



  
*checkpointmedia*

SMART HOME

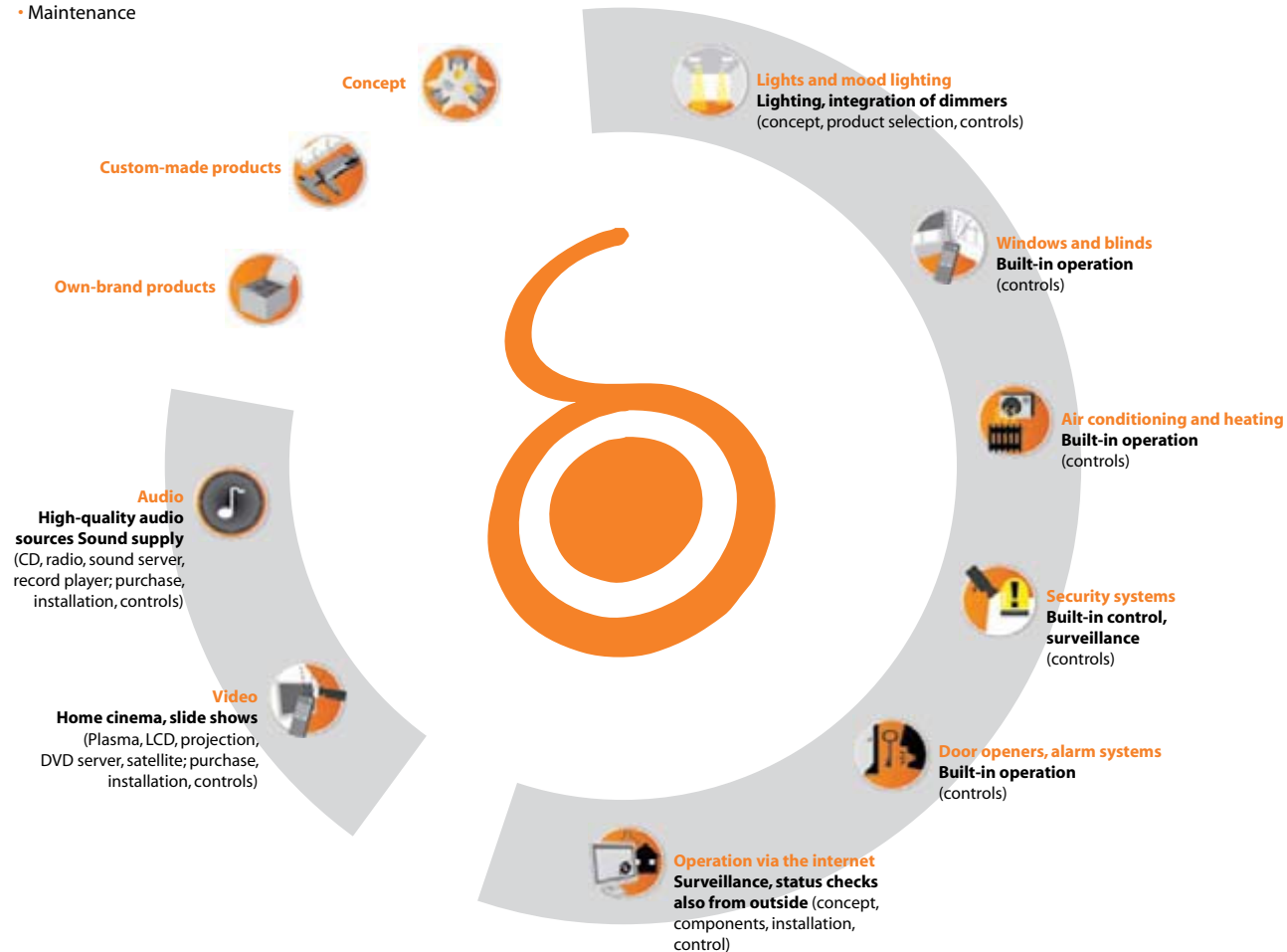


TECHNOLOGY  
for QUALITY LIVING

# Technology for quality living

checkpointmedia provides the full range of services as you create your Smart Home

