

Berghaus-News

Verkehrstechnik · Lichtinnovationen

Issue16

March 2004



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



At a Glance

Contents Schedule

Page 2

- The Powermoon and various accessory
- The LED technology is on broader front in the advance
- VVV elected new board of directors

Page 3

- Roughly 900 "Traffic light experts" qualified
- Truck toll: bankruptcy instead of billion income
- Our gloss: In America everything is possible!
- In 2003: less accident victims
Danger: too low distance

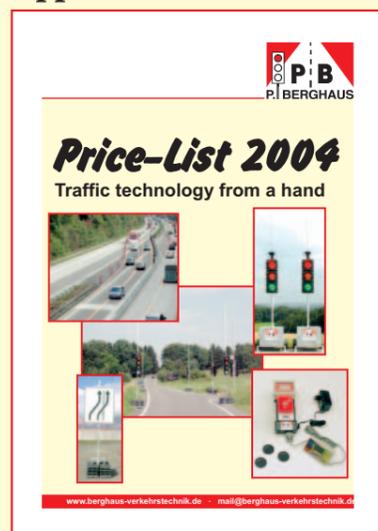
Page 4

- Information about transportable protection equipment
- Harry's column: I know what you do not know!
- The market demands them: Euro STGW of H1 / W6
- Foreign order: 13.5 kilometers in 2 days

Jubilee: 20 years of M+V

This year the M+V GmbH exists 20 years. We will take the occasion of this to celebrate in July with our friends, customers and suppliers on our new extensive area in Kürten-Eichhof.

Appeared anew:



Impressum

Publisher:

Peter Berghaus GmbH
Herrenhöhe 6
51515 Kürten-Herweg

Editor: Dieter Berghaus

51515 Kürten-Herweg
Text und Layout: Hans Kirch

Circulation:

15.000 copies in German
1.000 copies in English

Printed by: Druckerei Brocker
51515 Kürten-Dürscheid

Importantly for you: Intertraffic Amsterdam, Hall 6, Booth 06.304



The trade fair "Intertraffic" takes place from the 30th March to the 2nd April 2004 in Amsterdam in the fairground RAI. To this international trade fair for planning, management and maintenance of traffic and transport infrastructure all-important manufacturers are expected. We would be glad to being allowed to greet you on our booth. Please reserve yourselves this fair appointment. To our Highlights count among other things the new intersection control device type EPB 48 as well as the video camera to the production of virtual contact loops.

Our novelties on the "Intertraffic" in Amsterdam

EPB 48 multiprocessor

With our new control device system type EPB 48 multiprocessors can be steered up to 24 signal groups with maximum 48 achievement maps, 96 3-aspect signal heads are fully supervised. The programming occurs about PC or laptop with the traffic light Win program or in graphic form with the new traffic light plan program. The program data will transfer above a serial interface RS 232 into the controller. To the control and to the proof all necessary signal-technical bases can be printed out immediately from the control device.

The device technology of the EPB 48 multiprocessor for the master control device and the Slave are inserted in steel metal cupboards of the protection kind IP 55. The tableau as well as all parts relevant to control is accommodated in separately accessible lockable cupboard parts in 19"- technology.

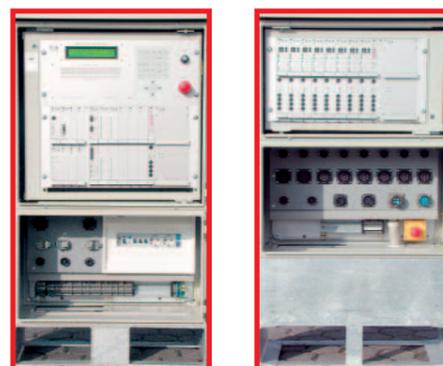
The wiring expenditure is diminished by the decentralized control device system about 50%. Cost of materials, carriage and personnel expenditures is considerably reduced.

The control device system EPB 48 multiprocessor is fitted out serially with the following modes of operation and addition functions serially:

Modes of operation: fixed time operation; fixed time operation or VA operation with daily schedules or holiday programs; VA operation with green time lengthening; VA operation with Green on demand; On demand operation (basic



Control device master EPB 48 multiprocessor for the control from up to 24 signal groups, construction variant to the direct care of 24 fully supervised signal heads as well as control from several mast's distributors (Slave EPB 48)



on the left: control device master EPB 48 (small construction variant) for the control from up to 24 signal groups about several mast's distributor (Slave EPB 48)
on the right: mast's distributors Slave EPB 48 for up to 8 signal groups to the care of 16 fully supervised signal heads

position All-red); coordination operation (Green wave); manual operation; flashing operation; dark operation. Addition functions: test operation (expiry without outside arrangement); tactfulness operation (test of the signal heads on proper connection and allocation); green time parameter change in the running operation; Green wave-parameter change in the running operation; Reprogramming without shutdown of the arrangement. The new control device system EPB 48 offers a maximum in safety. By the modular construction method with the new technology the system is serviceable and oriented to future.

