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VideoIP range "a tribute to Amadeus"

High-value components and complete solutions from 1-channel systems up to large IP projects.







Molfgang Amadeus Mozact Gifted with an incredible amount of talent and filled with unlimited passion, he composed operas, concerts and symphonies. His works were elaborate, harmonic and perfectly orchestrated. Whoever saw him play was enthralled by his prowess. Of course, there were already numerous outstanding compositions before his day, but Mozart's work eclipsed all previous musical creations. The genius of his pieces however Did not lie in them being particularly complex, but rather in their ingenious simplicity. In that regard professional IP video networks may well be compared to Mozart's masterpieces. The principle that great ideas and innovations do not necessacily have to be complicated was incorporated in the development of the new Dallmeier ID range "a tribute to Amadeus". High-quality products and solutions which are nevertheless understandable and comprehensible for everyone.

Just as Mozart,

brilliant instrumentation, created an ingenious
body of work, individual high-value IP components
can be used to realise top-quality video network solutions.
Like instruments in an orchestra, devices operate in perfect
harmony, controlled by the operator, who, like a conductor, keeps
things firmly in hand. As with an orchestra whose instrumentation
may change, the arrangement of the Dallmeier IP solution remains
variable and flexible. Its composition can range from a duo of camera
and streamer to a large ensemble of different elements.

Dallmeier's high requirements regarding image quality and reliability also apply when it comes to IP solutions. With the IP range "a tribute to Amadeus" the high standards of CCTV applications combine with the benefits of pure IP solutions. The best of both worlds, a star-studded ensemble with guaranteed success!

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What it was like until now...

Conventional video security technology has to date focused on high image quality, high resolution and colour fidelity. An outstanding real-time performance was a given and smooth playback without any interference was universally expected. Judder-free images were an absolute must. Additional functions such as reliable alarm switching and permanent background recording were taken for granted. Later, the ability to transmit images via networks was added to the range of functions. All in all, a surveillance system was a homogenous, self-contained system (closed circuit), offering highest reliability and stable operational dependability.

So, the requirements and quality criteria as they were stipulated by CCTV are clearly defined. They are:

- high image quality
- real-time performance
- steady and smooth playback
- permanent recording
- reliable alarm switching

Attempting to recreate a system like that which, in itself is simple and structured, as an IP solution raises many questions. This is because the video-over-IP solutions for security applications which are currently available on the market only offer poor quality results which are utterly unsatisfactory from a security point of view. This is despite the precisely defined performance requirements. The variety of problems include:

- blurred images
- blocking/formation of artefacts
- interruptions to image sequences
- corrupted data streams due to loss of single pictures (drops)
- delays in picture transmission so no real-time performance

Once the highly praised so-called unlimited possibilities offered by IP video suppliers – and emphasised by marketing departments – are compared with the tough reality of daily requirements, one soon realises how those unlimited possibilities can suddenly turn into extreme dependencies. Customers then also understand the enormous potential for problems associated with relying on video security technology the way they used to.

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Hence, the crucial question is: What can be done about it?

With the IP product line "a tribute to Amadeus" Dallmeier has developed a perfectly coordinated VideoIP range.

Cam_inPIX® Technologi

High-value individual components and certified active network components ensure constant and reliable network operation, thus reducing the loss of images to a minimum.

With years of DSP experience under its belt, Dallmeier developed high-performance codec variants for cameras as well as recorders. In combination with the Cam_inPIX® technology this new technology delivers a clear, high-contrast image at full frame rate, yet has low requirements regarding network bandwidth. Blurred images and artefacts are simply incompatible with Dallmeier's high quality standards.

The same rigorous approach to quality applies to realtime performance. Appropriate values are achieved by using flexible GOP sizes and specially adjusted codecs. They make a noticeable positive contribution in the control of cameras in particular.

What motivates customers to purchase IP solutions by Dallmeier?

All over the world Dallmeier IP solutions are in use every day and customers with high requirements have installed them because they were the best complete systems available. The quality of each individual component and a complete coordinated, harmonised system with the maximum availability are always the most important arguments in favour of Dallmeier solutions. Why should you settle for less?