- Concept and planning
- Coordination with the architect and other professionals
- Product selection and purchase
- Installation
- Commissioning
- Maintenance



checkpointmedia

Creating comfort zones



*Under the name Smart Home checkpointmedia creates personalized quality lifestyles at the touch of a button.*

checkpointmedia AG not only packages products, services and enterprises into multimedia artworks but also turns living and working space into multi-functional homes known as Smart Homes. Here, every kind of application and operation that one could conceivably wish for in a room or home entertainment system can be controlled with ease using intelligent operating units. This is a practical and affordable "luxury" made possible by ingeniously designed control functions.

checkpointmedia's engineers create and integrate discreet high-tech and develop intelligent control systems that are never obtrusive, and it is precisely this that provides a unique sensory experience. Even the most challenging and unusual demands on modern living are met with the greatest technical panache and the creation of remarkable original solutions.

## From “Home Sweet Home” to “Home, Smart Home”

and from the “media storeroom” to the multiroom

Smart Homes are houses and flats with automated appliances and installations that can be operated from control panels. These „amenity rooms“ often contain central audio and video units that can be relayed to several different rooms. These are known as multiroom units.

State-of-the-art audio, video and control technology means that turning your own four walls into your own private cinema or concert hall is now simplicity itself. A multiroom system makes it possible to play several media from different sources via a central unit in several rooms at the same time and at different volumes. The individual components can be controlled by computer, built-in touch panels or hand-held radio panels. The range of services offered by checkpointmedia’s technicians also includes remote operation of air conditioning, blinds, lighting, security devices (intercom, front and/or garage door openers, surveillance cameras) as well as remote access to the controls via internet. Local media sources (CD player, DVD player etc.) or existing audio and video elements can be accessed, as can multimedia content via central audio and video servers.



Plasma screen and built-in control panel

Installation is modular, which makes the procedure much easier for the client and the contractors involved.

In fact, anything is possible, from the laying of empty pipes (during construction, for example) in readiness for the cables that will later be fed through them, right up to the complete installation including retractable projection surfaces and concealed loudspeakers. The design is never obtrusive; checkpointmedia’s multiroom fittings complement and subtly enhance the existing architecture but never dictate it..



Multimedia in the living room

# Audio rooms

The Invisible Sound of Music

Wagner from the ceiling, Duke Ellington from the wall unit or fairy-tales from the nursery wall: sound supply à la checkpointmedia grants any wish.

The desired sound comes either from concealed speaker panels installed in walls, floorboards, pillars, ceilings etc, or – and this is the classic version – from high-quality speakers which relay sound from a central or local source (sound server, radio tuner etc.).



*"Carpe Diem Bar" in Red Bull Hangar-7*

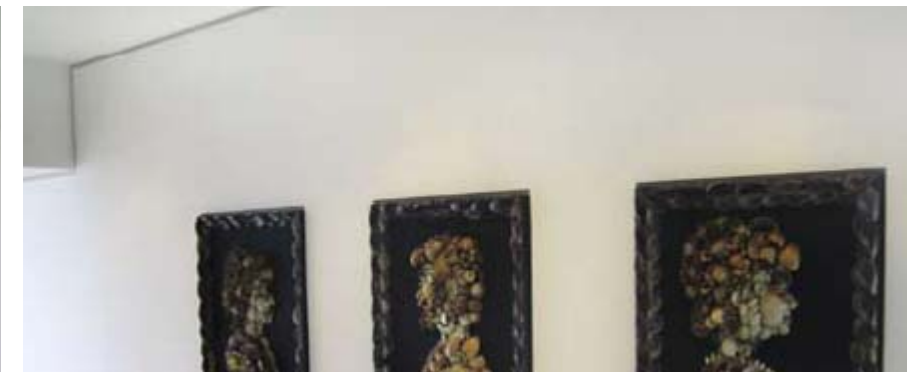
*Concealed ceiling sound supply*



*Dining room with concealed speakers in the vitrine*



*"Audio wall unit"*



*Wall of pictures with built-in concealed speakers*

# Audio rooms

High, higher, high fidelity – and high-end

The mere term “high fidelity” is music to the ears of many. As it is to the team at checkpointmedia, too.