Video camera PB CAM

Our new video camera PB CAM is used to the effective presence inquiry by vehicles in the area of light signal arrangements. With this technology the contact loops known to be installed up to now luxuriously are replaced to the vehicle detection control for the operation dependent on traffic. The detection-system orders more than eight freely adjustable detection-zones which are drawn as virtual contact loops in the street course.

Short description: an easy programming of the detection-zones about PC; detection-zone switchable direction logic; detection-zones freely in size and form; 4 freely configureable switch exits; preservation time till 3 minutes; RS-232-interface to the system configuration.

The Powermoon and various accessories



Statically examined stands

With Powermoon lighting conditions similar to daylight are achieved. It persuades with its steadily pleasant light which is strewn by the balloon cover and blow shade allows to disappear almost completely. The lower one side of the screen light strews the light, while the aluminum-coated upper side for a high light yield after below provides.



Bast-examined:
The horizontal nominal density of light according to ZTV-SA is fulfilled

Already with an installation height of merely three to five meters an optimum light distribution is reached.

The compact construction method allows storage and transport on the narrowest space.

With four Powermoon, which can be lightly stowed away in a passenger car station-wagon a surface is illuminated in a time of about ten minutes in the size of a football field completely. The highly competitive metal steam lamp HQI provides for the highest illuminating power with low connection value.

The Powermoon can be likewise fixed on machines and illuminates ideally the catchment area of the devices.



Tripod



Mast's holder

The lights body is manufactured completely from robust cast aluminum and high-grade steel. Meanwhile we have developed for Powermoon the complete program for transport and mounting, quite all the same whether the Powermoon stands in a steady location or must "walk" with the building site. We offer the right stands for all cases.



Powermoon with generator



Generator on statically examined mobile undercarriage with shafts

The LED technology is on wide front in the advance

The LED technology determines the picture of the future on a lot of levels. In the area of the traffic technology we are unlocked opposite this new technology very much. In the extensive field of the Berghaus traffic light signal arrangements we offer this technology already for a long time. Now after the advance warning lamps and lightning arrows the mobile warning trailer type AM 2 and the guide-light system AL 12 with the Peter Berghaus LED technology are also available.

- very fast mounting
- careful unloading of the accumulator (thereby higher lifespan)
- exhaustive, steady illumination of the lens
- constant brightness with unfavorable consideration corner
- constant brightness also with dropping accumulator voltage
- serial day/night adaption (automatic light adaptation)



Advanced warning lights Ø 340 mm and Ø 200 mm, yellow

The construction lighting system works precisely like in the RSA 95, point 3.2.2 (4) described: " All lights go on successively and together off. With darkness a yellow long-term light must be laid under. "

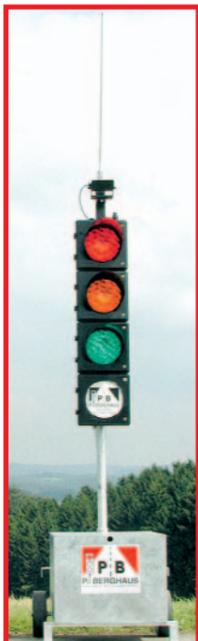
VVV elected board of directors

On the 17th January, 2004 the annual general meeting of VVV was carried out in Husum. Among the rest the new election of the board of directors stood on the agenda. Here the result:

Of new and present chairpersons: Jens Rolf Oppermann; 1st deputy Dieter Berghaus; 2nd deputy Steffen Plötner; 3rd deputy Uwe Hoss; treasurer Peter Gerding; 1th cash examiner Dieter Pfaff; 2th cash examiner Stephan Henning; control committee: Dirk Trompeter, Wolfgang Nimtz, Herbert Sauer.

The following member's firms were anew taken up in the association: Fa. Ludwig from Kaufering, Fa. Lauer VT from Oldenburg.

The next training appointments became scheduled. March: site manager and battery training in Freiburg; June: VOB training in Kassel; September: night construction building sites in Kürten. In February a two-day MVAS training was already carried out in Gütersloh.