A propos:

Dallmeier has been marketing IP streaming solutions for more than 10 years.
So Dallmeier knows what IP is all about!

This phrase indicates the enormously high quality standards of the individual components and their extreme efficiency and reliability in perfectly coordinated interplay. Different arrangements of individual components, depending on the type of application, and flexible, freely scalable expansion capabilities always deliver a perfect complete system which is optimally adjusted to meet its requirements. So it does not matter whether it is about realising a smaller stand-alone solution, a medium to large

You too can benefit from Dallmeier's know-how and many years of video network experience!

video-over-IP security system or even a huge project.

Adjusted to meet the customer's requirements

Dallmeier solutions are held in high esteem around the world because they operate reliably. Right from the beginning, Dallmeier's competence and know-how are an inherent part of the planning process which is the basis for the Dallmeier systems' operational reliability.

Only if the customer receives competent and tailored advice right from the beginning, is it possible to ensure that the final solution offered really fulfils his expectations. It does not matter whether it is about a small system with just two cameras, a medium-sized installation or a very large project with a few thousand cameras, Dallmeier always works to satisfy the target group.





Dallmeier supports planners, architects and project managers, starting with the initial stage of project planning. Experienced experts give advice on what to consider when designing a professional IP system and provide valuable information to ensure a good design. The heat emission of the system, for instance, needs to be kept in mind in order to calculate ventilation and air conditioning. Another important factor is the space requirement which needs to be assessed so that the server room can be designed appropriately.

Dallmeier does not limit its activities to simply selling individual products but also feels committed to sharing its know-how and experience with the customer and provide an optimal all-round support.

- High flexibility of the system facilitates future corrections and modifications, thus eliminating the risk of mis-planning
- The scalability of the system allows for straightforward expansions and maintains the system's investment security for many years
- No additional cabling is necessary for connecting management systems
- Migration from existing structures to IP structure is simple
- Experienced Dallmeier employees provide competent advice right from the beginning





In order to successfully implement a CCTV/IP project, a number of important questions needs to be answered in advance.

- Is there already an analogue video installation that needs to be modernised and expanded?
- Analogue and IP solutions can easily be operated simultaneously. With Dallmeier it is all truly IP from the recorder onwards and there are hybrid solutions for mixed operation at the recorder.
- Will the installation include a low number of cameras and recorders or are there plans for a higher number of channels?

For an extensive installation Dallmeier recommends a separate network with professional components.

- How long is the required recording time?
 Dallmeier codecs already provide an excellent image quality in D1 (4CIF) resolution at 2 Mbit/s.
 The HDD calculator helps with calculating the hard disk capacity.
- Is a video management system needed?
 With PView and SeMSy® Dallmeier offers scalable management solutions which are also suited for wide area networks.
- Will the installation be connected to a third-party system?

 Dallmeier offers IP-based software interfaces for easy integration.
- Will the recorded video data be used for research purposes?
 With the SmartFinder Dallmeier provides an excellent solution for effective searching which can, of course, also be performed from remote workplaces.
- Are secure network structures a must?

 Dallmeier devices are generally protected and video data can only be read using Dallmeier codecs.
- Is there a requirement for video analysis for automatic surveillance?
 Dallmeier's SEDOR® technology is fully IP-ready!













In order to render his theme expressively, Mozart carefully arranged the orchestration of his pieces. Just as every instrument is not suited for every kind of composition, not all available products are designed for a professional IP system. A masterpiece is only created when all instruments interact harmoniously and are perfectly coordinated.

There is one particularly crucial factor with a professional VideoIP system, and that is the reliable functioning of the whole system.

This kind of reliability is based on high-quality components which meet the highest demands in terms of reliability and stability. The most important thing however is the harmonious interplay of all elements within the complete system.

he can build up the system using products from any Even once the faulty device has been found, the search Who can the customer turn to for advice then?

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everything from one source and perfectly coordinated. advance in order to guarantee an optimal interaction. Open interfaces facilitate trouble-free connection with third-party products and complete systems.

