-relevant width of 10 cm and the low element weight of 23.5 kg per metre make this crash barrier particularly suitable for city use while offering a containment level of T1/W2 and an ASI value of A. Tested in impact tests according to the strict stipulations of DIN EN 1317 for 80 km/h. In addition, the speed limit through urban roadworks is usually reduced to 30 km/h which makes the ProTec 50 City even safer!



**ProTec-Tor 50**

**ProTec-Tor – speedy access for emergency services**  
The ProTec-Tor can be opened quickly by hand by the police, fire brigade or emergency services. All it takes is for a cotter pin to be pulled in front of and behind the ProTec-Tor elements to remove the locking wedge and open the crash barrier.

Fitted at regular intervals or at strategic points e.g. before and after tunnels, with the ProTec-Tor the crash barrier can be opened in next-to-no time for all emergency services to drive through – no tools needed!



**ProTec 160**

The mobile crash barrier ProTec 160 fulfils containment level H1/W4 and needs a planning-relevant width of just 18 cm. ProTec 160 can be used for all applications as per ZTV-SA (A to E).

## Perfect control: mobile traffic light technology from Berghaus at a glance



**MPB 1400, quartz-controlled signal system as per TL-LSA 97 for alternating one-way traffic (export version also for T-junction and crossroads traffic)**

- Simple handling with menu-driven infrared remote control
- Menu language in German, English, French, Spanish, Dutch, Italian or Turkish (other languages possible)
- Fixed-phase mode, manual mode with continuous red or continuous green, blinking lamp, lamps off
- Can be extended by simple addition of identical signal heads to obtain T-junction or crossroads control (for export)
- Standard halogen lamp or innovative LED technology on request with night-time dimming



**MPB 3400, radio-controlled signal system, vehicle-actuated for alternating one-way traffic, can be extended through to crossroads control**

Technical features as MPB 3200, with the following **in addition**:

- All signal heads identical: can be extended immediately by simple addition of more signal heads to obtain T-junction or crossroads control - technically also by radio. (To comply with the TL-LSA, in Germany traffic lights for crossing traffic flows must be connected by cable).
- In contrast to the competition, a crossroads traffic light consists of four identical full traffic lights that can be combined at random, instead of one transmitter and three receivers.
- Different modes can also be mixed, for example: main road with green phase extension and side road (or roadworks exit) on request



**MPB 3200, radio-controlled signal system, vehicle-actuated for alternating one-way traffic**

- Clearly structured operation – all at a glance
- All signal heads identical – can be used as sender or receiver
- Vehicle-actuated control with directional radar detectors
- Fixed phase mode, request mode, green phase extension, manual mode with continuous red or continuous green, blinking lamp, lamps off, green on request (continuous red)
- Radio, cable and quartz control for universal use
- Standard halogen lamp or innovative LED technology on request with night-time dimming



**MPB 4400, radio-controlled signal system, vehicle-actuated for alternating one-way traffic, can be extended through to crossroads control**

Technical features as MPB 3400, with the following **in addition**:

- Simple handling with menu-driven handheld terminal for up to 4 signal groups
- Programming possible for up to 12 signal groups with maximum 24 monitored signal heads and up to 24 parallel signal heads per laptop with AmpelTools
- Printout of all relevant data as per RiLSA and TL-LSA possible from the working traffic lights on site
- Timed program changeover with day and week programs for flexible traffic control
- Also for pedestrians, local public transport, coordination of progressive signalling, SMS module, fire brigade control, and much more besides.

## Innovation at the Intertraffic: mobile remote traffic-light controller EPB24

The new mobile traffic-light controller EPB 24 multiprocessor controls temporary signalling systems at major crossroads with minimum timing and cabling requirements.

The master and slave controllers in the EPB 24 series can be used for local control of up to 24 signal groups with maximum 48 power cards for 96 fully monitored three-aspect LED signal heads. The controller is programmed by PC or laptop with the menu-driven graphic AmpelTools software. All necessary signal-related records can be printed out directly from the controller for checking and as verification.

The control components for the master controller and individual slaves are accommodated in IP 55 cabinets. The operating panel and all control-relevant parts for the master are accommodated in separately accessible locked cabinet compartments in 19" design. Depending on the application, the customer can put together his own EPB 24 master/slave controller system from four different types.



The new EPB 24 Master crossroads controller with colour display, showing all signal statuses at a glance.

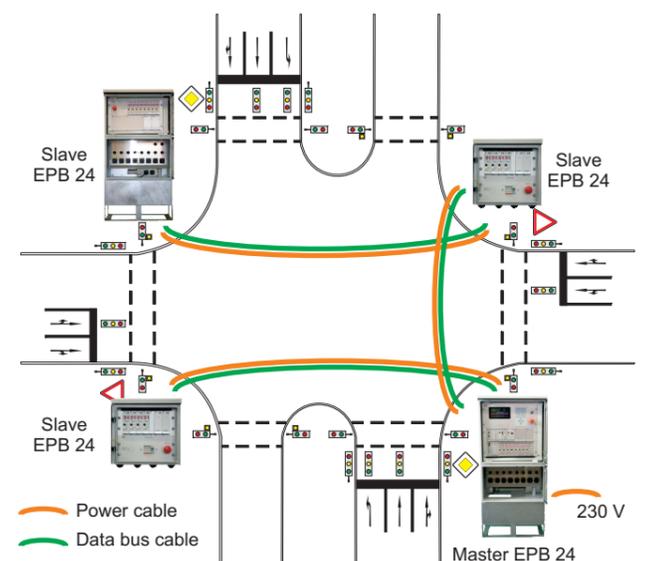
For example, there is an EPB 24 master with power cards for 8 signal groups and a master in a small housing without power cards. There are also two different versions for the EPB 24 slaves: on the one hand with power cards for 8 signal groups, or as a slave for 4 signal groups in a small housing that can be fitted to a mast.