Traffic lights

The LED technology offers important advantages for users:

- considerable lowering of the service costs
- considerably brighter light than up to now to known LED applications
- up to 70% of energy savings opposite the previous technology
- never again electric light bulb failure
- all lights are identical to construction (low spare part storage)



Warning trailer type AM 2



Guide-light system AL 12 LED

Our new guide-light system AL 12 LED encloses in the normal trap ten lights, Ø 200 mm, yellow, with 13 m of cable as well as a supply cable. The operation tension amounts to 12 volts, with automatic day/night adaption, separate control device or connection box are no more necessary.

Roughly 900 "traffic light experts" qualified.

The firm Peter Berghaus in Kürten as well as in Mellingen in each case for traffic light experts carries out annually two-day trainings. The resonance was also very great this time again. In January and March more than 80 experts were trained by seminar leader Alfred Wurth and service engineer Uwe Banischewski. The training program I enclosed the basic course for the MPB 4000 and MPB 3003 during two days. The production of signal time plans with the new traffic light plan program, version 2.0 as well as the conversion of the phase plans into the signal arrangements MPB 3003 and MPB 4000 stood afterwards on the agenda. During the second day stood, primarily, the use of the program device type MPB 4000 and the conversion of the phase plans into this signal arrangement on the program. The training program II had the user's training for intersection-signal arrangements on the subject during the first day:

CAM. A certificate with the quality name "examined professional operation for portable building sites traffic lights" was handed in conclusion to the graduates of both courses. All together about 900 traffic light experts were trained during the last nine years in our rooms.

To ways of the constantly growing requirements for the signal technology by stronger and stronger traffic amount the requirements for the staff of the traffic security enterprises rise constantly. It becomes more and more important in future to train the staff constantly. Since only by technical personnel it is possible to take into account the high standard and the rapidly occurring advancements (see also tip technical personnel / experts RiLSA).

From the users of these guidelines it is expected that they follow the given bases for the purposes of the standardization aimed in general.

Not all questions appearing in the



Attorney Alfred Wurth and programmer Uwe Banischewski with the training

the production of signal time plans with the new traffic light plan program, version 2.0, the conversion of the signal time plan into the control devices EPB 6000 S, EPB 2400 and in the new control device EPB 48 multiprocessor as well as the installation in the new far supervision system by SMS.

During the second day it went in the practice: programming with the new traffic light Win program, version 3, practical applications for the control devices EPB 6000 S, EPB 2400 and the new control device EPB 48 multiprocessor as well as the new video camera PB

practice can be grasped by guidelines entirely. The technical progress or also special local circumstances are to be taken into consideration in the isolated case. Experts must be on account of their skills and experience in the position to diverge if required in own responsibility from the agreed bases. The guidelines contain to a row of questions recommendations and suggestions, which mark out the frame for an independent and professional action.

Our gloss: in America everything is possible!

This is a unique lawyer's history of the year and probably also those of decade. It is true and has won the first place in the American "competition of the penal defenders" (Criminal Lawyer Award Contest).

In Charlotte (NC) a lawyer bought a box with very rare and very expensive cigars. He insured, among the rest, the cigars against fire damage. During the next months he finished the cigars entirely and called in the insurance the fire damage resulted to it. In his claim writing the lawyer explained that the cigars have been destroyed "by a series of little fire damages". The insurance refused the damage regulation with the grounds, the cigars would have been used correct.

The lawyer complained before court - and won!

The court agreed with the insurance that the claim is indeed impertinently, however, arose from the insurance policy unambiguously that the cigars

are insured against every kind of fire and liability exclusions were not stated.

Consequently the insurance must pay. In the end, she would have signed this contract herself. Instead of exerting long and expensive appeal proceedings, the insurance accepted the judgment at first and paid 15,000 dollars to the lawyer who had lost his noble cigars in "numerous fire damages".

However, now there comes the other side: After the lawyer had redeemed the check of the insurance, he was arrested on her motion because of "24 cases of fire raising".

With reference to his civil-juridical complaint and his own information before court he was sentenced because of intentional firing of his insured property to a term imprisonment of 24 months (without probation) and a fine of 24,000 dollars.

Truck toll: bankruptcy instead of billion

Now after the cancellation of the contracts with Toll Collect on the 17th February numerous traffic projects stand on the spring. The Federal Government numbers the damage by being missing toll income at 6.5 billion Euros. Till the end of 2004 only 2.8 billion Euros are absent. Last Toll Collect had offered maximum 600 million Euros per year in damage balance.



