Berghaus News

Traffic Technology Light Innovation

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P.BERGHAUS

Fachbetrieb und Mitglied im Verein für Verkehrstechnik und Verkehrssicherung e.V.

At a glance

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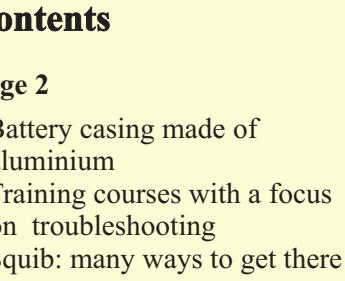

Congratulations!

Peter Berghaus GmbH congratulates Mr. Werner Sporleder on his 80th birthday! We wish him good health and all the best !

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Amsterdam: meeting place for the specialists

At the biennial trade-fair "Intertraffic" held in Amsterdam's RAI exhibition centre from 4 to 7 April 2006, our company will be present as in the previous years with a display of more new products, including for example signal system MPB 3200. We shall also be demonstrating solar-powered systems for export. We are also looking for partners to expand our export network.

It would be our great pleasure to be able to welcome you to our stand 06.202 in hall 6.
We have 100 free entrance tickets for our loyal customers. If you are interested, please contact us immediately by letter, fax or e-mail. The tickets will be issued in the order in which we receive requests, subject to availability.

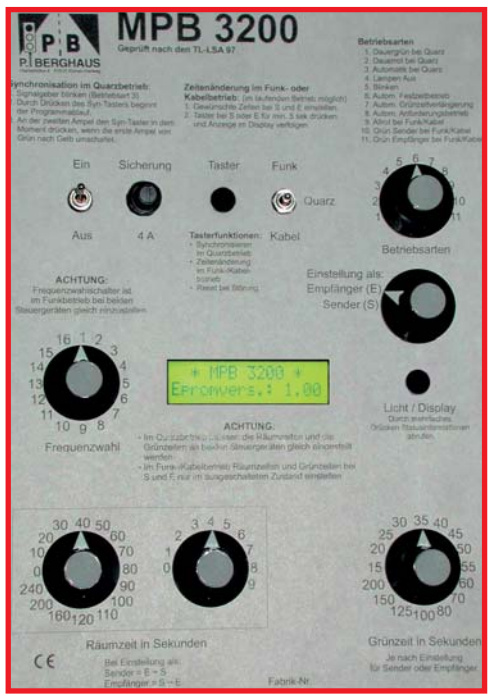
TRADE-FAIR NOVELTY: new low-cost traffic signal system MPB 3200

Peter Berghaus GmbH is presenting a completely new, portable traffic signal system punctually for the Intertraffic.

New: MPB 3200 universal in use with radio, cable and quartz control

Our new low-cost traffic signal system MPB 3200 can be used as a radio, cable or quartz system. It is designed for controlling bottlenecks; the VA version for traffic-dependent operation is equipped with directional radar detectors. MPB 3200 fulfils all the regulations of VDE 0832 and RiLSA for radio, cable and quartz controlled systems and corresponds to type classes A, B and C of the Technical Delivery Conditions (TL) Portable Traffic Signal Systems 97.
It is erected quickly and can be operated intuitively without demanding much previous knowledge. Signal system MPB 3200 consists of two three-aspect signal heads. They are made of impact-proof, UV-resistant polycarbonate. All signal heads have the same equipment. That means they can not only be put to universal use but also eliminate the need for keeping large quantities of costly spare parts, as is the case when using differing designs. The compact structure means that even in the multi-frequency version, the complete controls can be integrated in the green chamber of the three-chamber system. It is easily accessible thanks to a snap fastener and can still be locked to prevent unauthorised access. The portable aluminium battery casings are statically tested. They support the signal heads and can accommodate two batteries (12V/170Ah). The lower edge of the signal head is fully variable up to 1.80 m above the erection surface.

The controls for MPB 3200 are well organised, extremely simple to use and can even be read when the system is switched off. The function switch selects whether the signal system is being run by radio, cable or quartz operation. The corresponding setting is selected with the mode switch.



The new MPB 3200: easy to control clearly organised at a glance

All signal heads are the same so you can decide for yourself which signal head to use as transmitter or receiver (with active feedback) for radio operation.