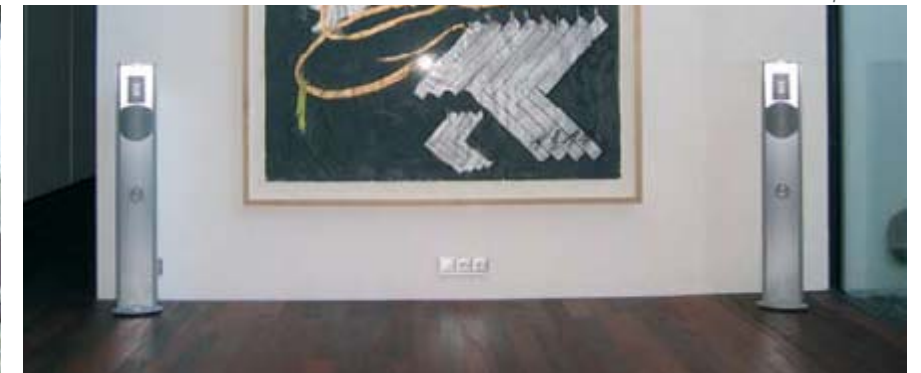
In the audio room, anything goes: if you wish, you can enjoy the uplifting sounds as both an aural delight and a visual attraction by placing the high-quality audio components and high-end speakers in full view – or maybe you are one of those who likes nothing better than the indescribable feeling you get when the sound comes from an unseen source. And this source can be anything from a high-end CD player to superior equipment for the true enthusiast such as a record player.



*High-end loudspeaker with coaxial ribbon midrange/tweeter*



*Elegant high-end loudspeaker in the living room*



*Classical aluminium speaker*



*Superior high-end record player*

# Entertainment rooms

The best films are on in your own four walls

Film buffs know how best to enjoy a movie. With the right equipment, expertly installed by checkpointmedia, your home is the best place to see what the world of cinema has to offer.



*Audio and video installation in the living room with a television and elegant home cinema components.*

Nothing is left to chance:

Thanks to the best flat screens and projections money can buy, watching television and DVDs becomes an audiovisual feast: perfect picture quality with digital surround sound is central to every kind of home entertainment. Again, the speakers can either be concealed or can be placed in the room as aesthetic features.



*Superior home cinema system with a flat screen and local audio sources*

*Concealed surround speakers*



*Motorized ceiling lift for the projector*



*Electrically-powered screen, mounted on the ceiling*

# Relaxation rooms

Unwind with your own choice of sounds and images

Worlds of sound in the bathroom, streams of images in the bedroom, or vice versa, or a combination of both: checkpointmedia successfully exploits the virtues of modern "technology of relaxation".

Video, television and the carefully planned use of music as sources of calm in relaxation areas: the technical infrastructure is tastefully blended with the room, while the media are relayed either from a central source in the technology room or played on local sources, depending on the situation. The speakers are either concealed or stand freely in the room.



Audio from unobtrusive speakers in the bedroom

Bathroom with designer speakers



Sunk loudspeakers in the bathroom



Surround speakers built into a wall unit



Bathroom with multiroom control panel

## Open spaces

Chilling and thrilling in the open air

Quiet mood music gently plays, while images and sounds provide an evocative background for warm summer evenings:  
The programme consists of chamber music in the arbour and films with a summer feel on the terrace.  
All thanks to checkpointmedia.

Sound for outdoor music and audiovisuals for video enjoyment in the garden are relayed from a central source in the technology room. The speakers used outside are, of course, weatherproof. Mobile televisions can be brought out on optional media trolleys.