The advantage of using a local controller system such as EPB 24 that can have several slave controllers physically remote from the master is that far less cabling is required because it is no longer necessary to bring all cables together to a central point above the carriageways. All that's needed is to connect the traffic light signal heads with the nearest controller.

The controllers themselves only need two cables: one for the data bus and one for the power supply. There is no need for central 230V supply: the individual controllers can be simply connected individually to the nearest 230V power supply point, depending on the conditions on site.

The standard EPB 24 multiprocessor controller offers many modes and additional functions, such as fixed-phase or vehicle actuated (VA) mode with daily or holiday program; VA-mode with green-phase extension or green on request; request mode (continuous red default); coordination mode (progressive signalling with GPS); manual/blinking/blanking; test mode (process without outside system); clock mode (checking signal heads for correct connection and assignment); changing green phase parameters and progressive signalling parameters while the system is in operation, and reprogramming without switching the system off.

The new EPB 24 multiprocessor controller system offers the greatest possible safety. Thanks to the modular concept with state-of-the-art master/slave units, the system is ready for use in next-to-no time with only minimum cabling requirements.



## New Berghaus product catalogue 2016 / 2017



Our new product catalogue 2016 / 2017 is being sent out to customers right on time for the INTERTRAFFIC. 68 colourful pages give an overview of our comprehensive range of products.

Well over 200 illustrations and detailed explanations indicate the strength and diversity of Peter Berghaus GmbH: innovative traffic technology from a single source – naturally straight from the manufacturer.

The new catalogue is organised into product groups and includes for example:

LED flashing and advance warning lights, LED temporary traffic control light systems, LED illuminated arrows, rotating beacon indicator lamps, mobile pre-warner and warning trailers, mobile traffic lights and crossroads controllers, software for traffic-light control, mobile mounting devices for traffic lights and signs, modular large mast systems, LED lighting systems, road marking films, TL-beacons, mobile crash barriers for safeguarding roadworks on motorways and in urban settings, together with many other traffic technology products.

You can naturally also download the current product catalogue with sales prices from our website, together with all brochures and operating manuals, quite openly at any time without having to register:

[berghaus-verkehrstechnik.de](http://berghaus-verkehrstechnik.de)

## 120 years in the service of traffic safety



Long-standing employees and managing directors (from left to right): Michael Kronenberg (two sets of 10 years), Ralf Gressler, (MD Peter Berghaus GmbH), Guido Krämer (30 years), Axel Keller (MD AVS Overath GmbH), Andreas Dorff and Uwe Banischewski (both 35 years) and Dieter Berghaus (MD AVS Verkehrssicherung GmbH).

In good Berghaus tradition, at the end of November the staff from Berghaus and AVS Overath came together for a joint celebration of their long-standing employees.

Michael Kronenberg was honoured for two 10-year periods with the company. The qualified radio and TV technician was first employed by Berghaus from 1991 to 2001, initially in production and then a period in service and rentals, followed by many years on the in-house sales team. In 2005 he came back to Berghaus, where his technical background and good knowledge of Berghaus's comprehensive product range meant that he was destined for designing technical descriptions, catalogues and brochures. Today he is responsible for almost all printed matter by Berghaus and AVS.

Guido Krämer joined Berghaus in 1985 as an apprentice electrician, with his training taking him through all the departments from production through to service. He quickly became a traffic light expert. After completing his vocational training, he joined the rentals department, where he continues to work today in this interesting, varied aspect of traffic safety. He makes successful use of his more than 30 years of professional experience as dispatcher for AVS Overath, where he runs and coordinates the assignments for service teams dealing with mobile traffic light systems, signage and traffic safety. Andreas Dorff has accumulated an impressive tenure of

35 years. He began his career at Berghaus as an apprentice electrician in 1980. Back then, production and rental activities were still all in one and the same company. Andreas Dorff therefore swiftly acquired comprehensive professional know-how in many areas, including stints now and then in the metalworking shop. Today he is involved among others in the production of mobile traffic light systems, LED illuminated arrows, LED blinking and flashing lights, LED temporary traffic control light systems and much more besides. Many apprentices have acquired their know-how about producing Berghaus's extensive product range from Andreas Dorff. Uwe Banischewski also looks back on 35 successful years with the company. He joined Peter Berghaus GmbH in 1980 after completing his training as a power electronics technician. For many years he was involved in the production of traffic light controllers. Thanks to his wealth of professional experience in this field, today Uwe Banischewski works on the development and programming among others of the user-friendly software for our mobile crossroads controllers and runs the technical support for this product segment. For more than 20 years, he has joined forces with operations manager Alfred Wurth to hold the popular traffic light training courses, which means that he has therefore trained well over 2,000 traffic light experts.