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The rotating actuator is used to adjust the necessary clearance phases (interim phases) and the green phases for the transmitter and receiver control unit. In radio or cable mode, these can also be adjusted separately for every direction of travel. Again in radio or cable mode, the illuminated information display even provides information about the other side. It is thus possible for example in manual mode to read off the cycle status or an occurring fault at every signal head.

In the interest of trouble-free traffic-dependent control, the signal system is equipped with directional radar detectors as a standard feature for this specific purpose.

Directional radar detector: standard feature in VA version

The road users are informed by an LED display in the radar detector that their request has been registered. Reliable all-red mode (green on request) is only possible with directional radar detectors, because these are not susceptible to interference from cross traffic, departing traffic, rain or snow.

Our new MPB 3200 is equipped with halogen lamps 12 V / 10 W as a standard feature. Fully variable adaptation of the luminous intensity of the signal heads to the ambient brightness is achieved by the automatic night-time reduction. In this way, the battery change intervals can be extended many times over.

On request, the signal system is equipped with new LED technology, either ex works or for retrofitting by the user.
New actuation electronics and the use of innovative LED technology has reduced the already low power consumption rate of our LED modules even further. This results in additional energy savings of up to 50% compared to the previous LED technology, while still maintaining the same brightness even when there is a decrease in the supply voltage!

State-of-the-art technology is also involved in the radio transmission system: now even better transmission quality is possible than before. The security of the radio connection is enhanced. The new radio, cable and quartz controlled MPB 3200: innovative technology at a low price! Just ask us for a quotation!

Battery casing made of aluminium

Price advantage, lighter transport thanks to considerable weight savings (20 kg compared to 50 kg) and yet the same stability: these are the features of our battery casings made of aluminium. The definitely positive response from our customers has encouraged us to expand the aluminium products even further.
And so we are gradually also equipping our portable traffic signal systems with aluminium battery casings.
The battery casings equipped with solid rubber tyres for simple transport of the signal system provide protected accommodation for two batteries 12V / 170 Ah. The statically tested battery casing offers great stability and fulfils the regulations of TL-LSA 97 (Technical Delivery Conditions (TL) Portable Traffic Signal Systems 97). The signal system remains in a stable position even when the lower edge of the signal head has been pulled up to its maximum possible height of 1.80 m on the stand pipe.
A battery casing to accommodate just one battery is also provided for exports and for use for example with a pre-warning light or other applications.
An increasing number of authorities and traffic safety companies have recognised the reduction in weight with resulting easier handling in erection and transport of our aluminium products, and are gradually converting their systems to aluminium.

Now standard for all signal systems: aluminium battery casing

Training courses with a focus on troubleshooting

For more than 10 years now, we have been offering extremely popular training courses for "traffic light experts", both in Kürten in North Rhine Westphalia and in Mellingen in Thuringia. This time again there was great demand so that the January course in Kürten was fully booked in next-to-no time.
As in previous years, the courses were led by master electrician Alfred Wurth and service technician Uwe Banischeweski. Two different courses were offered, depending on the qualifications of the participants. Training course I covered two days and looked at calculating signal timetables for single carriageway alternating traffic systems, implementing timetables in the MPB series signal systems, troubleshooting and fault rectification. Calculation of signal timetables for signal systems at junctions and cross-roads with the traffic light timetable program, implementing the timetables in signal system MPB 4000 and familiarisation with the SMS remote monitoring system were also part of the agenda.
Training course II also covered two days and concentrated essentially on calculating signal timetables with the traffic light timetable program, implementing the signal timetable in control units EPB 6000 S, EPB 2400 and in the new control unit EPB 48 multi-processor, together with familiarisation in the SMS remote monitoring system, programming with the new traffic light Win program (version 3.0), practical uses for control units EPB 6000, EPB 2400 and EPB 48 multi-processor, analytical troubleshooting and fault rectification, and video detector with presence detection.
Graduates from both courses received a certificate with the quality title "Tested specialist for portable road works signal systems".

Squib: many roads lead to the destination

One question in a physics examination at the University of Copenhagen read as follows:

Describe how to ascertain the height of a skyscraper using a barometer.