Pictorial computer animation of the toll situation recumbent finally now at the bottom

About five million Euros should flow daily since September 2003 from the truck toll into the federal budget. Up to now, nevertheless, there were only bankruptcies, bad luck and hitches. Everything had begun promisingly: Germany wanted to take with a to a great extent automatic elevation of the truck toll a forerunner role in this technology area in Europe and worldwide. Still at the middle of December explained Dr. Manfred Stolpe: "The worldwide first realization of such a system can release an innovation push."

In the meantime, Europe completely laughs at this flop. The trust advance for the German technology giants Telekom and DaimlerChrysler as well as Cofiroute (France) as a main owner of Toll Collect was fine too largely. In the meantime, instead of toll for our streets there is a gigantic deficit. The money, which was fast, planed for urgently necessary investments.

To get in at least one part of the money, Stolpe has announced to introduce the euro vignette abolished before the planned toll appointment for truck again. This would bring in the budget monthly 40 million Euros, less than one quarter of the planned sum. To the damage limitation one more arbitration procedure queues with which the toll failures of monthly 180 million Euros (since September) are asserted. In the meantime more than one billion Euros was closed for investments in traffic removal measures (street, rail, aquatic ways). This

signifies according to opinion of ADAC road service only in the street area shortenings about more than half a billion Euros.

Many important traffic projects are endangered by the hitches with the truck toll. It is not only about the mastering of the expected truck flood from the east. The next important date is the football world championship in June 2006.

Also here there will be drastic traffic bottlenecks. Actual not only the extension of the Cologne ring stands on the spring, but many further projects.

Now the sins of the past take revenge. Above all the hurried completion of the contract with which ex-minister Kurt Bodewig wanted to bring the prestige project still in his term of office in September 2002 under roof and field. And the naive-optimistic way in which successor Manfred Stolpe planed the toll income immediately for traffic projects.

The toll bankruptcy throws back Germany far. The risks go unambiguously to loads of the alliance. There are many losers, here above all the taxpayers. Now forwarding agents may go probably till the end of the year without every toll.

Apart from the fact that the Federal Government had too long patience, the disaster meets, primarily, the German showpiece enterprises DaimlerChrysler and the German Telekom. These are disgraced up to the bones. The engineering purposes were too demanding. The image damage of the industrial-political bankruptcy is gigantic.

The notice of the toll contract is for competitors of Toll Collect the start signal. The Swiss toll operator "Fela" as well as the Italian enterprise "Autostrada" announced to make offers the construction of a simplistic system to the Federal Government.

In 2003: less accident victims

Year after year still too many people are killed on German streets. Small bright spot: the number in the traffic lethally to victims has sunk last year after figures present up to now with 6605 on the lowest state since beginning of the counting in 1950. These are about 3.5 percent less than 2002. A sad record were 21 332 dead people in 1970. With accidents with personal damage there was in 2003 a decline of 1.6 percent.

Danger: too low distance.

Too low safe distance is one of the most frequent dangers springs in the traffic. If inadequately high speed comes, accidents are programmed, stated the car club Europe (ACE). Already with 70 km/h a automobile has put back according to ACE 20 meter, before the driver can generally react with a step to the brake. When rule of thumb counts of keeping at least to half of the speed in meters as a distance - with speed 130 km/h at last 65 meters.

Information about transportable protective facilities

The market demands them: STGW Euro H1/W6

The trend in the tenders is rather clear to recognize: more "high protection walls" are demanded. The security consciousness of the principals, which we fully support, gives us the possibility to move innovative thoughts.

The Peter Berghaus GmbH has decided before some time to develop a new steel barrier system. The bottlenecks with the protection walls with a containment level of H1 showed us quite clearly in which direction we had to steer our thoughts.

Our development department was fed on data and the necessary defaults. Out a narrow construction came for a H1 wall with a construction width of 50 cm and a

guarantee for you that we mount to one working day up to 2.000 meters independent of weather all ready. The application possibilities of this protection wall are described in the ZTV-SA in picture 2 and in the table 5 more or less clearly, because the H1/W4 wall demanded there (which there is at the market neither in concrete nor in steel!) can be replaced with a H1/W6 wall.

Nevertheless, this is only the classical area of application "E" according to ZTV-SA. For this only few hundred meters are required at the building site. It concerns, on this occasion, around track changing areas. About the demand of the

ZTV-SA going out one can use a H1 wall (rarely, but absolutely legitimately) also in the oncoming traffic area (area "D" of the ZTV-SA), namely where the truck traffic can meet with 2+0- or 3+0 guidance. The real area of application is to be seen in the separation between fluent traffic and the workroom, sensibility with a T3 wall, however, better with a H1 wall *) protected. Here the working width so small must be held as possible. Very clearly therefore, if one thinks that behind the protection wall in the so-called

"working width" no persons, working devices or empty scaffoldings may be. These strongly threatened areas are equipped absolutely more and more with such a safe separation. Since it cannot be that the motor traffic is protected, the construction workers, nevertheless, often only by a beacon row of the fluent traffic are separated. Here the future of stable protection equipment will lie.