With its VideoIP solutions Dallmeier offers the customer The customer acquires a complete system which guarantees the highest reliability. Furthermore, Dallmeier, as The individual components are thoroughly tested in a provider of complete solutions, assumes responsibility for the entire system. The customer benefits from this as he is given one designated and competent contact for all questions and problems.



Advantages:

- High-quality components that are perfectly coordinated
- Reliable functioning of the complete system
- Problem-free integration of third-party systems via open interfaces
- One competent contact for all matters





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The interplay of the various instruments is not the only thing that must be perfect — every single instrument needs to meet the highest requirements.

In a professional IP system, each and every product must guarantee highest quality, reliability and ease of use.

Cameras

Cameras form the first element of a complete system and therefore have to be chosen particularly carefully.

For one thing is clear: even the best recorder can only record high-quality images if the camera provides them. A chain is only as strong as its weakest link.

Dallmeier has used its many years of experience to produce own analogue, network and PTZ cameras. In doing so Dallmeier has banked on the latest Pixim DPS* technology and used it as the basis for the in-house development of <code>Cam_inPIX*</code> technology, making the company the only developer and manufacturer of this advanced <code>Cam_inPIX*</code> technology which is already being used very successfully in many CCTV/IP projects. Using this innovative camera technology it is now possible to solve problems of video security technology which were deemed unsolvable with conventional technology. The most difficult lighting conditions such as backlighting or scenes affected by constantly changing environmental influences can be overcome with <code>Cam_inPIX*</code> technology, even in extreme situations.

Cam_inPIX® reliably provides for the display of considerably more details in shaded and very bright sections of a picture. This is because of the **Ultra Wide Dynamic Range** feature (UWDR) and the high colour differentiation. The camera's excellent control behaviour is also a decisive plus.

By the way:

Dallmeier recorders are highly flexible and future-proof. As well as being able to record from Dallmeier cameras, they can record third-party data streams (analogue, IP, megapixel) too.



Streamers

In many cases, there is already an analogue surveil-lance system in place with components which customers want to continue operating. The challenge is therefore to make existing infrastructure IP-ready. In order to facilitate this Dallmeier has developed the MicroStreamer which enables easy and straightforward integration of analogue cameras into a network. The MicroStreamer can receive analogue audio and video signals via different inputs (e.g. BNC). After digitising or encoding, data can be transmitted over a network in various formats, for instance MPEG-2, MPEG-4 or MJPEG. Transmission is done in real-time, either to one (unicast) or more (multicast) IP addresses.

As receivers, Dallmeier recorders can be used for image recording while Dallmeier video management systems (e.g. PView, SeMSy®) can be used to analyse



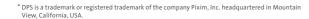
the image material. It is easy to configure the Micro-Streamer via the network using a PC/browser, and all settings can be adjusted through a graphic user interface.

By the way:

Migration from an analogue to an IP system can be carried out very easily. For all new installations you use IP recorders, with the existing analogue cameras and recorders continuing to operate at the same time. Naturally, a mixed operation on one recorder is no problem either.









In the world of analogue technology, a recorder was often used as a stand-alone device as well. IP recorders are seen as part of a network of various components. That is why, in this context, people refer to them as Network Video Recorders (NVR).

Dallmeier has a suitable device for any requirement. The DMS 240 model range with up to 24 channels, and the recipient of several international awards, leaves no desires unaddressed. One new innovation is the compact VNS production series with up to 16 IP channels. In terms of quality the VNS is on a par with the DMS – just its number of channels is more limited.

The DIS-2 range featuring blade technology has been designed for large to very large installations. It is being used around the world in a variety of complex systems. These 1-channel recorders offer top availability for monitoring critical areas while also saving space.

Dallmeier Network Video Recorders do not mirror the entire functionality of traditional stand-alone devices and are therefore used in combination with a management system. The DMS and VNS ranges are often operated using PView, whereas in large installations with the DIS-2 series, the SeMSv® management is used.





Network technology allows the user to spread recorders and IP cameras all over the building and the entire area, which offers a high degree of flexibility when planning the CCTV system. The video management system is simply integrated into the network, and can be used to administer the installation's recorders and cameras, even across wide area networks.