One candidate answered as follows:
Tie a long piece of string to the fastening on the barometer and lower the barometer from the roof of the skyscraper to the ground. The height of the building is equal to the length of the piece of string plus the length of the barometer.

This highly original answer horrified the examiner to such an extent that the candidate was dismissed from the examination immediately. But he appealed to his basic rights, claiming that his answer was indisputably correct. The University then appointed an arbitrator to judge the case. The arbitrator decided that the answer was in fact correct, but failed to reveal any perceivable knowledge of physics. In order to solve the problem, it was decided that the candidate would be summoned again and given six minutes to provide an oral reply which was to reveal at least a minimum degree of familiarity with the basic principles of physics.

For a full five minutes, the candidate sat still on his chair, his head bent forwards, lost in thought. The arbitrator reminded him that time was running out, to which the candidate replied that he had a few extremely relevant answers, but could not decide which to give. Being advised to hurry, he answered as follows:
"Firstly, you could take the barometer up to the roof of the skyscraper, drop it over the edge and measure the time it takes to reach the ground. The height of the building can be calculated using the equation H = 0.5 g x t squared. But the barometer would be destroyed!
On the other hand, if the sun is shining, you could measure the height of the barometer, stand it upright and measure the length of its shadow. Then measure the length of the skyscraper's shadow, then it is easy to calculate the height of the skyscraper using proportional arithmetic.
But for a highly scientific approach, tie a short piece of string to the barometer and let it swing like a pendulum, firstly on the ground and then on the roof of the skyscraper. The height corresponds to the deviation of the gravitational restoration force T = 2 Pi squared (l/g). Or if the skyscraper has fire escape, the easiest would be to climb the fire escape, measuring the height of the skyscraper according to barometer lengths and adding them together at the top.
But if you just want a boring, orthodox solution, you can naturally use the barometer to measure the air pressure on the roof of the skyscraper and on the ground. Then convert the difference in millibars to calculate the height of the building.
But in view of the fact that we are constantly being told to keep our minds independent and to use new scientific methods, without any doubt it would be much easier to knock on the caretaker's door and make the following suggestion: "If you would like a nice new barometer, I can give you this one on condition that you tell me how high this skyscraper is".

The candidate was Niels Bohr, the first Dane ever to win the Nobel Prize for physics.

Great response to the EPB 48 multi-processor

Crossroads control unit EPB 48 Master

At the last Intertraffic, we showed our customers the new crossroads control system EPB 48 multi-processor as a trade-fair novelty; the innovative decentralised system met with huge response from all sides.
Looking back over the last twelve months, we are very pleased to see that many traffic safety companies in Germany have seen the advantages of the EPB 48 multi-processor and converted or expanded their rental park accordingly. This is a considerable triumph for the new master/slave control unit system, particularly in view of the fact that series production only began in early 2005.
Many of our previous customers have been convinced by the fast, simple installation of the innovative master and slave system which reduces installation times by up to 50 percent. It is extremely pleasing that this new technology also managed to convince many new customers. Traffic safety companies who were previously not in a position to cover the market for "wired crossroad systems with 42V technology, tested according to TL-LSA 97 (Technical Delivery Conditions (TL) Portable Traffic Signal Systems 97), type class D" have used this new possibility and expanded the range they can offer their customers accordingly. Our compact control unit system EPB 48 can be used to install major crossroad systems with up to 24 signal groups and 96 signal heads fully dependent on traffic, throughout the whole of Germany in next-to-no time. Menu-guided programming allows for quick and easy implementation of the signal timetables in the control unit. The multi-processor system brings great time savings because only one data line and one power line have to be connected from the master control unit across the road to the slave sub-distributors. Then only short feed lines are necessary for decentralised supply to the signal heads. EPB 48 helps you to save time, material and personnel costs!
Please request our special brochure EPB 48 and ask for a personal quotation.