Who speaks of safety in the building site traffic, will mean in future STGW Euro H1/W6, because thus our new H1 steel barrier system is called. Further information by mail under:

lippert@stahlschutzwaende.de.

*) To the better understanding: the difference of both walls lies in the bigger energy admission, which is reflected, secondarily in the working width. Hence, it also is to be understood by all means that the working width of a H1 wall is equated with W6 to a working width of a T3 wall with W4. A H1 wall takes up the 3.5 times of a T3 wall in dynamic energy!



High requirements for this wall: All could be fulfilled

width relevant to planning of only 48 cm. The height was fixed to 70 cm.

On the 7th and 8th February 2003 this construction was tested in France with the L.I.E.R. thoroughly. A truck-starting-up attempt after TB 42 (a 10 tons truck goes with 70 km/h in an angle of 15 degrees against the protection wall) and a passenger car attempt after TB 11 (a 900 kg vehicle races with 100 km/h in an angle of 20 degrees against this wall) were carried out.

To take up this energy, we had to put a lot of innovation in the system. The weight was raised on more than 100 kg meter. The number of the stands was adapted. Because we wanted to remain with our basic system (a construction from normed protection planks of the type "A" and stand with vertical side parts), these measures had to be carried out.

As appeared, the operation has been worthwhile. The achieved results can be seen. The wall has moved merely about 1.4 meters and lies with thus in the working width of W6 (W6=2.1 m).

This wall has the same good properties as well as our T3 constructions: sufficient clearance of about 5 cm, a system open below and upwards which admits no warm traffic jam is friendly to repair and - for us very importantly - whom possibility of the quick mounting offers by precast system lengths of 16 m. Also here we

HARRY'S COLUMN

I know what you do not know!

Nevertheless, there what was with the working width! Something with W 6 or W 8, the higher, the better, or? There is spoken of area "D" and "B". Examined after TB 41, the ASI value should not be more than 1.4 and a KLB element should be inserted. Still know you what we speak of?

If you shake now the head, you are exactly the right thing to organize the next seminar in your house.

Invite me for a talk of information on transportable protection equipment. I will bring you all these bewildering concepts near and explain of course also as well as indicate the right contact with it. I will state examples and demonstrate to you how these concepts are applied properly and are shown then in tenders so that these are unequivocal for the supplier and the risk of the speculation or supplements are excluded.

In a lot of streets and highway offices I have held partly already for the second time talks on this

subject. I think that the results can speak for themselves. It will be no publicity event, but a pure arrangement of information for temporary protection equipment and the DIN EN 1317 applies to the transportable one as well as to the stationary area generally, and this to concrete as natural also for

steel barrier system. Invest two hours of your precious time (then more expenses do not result for you) and you agree on an appointment with me. I think, this investment is worthwhile for you and your department.



Harry Lippert

And thus reach me: e-mail: lippert@stahlschutzwaende.de or phone: +49 22 07 96 77-15 or by fax: +49 22 07 96 77-80

When do we see ourselves?

Foreign order: 13,5 kilometers in 2 days

Like all enterprises we are interested of course also to get orders.

However, if then they come, they must be carried out to the contentment of the customer. We have received an extensive order: to build up 13.500 meters of steel barrier system in a European country. "The price is good", I said. "Stop", meant my director, "this will still turn out, the post calculation will show it." Nevertheless, oh ever, this will not probably go to the trousers? Since the thing has a hook: We must deliver within

48 hours the whole material (13.500 meters of STGW Duo 4 as well as 176 meters STGW Quadro T3 / W4) for this distance, unload, be based, connect strength-logical and straighten. This is a novelty.

We will report after execution of the order in detail about the course at this point. It seems, as if we can place new graduations.

We are confident. Press to us the thumbs that this works all as demanded.



On special transporters precast 16-m lengths are transported to the building site



Peter Berghaus GmbH

Verkehrstechnik · Lichtinnovationen

Herrenhöhe 6 · D-51515 Kürten-Herweg · Phone +49 22 07 96 77- 0 · Fax +49 22 07 96 77- 80

www.berghaus-verkehrstechnik.de · mail@berghaus-verkehrstechnik.de