The management systems PView and SeMSy® enable live playback of the video data streams as well as efficient searching within the recorded image data. IP systems by third-party manufacturers are supported, no matter where the recorders are located or how many there are within the system.

Furthermore, the video management system can access whatever data format (e.g. Wavelet, MPEG-2/-4, H.264) is used for recording and however many cameras are recorded by the relevant pool of recorders. Clever features and tools have enabled the administration of complete systems to be largely automated.





Video Management Centre

Are you looking for convenience? The Video Management Centre VMC-1 "Eagle" is modular in structure and therefore flexible. The individual components, everything from the keypad, the joystick to the jog-shuttle, may be positioned according to individual preferences and are therefore equally well-suited for both left-

and right-handed operators. Sophisticated ergonomics and a classic, timeless design support for long-term and efficient operation. Product designers analysed operators' typical movement patterns during months of field tests. The lessons learned were then directly incorporated into developing the product. Hence the man-machine interface guarantees the highest possible user-friendliness.











Dallmeier VideoIP solutions for every need

Not everybody shares the same taste.

One person loves small duets,
another prefers large symphonies.

There is also no standard solution when it comes
to IP systems, instead every customer is provided
with a tailored system which meets
his individual requirements.

What kind of IP system is best, clearly depends on the specific requirements of the customer. It may range from a small system with two cameras to a large-scale project with a few thousand cameras. The decision whether it should be a pure IP solution or a hybrid system also depends on the customer's wishes. Dallmeier provides specific solutions for every target group, while always ensuring that the systems can be freely added to or expanded.

In line with its corporate philosophy "Quality made in Germany – Quality made by Dallmeier", the company offers complete solutions from one source with perfectly coordinated components – from image capture and transmission to recording and video management.









Whether its analogue, hybrid or fully IP, and whatever its size – you profit from Dallmeier's many years of experience!

Solution S

EasyEntry solution with a top class Dallmeier IP Cam

EasyEntry 1-Channel Recording

You just need a camera for live viewing? For example to check on entries, entrances or loading bays? And you want quality?

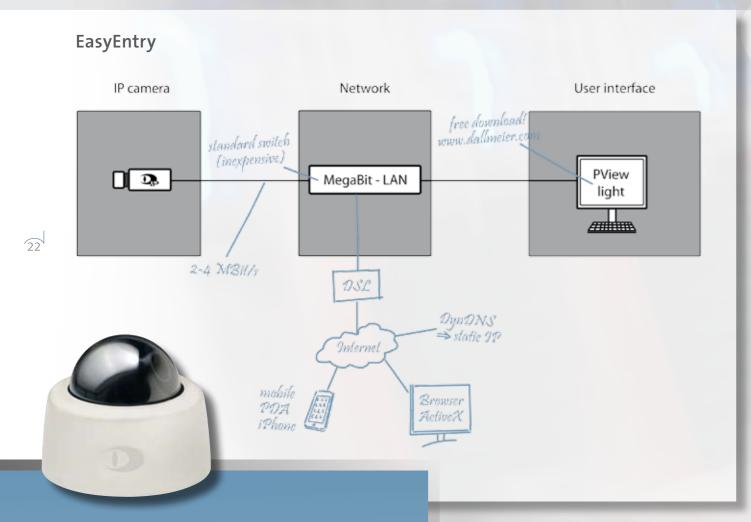
Then the Dallmeier IP camera is the perfect choice. Used with a browser or the free version of PView (PView light), this is the smallest solution which is nevertheless scalable.

For this solution inexpensive consumer network components can be used.

You want to know what happens on your site at night? Or at your holiday home? And single channel recording is enough for you at the moment? Then the VNS 1 single channel recorder is just right for you.