Crossroads control unit EPB 48 slave

VVV elected new board

During the Annual General Meeting of the Verein für Verkehrstechnik und Verkehrssicherung e.V. (VVV Association for Traffic Technology and Traffic Safety) in Korbach, Chairman Jens-Rolf Oppermann reported on the association's activities over the last twelve months. He thanked the 32 member companies and institutions from services (traffic safety) and development/production (traffic technology) for all the work they put in, including among others in the Industrieverband Straßenausstattung e.V. (IVSt Industry Association Road Equipment), particularly for their involvement in the working party on training, and for preparing and holding the Road Equipper's convention in Hanover.
During the AGM, the members present at the meeting also elected a new board. The results are as follows:
New chairman Uwe Hoss, 1st vice chairman (IVSt delegate) Dirk Trompeter, 2nd vice chairman (office manager) Steffen Plötner, 3rd vice chairman (event manager) Andreas Plank, treasurer Oliver Tauffenbach, 1st auditor Stephan Henning, 2nd auditor Wolfgang Ziegler, control board Herbert Sauer (chairman), Wolfgang Nimtz, Torsten Restemeyer.
All members naturally expressed their gratitude to the previous chairman Jens-Rolf Oppermann, who stood down after more than ten successful years in this position, and to the company Horizont for holding the AGM this year.

Height warning system in use

Use of our height warning system at construction work on a bridge in Cologne

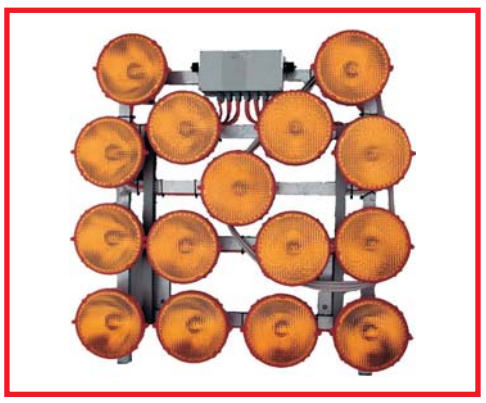
Our mobile height warning system is currently being used at construction work on bridges in Cologne and in Halle an der Saale. This system has been specially designed for areas where failure to comply with height and passage limitations can cause serious accidents and damage to building structures. The height warning system HWA uses two heated special light barriers with directional logic system for reliable detection of high vehicles. If such a vehicle is detected, the system emits an acoustic signal for five seconds. Two 300 mm high-luminous two-colour signal heads (LED) positioned about 30 m before the bridge changeover from yellow to constant red. The high vehicle is stopped.
The system is reset either using a key, by a time module, by radio or SMS. The height warning system can be erected quickly and simply at any site thanks to our mobile stand system. The laser aligning guide means there are no problems with precise erection. Power is supplied from 12 V batteries or 230 V mains voltage. The control unit is accommodated in a waterproof lockable housing; the standard version offers mains/battery changeover, low-voltage and reverse polarity protection.
All parts such as light barriers, horn, signal heads and key switch are connected by means of water-proof plug-in connectors.
The mobile height warning system serves to prevent damage to vehicles and building structures not only at road works and changed road layouts. Areas of application include for example: construction work at bridges, railway subways, tunnel passages, and at entrances to buildings, underground or multi-storey car parks.

Height warning system in use in Halle/Saale

New: LED technology now even better

Whether in traffic signal systems, pre-warning systems, illuminated arrows or temporary traffic control light systems, LED technology is meanwhile to be found everywhere. Whereas ten years ago these systems caused amazement and amusement, they have rapidly found their place in traffic technology. On-going developments have been continuing at an amazing pace.
In recent months, the DGM protected LED modules with proven LED technology developed by Peter Berghaus GmbH have undergone further optimisation. Our technicians in the Kürten factory have designed a new activation board which together with the very latest LED technology consumes up to 50% less power than previous LED systems. While producing the same brightness, our LED modules are now even more economical than in the past. It is thus possible to clearly prolong the operating periods of battery-driven systems. Even when the power supply starts to diminish, our intelligent activation system keeps the brightness of the LED modules on an almost constant level.
If you were uncertain in the past or had reservations about changing over to LED technology, it is now time for you to take a look at our optimised system you will soon be convinced by its energy-saving advantages and the unbelievable brightness with full-surface illumination of the new LED modules. Come and see us at "Intertraffic" in Amsterdam.

Temporary traffic control light system



Illuminated arrow L15 with LED technology

Portable traffic signal systems with LED technology

Information about portable safety devices

Fatal accidents in motorway road works

Fatal head-on collision in motorway road works: is it not possible to reduce the risk?