## Professional traffic safety, naturally with AVS – your Number One service partner



When it comes to professional traffic safety on German roads and motorways, the AVS Traffic Safety Group is without doubt your Number One contact partner. With a network of around 400 well trained, experienced AVS experts at currently 12 AVS sites in Germany, we ensure swift, professional and low-cost implementation of regional and national traffic safety projects.

AVS is the compact supplier of professional traffic safety solutions on all roads and motorways, including major projects and also for example in the framework of PPP models (public/private partnership).

The range of services extends from initial planning, compilation of road sign and signal plans, applications for approvals and traffic law provisions, setting up diversions with signage and mobile crossroad traffic lights, complete roadworks marking with foil, paint or plastic materials including demarking with the AVS PeelJet after the end of construction without leaving any residues while protecting the road, installation, maintenance, modification and dismantling of TL-beacons and mobile ProTec crash barriers, LED signage and mobile congestion warning signs as well as regular inspection and maintenance of the construction site protection as a 24/7

service, and much more besides.

AVS is your expert service partner supplying all you need for safe traffic control from a single source.

You too can benefit from our wide range of experience and the extensive AVS network: simple entrust your roadworks facilities to AVS, your Traffic Safety Professionals!

## Berghaus trains around 100 traffic light experts

Once again this year, around 100 employees from specialist contractors for traffic safety and signalling technology, road traffic authorities, road maintenance depots and municipal depots attended our four traffic light training courses in Kürten (NRW) and in Mellingen (TH).

Given the great demand for our traffic light training, the four courses were fully booked within just a few days of issuing the invitations.

The two-day seminars by our traffic light experts are consecutively structured, addressing beginners on the one hand and those with advanced knowledge on the other. The course contents included the necessary regulations and technical requirements for mobile traffic light systems, such as the Technical Delivery Conditions for Mobile Traffic Light Systems (TL-LSA 97) and the new version of the Guidelines for Traffic Signal Systems (RiLSA 2015), published in September 2015. Instructions were also provided on how to calculate and compile signal timetables correctly. The main focus once again was on programming and operating the traffic light controllers and practical implementation of the compiled signal timetables.

Operations manager Alfred Wurth and technician Uwe Banischewski led the participants through the various



Participants on the Traffic Light Training Course II in the Kürten exhibition room with instructors Alfred Wurth (left) and Uwe Banischewski (5th on the right)

austopics and passed on valuable tips and tricks accumulated from their 35 years of professional experience with mobile traffic light systems.

Were you unfortunate enough not to get one of the coveted places on the traffic light training courses held at the start of the year?

We can gladly provide individual courses on separate dates which we as manufacturers for mobile traffic light systems adapt flexibly to the special needs and specific machinery used by the customer, either in our training facility or naturally "inhouse" at your site. Please contact us so that we can send you a corresponding quotation.

## BAB 2: swift modifications to 10 km of crash barriers



Our photo shows the major roadworks set up in the summer by AVS Overath, Gladbeck branch, on the A2 motorway near Bergkamen, which have now been modified in night shifts. Among others, this entailed moving more than 10 km mobile crash barriers.

In November, the colleagues from AVS Gladbeck started with the comprehensive modification of road safety measures at roadworks on the A2 motorway between Bergkamen and the motorway interchange Dortmund-Nordost. As the construction project progressed, part of the around 26 km of ProTec 100 mobile crash barriers had to be moved with corresponding modifications to the 4+2 road layout, working at night. To minimise the impact on the flow of traffic, all the tasks to be performed by the AVS were carried out in just four nights between 8 pm and 5 am. All work along this section of the motorway had to be finished as soon as the morning rush-hour began.

Extra staff were needed to complete the work in this tight time window. Colleagues from other sites joined the experts from AVS Gladbeck at short notice, and everything ran smoothly as all AVS staff are trained to the same standards. On average, about 40 AVS staff were deployed on site for each shift, together with their vehicles and the necessary machinery.

In the four nights, altogether 10,200 metres of mobile ProTec 100 crash barriers were dismantled, modified from phase 3 to phase 4 and then reinstalled again in a changed road layout with the corresponding emergency refuge areas.

At the same time, the extensive signage and beacon guidance elements were dismantled and relocated, road markings that were no longer needed were correctly removed and way over 30 km of thick marking film were applied with primer for the new road layout.

Roland Monjau, branch manager of AVS Gladbeck, was highly satisfied with the teams and their achievements, particularly with how the work had gone smoothly during the night shifts, and praised the good cooperation between AVS colleagues from the various sites. Here once again the excellent AVS network with its uniform standards has paid off.

StraßenNRW (North Rhine Westphalia highway agency) was also very pleased with the fast, reliable completion of the modification work to keep traffic flowing safely.

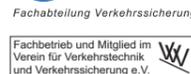


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