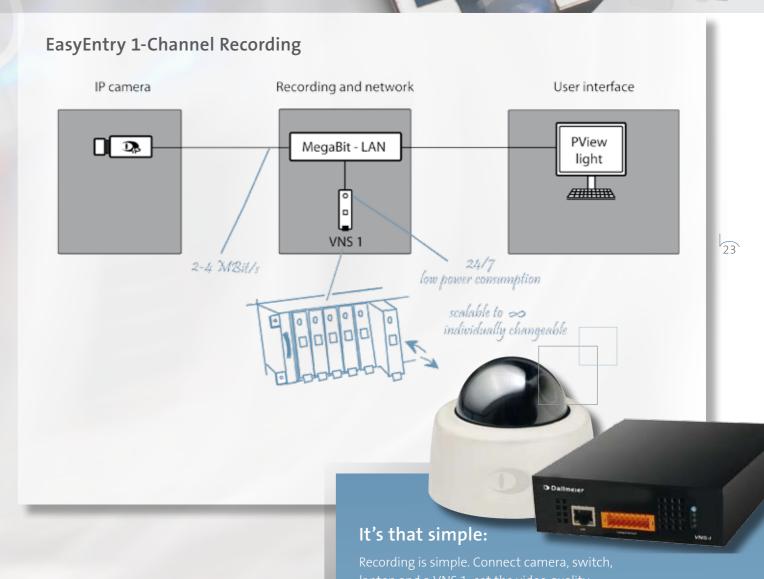
And for this single channel solution you can use inexpensive network components too.





It's that simple:

For this installation you need:
Just a camera, a LAN and a computer with the PView
software. And with a static IP address your camera
accessible from outside









You need a multi-channel IP solution, for monitoring your shop for instance? Then the new VNS is a good first step into the Dallmeier IP world. Equipped with all essential features the VNS records for up to several weeks. The VNS comes with 4, 8 or 16 channels. For a more extensive installation you can choose the

DMS 240 IPS with up to 24 channels.

PView serves as a user interface and provides a professional management system. This gives access to the live pictures and lets you view the recorded data.

Depending on the number of cameras and the desired security level, low cost network components can be used.

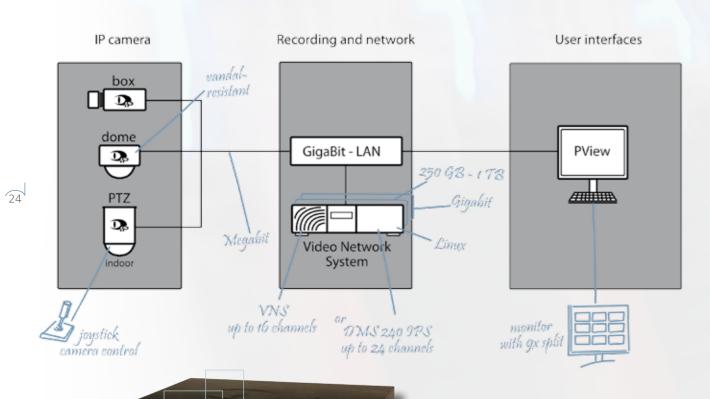
You already have analogue cameras? And you want to expand flexibly? Then you could use one of the hybrid solutions.

For example in a DMS 240 you have all the components you need. It can record analogue cameras and IP cameras.

If you only want to use the existing cameras but set up the whole installation as an IP solution, then you can use MicroStreamers. MicroStreamers convert analogue video signals into IP data streams. This kind of solution is used in large systems too.



Multi-Channel

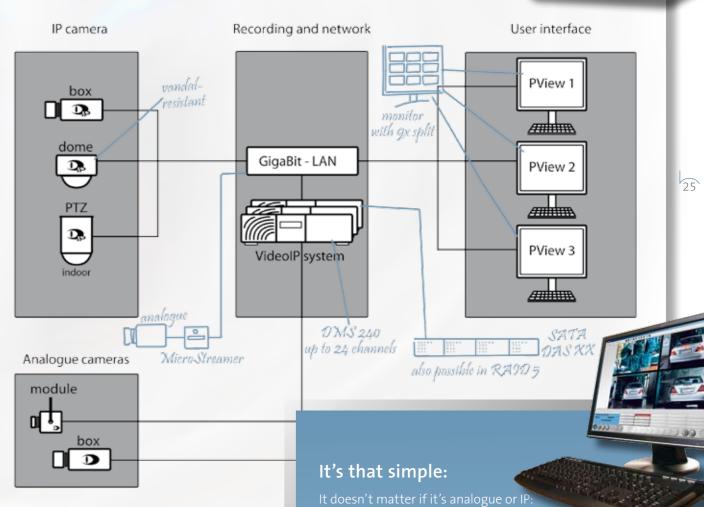


It's that simple:

Entering the multi-channel professional league. For small installations with more than 4 channels, modular, scalable A VNS is perfectly adequate for many requirements.