Munich: A severe accident in motorway road works north of Munich took the lives of four people on 4 October last year. Another four people were injured, one of them severely. According to the police, a car travelling south got onto the oncoming lane. At this point in time, the opposing carriageways of the motorway A9 were not separated by transportable modular lane dividers but only by warning beacons.

Meerbusch: A severe traffic accident on the motorway A57 near Meerbusch took the lives of three people on 5 December last year. According to the police, a Dutch articulated lorry had got onto the oncoming lane in a section of road works. *Author's remark: the opposing lanes of traffic were separated by double rows of yellow marking and markers.*

Here an excerpt from the ZTV-SA:
Point 6.11.1 "Erection of portable road restraint systems"
(1) To avoid consequential accidents resulting from vehicles getting off the carriageway, lengthier sections of road works should always be equipped with portable road restraint systems, wherever possible with regard to the available width of the total carriageway cross section. Depending on the particular application as per Fig. 2 (see ZTV-SA), portable road restraint systems are to be used as stipulated in table 5 (see ZTV-SA). As far as non-motorway roads are concerned, corresponding uses are to be stipulated in analogy to Fig. 2.

Most of the people responsible for road works safety in the supervisory authorities have understood the wording "should always …" used in the ZTV-SA and successfully include this requirement visibly in their invitations to tender and on our roads, in the interests of greater safety for all road users but unfortunately, this does not yet refer to all those responsible for such work. And yet there is an ideal modular lane divider available for practically every application. Intensive development work and practical experience have been integrated in a large number of models; today even confined space is no reason to dispense with modular lane dividers!
The latest statistics reveal a clear reduction in accident fatalities, particularly on our motorways. But when we read police reports like those quoted above, it is quite obvious that the figures can be brought down even further.

There is no reason to manage without safety! Follow the recommendations of the ZTV-SA and secure your road works safely with transportable modular lane dividers. Talk to us about it, we offer our advice free of charge.

We are responsible not only for what we do but also for what we do not do
(Lao-Tzu, Chinese philosopher, 4th-3rd century BC)

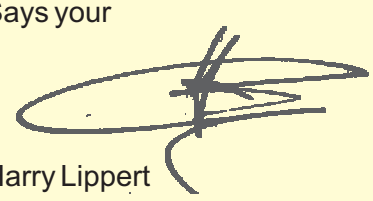
HARRY`S KOLUMNE

Europe and the EN 1317

It's a good thing that we have European standards (EN)! You're sure to have read it here in my column before now or heard me say it: lane dividers are tested to EN 1317. That means that the same test conditions have to be used in all European countries. This is achieved verifiably by accredited testing institutes. As a result, road restraint systems which have been tested in this way can be erected throughout Europe. But it does not mean that for example road restraint systems used in another European country have to look exactly like the safety systems used here in Germany, because every EU country has the right to its own national implementation of these tested systems. Here in Germany we have our own regulations for this purpose, e.g. the ZTV-SA ("additional technical contract conditions and guidelines for the work involved in safeguarding road works"), the RSA ("guidelines for the work involved in safeguarding road works") and the TL 97 (Technical Delivery Conditions (TL) Portable Road Restraint Systems 97). Other countries have some national restrictions or additions, but always based on EN 1317. Time and again, the PETER BERGHAUS group, which must be one of the leading German manufacturers, successfully erects its transportable lane dividers at sections of road works in many European countries, because our products usually comply with the national regulations of our European neighbours. There are countries which have harmonised their regulations with the German legislation. These include Belgium and Austria, for example. Others in turn go way beyond what is required here, this applies to the Netherlands for example or France. Other EU countries make even higher demands of themselves and develop their own lane divider systems possibly with state help, as is the case in the Netherlands for example with the development of the step barrier system. When travelling throughout Europe, time and again you will see German products in use on the roads. And of course the same applies in reverse too: in Germany you can find products being used from other European countries: this is possible as soon as these road restraint systems comply with EN 1317 and fulfil the German regulations such as ZTV-SA and TL.

In united Europe, dividers not only separate but also protect and connect.

Says your



Harry Lippert

Any more questions?

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