From 6 cameras and above, professional switches with Gigabit technology should always be used. For stability Dallmeier strongly recommends the use of high quality switches.

Hybrid



Enterprise solution with Comfort Management System

What is an enterprise solution?

You are in need of a complete system with several hundred to a thousand cameras? You want worldwide tested quality? Then Dallmeier is your choice!

Big installations usually consist of DIS-2/M Network Storage Units (NSU). This single channel recorder can record audio and video streams. For converting, the multi-decoder DIS-2 Multi-D, an allround talent, is available. With the help of it together with open interfaces almost any third party system can be integrated.

The management system for a big installation is constructed using SeMSy®. It forms the user interface of the whole system.

Does it need to be easy to handle? Then the Video Management Centre is ideal! Modular and flexible individual components ensure easy, ergonomic and efficient working.

- a large project with a large number of channels and big dimensions
- · very high demands on availability
- · digital, virtual video matrix
- several monitoring control rooms
- individual and client-specific customised user interfaces
- open interfaces for integrating other equipment

Enterprise IP camera Recording and network User interface Jecure. blade system redundant system! 99.99994% Six Nines" SeMSy® multicast! GigaBit - LAN **D**3 DIS-2 Multi-D top design D, certified hardware AP9/ Third Party Management System It's that simple: SeMSy® management are planned and looked after by the Dallmeier Project Team Talk to us!

References – video network solutions worldwide

Miscellaneous

- Josy-Barthel Stadium, Luxemburg
- Anglo Platinum Mines, South Africa
- Britannia Building Society, UK
- White House in Moscow, Russia
- McDonald`s, worldwide
- · Edeka, Germany
- Australian Post, Australia
- Dachser, Germany
- BMW, Germany
- Formula 1 Nürburgring grand prix track, Germany
- Pyramids of Gizeh, Egypt
- · Legoland, UK
- etc.

- Burswood Casino, Australia
- Crown Casino, Australia
- Star City Casino, Australia
- Reef Casino, Australia
- · Barona Casino, USA · Sands Macau, China
- Venetian Macau, China
- Casino Monte Carlo, Monaco
- Spielbank Berlin, Germany
- · Spielbank Esplanade Hamburg, Germany
- etc.

Banks

- First Citizens Bank, USA
- Bank of Queensland, Australia
- · PSIS Bank, New Zealand
- · Bank of Latvia, Baltic States

- · Airport Copenhagen, Denmark
- Brisbane Airport, Australia
- Riga Airport, Lithuania
- Madrid Barajas Airport, Spain
- Rockhampton Airport, Australia
- etc

Your Dallmeier advantage:

- · decades of experience and expertise in the planning, execution and care of large projects
- offices worldwide
- perfect Dallmeier systems for all-in-one solutions

















Socializations

Project outline "Home IP-Security"



"Personal protection and security for family and property is probably every human being's most important necessity.

The flexibility of VideoIP-supported security solutions can make a considerable contribution to achieving a decisive step towards fulfilling this existential requirement.

In the project outline below I have tried to represent different options for a scalable home IP security

solution. Of course because of the scalability and the flexibility of Dallmeier's complete solutions there are considerably more possible variations. Give your imagination and your creativity free rein. And then talk to us and we will realize your ideas. I look forward to it."

Your Dieter Dallmeier President & CEO Specifications:

Call up from the PC

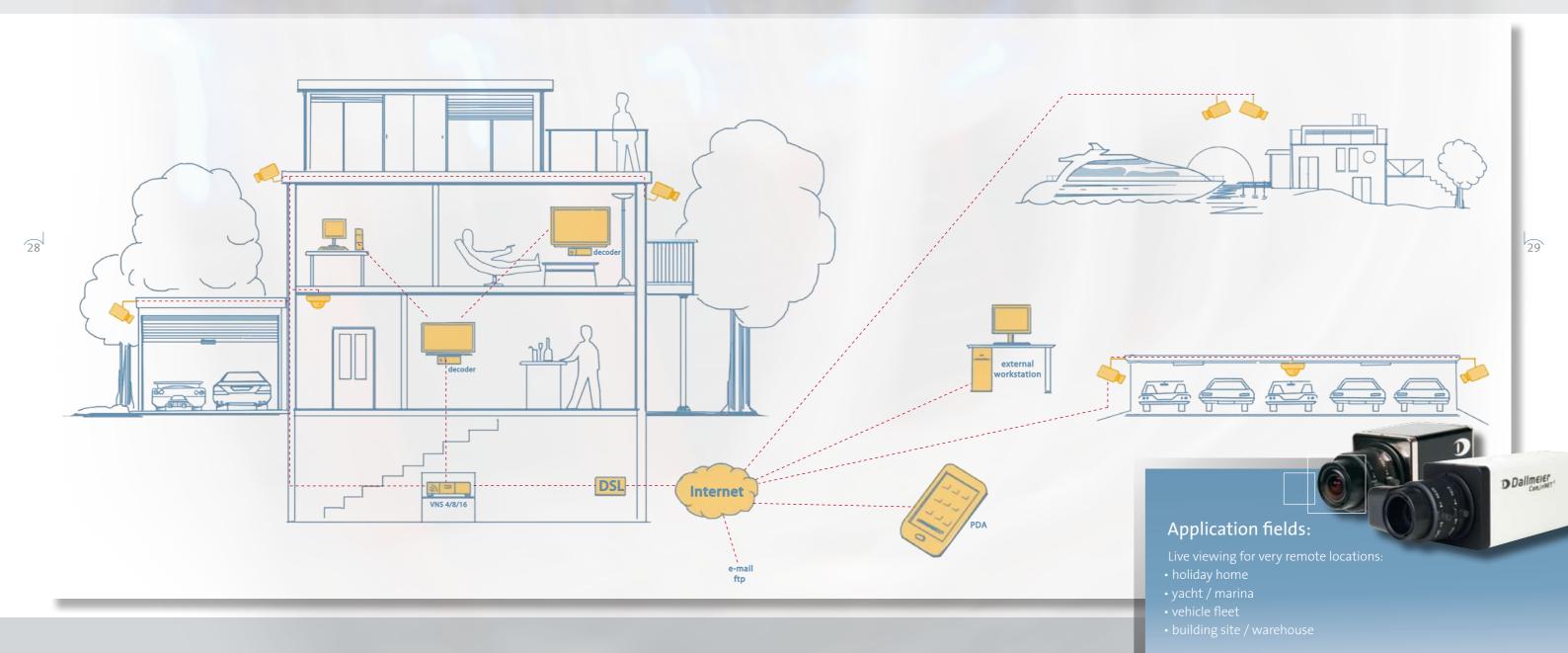
O Display on TV

Motion-activated recording

Vandal-resistant cameras

Alarm report by e-mail

V Live viewing on mobile devices



berformance Implementing the VideoIP solution

At last we are here: the big premier,
the composition is performed.

If the conductor and orchestra are well prepared
the piece will be played immaculately.
And with careful advance planning
an IP video system can be implemented
just as smoothly.

Dallmeier VideoIP solutions are quick and easy to implement.

The network planning is done, active components have been defined and the central server rooms are available. And the hardware installation is not much different from the other network components.

Cameras may need a separate power supply or they may be active network components using Power over Ethernet (PoE).

Once installed the cameras' e-mail addresses can be found using the Dallmeier IP-Finder and they are set up using the camera web interface.

The next step is to configure the VNS video network server using the DMS NetConfig tool. After this comes the installation of PView onto a separate workstation computer and the system begins to work.

Even system analysis is very easy. The cameras can be accessed and checked out for functionality through the browser. PView checks the VNS functions.

The network as such can be analysed with any network tool you like.

All the set-up steps are described in detail in the manuals and in electronic form. Really easy, isn't it?



Visit our website **www.dallmeier.com/VideoIP-Partner** for detailed information about Dallmeier IP partners and find out how you can become a certified Dallmeier IP Partner as well.





The performance of the composition was a great success,
the audience applaud enthusiastically
and there are standing ovations.

Dallmeier VideoIP systems have many enthusiastic and
satisfied users round the world.

And so just as with the best works in musical history,
the systems are timeless.

Dallmeier has planned and implemented the world's biggest real-time IP systems. And what has been proven in large projects, works in small systems too.

Above all the reliability, flexibility and user-friendliness of the solutions mean that customers all round the world trust the company's experience and expertise. But that's not all. Daily contact with its customers enables Dallmeier to continuously improve its products and bring new innovative solutions to the market. Its ultimate aim remains the creation of new, secure, reliable systems for its customers.

Before delivery all Dallmeier products have to meet strict test conditions: such as a climate test with extreme temperature variations or uninterrupted long duration operation. Only devices which pass all the tests with a perfect scorecard are shipped to customers. This is how Dallmeier ensures continuity of its quality standard "Made by Dallmeier".

Tests are not just limited to individual products. The interaction between products within a network is also extensively tested.

For big systems a comprehensive Factory Acceptance Test is also carried out. This involves the customer's whole system being constructed in the Dallmeier factory in Regensburg, so that not just parts, but the whole system can be assessed and accepted, including the whole infrastructure and network environment Because of the high flexibility of the management software, adjustments can be made for the customer's special conditions during the factory acceptance procedure and before it goes into service.

To ensure that the transition into the IP solution goes smoothly and without disruption to the current operation, the new system sometimes first runs for a while in parallel with the previous one. Some of the security staff work with the new system and receive training so that there are no failures from the personnel point of view. Only then is the old system switched off This strategy ensures that the customer gets a solution which is perfectly matched to his requirements.

Support – Around the clock

Dallmeier supports the customer in every stage of the project, from initial planning to implementation. Additionally, the company offers comprehensive on-site training for system designers and installers as well as security personnel, thus ensuring a smooth transition to the new IP system without any interruptions to daily business operations.

If any questions arise Dallmeier is always available for the customer — 24 hours a day, around the clock. Whether on site, over the phone, via e-mail or through the online Partner Forum -

you are never left alone with your questions!

High investment security

The Dallmeier VideoIP solution is a secure investment over many decades. Thanks to their modular design Dallmeier systems are very flexible and extending them is easy and straightforward – irrespective of whether you need to add hardware or software components. The system's modular structure keeps the installation open to new technologies and new possibilities at all times.

Older devices can also be integrated into a modern system without difficulty, thus allowing for the flexible use of devices from different development generations. The long-term availability of all spare parts guarantees high investment security for the whole installation. The surveillance system grows along with the building extensions and keeps up with the customer's continuously increasing demands on his individual solution.





Made in Germany – made by Dallmeier

You are right to expect that Dallmeier's complete system operates steadily without interruptions. The guarantor for this is the high quality standard "Made in Germany – made by Dallmeier".

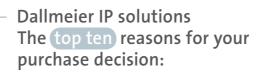
Dallmeier IP products

Expert research and development departments with highly motivated employees put innovative ideas into practice.

All devices face the acid test at the in-house test centre. With large installations the complete system is constructed to scale and accepted by the customer at the Factory Acceptance Test Centre.

Dallmeier quality - made in Germany





_ www.dallmeier.com

Dallmeier

- 1 More than 10 years of experience with CCTV/IP solutions
- 2 Competent advice on your VideoIP project
- 3 Perfectly coordinated IP complete solutions from one source
- 4 Satisfied customers around the world regarding small as well as large IP solutions
- 5 24-hour support, competent and effective
- Global presence in more than 60 countries
- 7 Just-in-time delivery of all IP products
- Certified VideoIP partners with extensive know-how worldwide





Complete solutions by Dallmeier are being used all over the world. Their high quality has withstood the test in thousands of installations. No matter how big your requirements, you benefit from the many years of experience assimilated in implementing systems small and large.

At Dallmeier we believe

that what operates perfectly on the large scale will also work perfectly on the small scale!

VideoIP solution - no matter how many cameras!