*Barely visible terrace audio system, suitable for use in all temperatures and types of weather*



*Discreet terrace audio system using open-air speakers*



*Terrace sound supply*



*Terrace sound supply*

## Wellness rooms

Listening and watching keeps body and soul together

Thanks to checkpointmedia videos can be selected in a flash in the fitness room, and even in the jacuzzi no one need go without their favourite sounds.

Sound and videos in the sports room and damp rooms are either relayed from a central source in the technology room or from local appliances. And for water rats big and small: you can also hear sounds underwater through specially designed loudspeakers operated by floating remote control units.



Sound system in an indoor pool with barely visible speakers



Special loudspeaker panels - as a picture - painted by the six-year-old daughter



Indoor pool with a flat screen and loudspeakers

# Workrooms

State-of-the-art control centres for quick thinkers, lateral thinkers and innovators

checkpointmedia's multimedia for the workplace provides the infrastructure professionals need to encourage the top performances they expect.

All media are relayed either from a central source in the technology room or played on local appliances. A PC connection is of course also possible, which means the appliances can be operated not only with control panels as normal but also from the computer. The control functions are completed by a remote access feature: this makes it possible to check the status of your appliances from almost anywhere in the world and to operate them all by remote control.



Work-station with built-in Smart Home controls



Work-station with concealed audio sources

# Amenity rooms (and dreams) become reality, part 1

How the innovative use of control technology forms the basis of interior design.

Every Smart Home aims to keep the number of electrical appliances in the home to a minimum and to conceal the other necessary equipment by putting it all in the technology room. In each of the areas served by the media sources only those appliances are placed that must be operated directly, such as a CD player. The central controls can be easily accessed from any location using the touch panels.

So far, so convenient. But how does that actually work in practice, and what do you need?



Smart Home controls built into the wall

# The hardware

Control units and remote controls

## Wall panels

Design follows function: no more unsightly light switch mountings next to the door; instead, attractive interfaces which, although they consist only of a single LCD panel, still let you play and operate anything you wish.



Wall panel in a custom-made frame

## Remote control by cable

Each to his own: in this case, control using cable, without the need for batteries.



Colour touch panel powered by cable

## Portable remote controls

Each to his own: in this case, portable, independent control, with complete freedom to zap around.



Pocket PC as a Smart Home remote control



Panel with a colour touch display



Table display powered by cable



Radio touch panel with embedded windows

# Amenity rooms (and dreams) become reality, part 1

The innovative use of control technology as the basis of interior design.

## Technology rooms

Here is the where the entire infrastructure for the multimedia appliances and installations is housed: everything in all the rooms is controlled from the central technology room which contains all the power amplifiers and media sources such as the sound server, radio tuner, DVD multiplayer, satellite receiver etc.

The advantage is obvious:

The technical components are installed in one place in an easy-to-manage system. In addition the living space is not cluttered with a large number of electrical appliances.

What is most important for a technology room is of course the carefully thought-out installation of all the racks, so that extra components can be added or faults located quickly and easily.



Large rack in a self-contained technology room

# The hardware

The central technology room



Rack for a relatively small Smart Home system



Professional technology centre of a Smart Home system; front view



Clear layout of a control centre

## Amenity rooms (and dreams) become reality, part 2

Visual and audio components as multidimensional tools for new experiences

What makes checkpointmedia's innovative hardware so outstanding is not only its superb technical quality but also the superior design, which makes the individual elements highly desirable aesthetic complements to the architectural environment.

Examples of products and their use in various different situations:



*Top-quality floor speakers for audiophiles*

## From hardware to "beautyware"

Plasma, LCD, DVD, CD, loudspeakers ...



*High-end surround processor for perfect home cinema*



*Flat-screen TV with picture optimizer for the best possible picture quality*

## Amenity rooms (and dreams) become reality, part 2

How well laid-out user interfaces enhance each living space

One look, one touch: everything is logical and easy to use: select the page you require on the touch panel and make the desired changes; read status reports and messages from the individual appliances, take action if necessary, but above all – relax.

So far, so convenient. But how does that actually work in practice, and what do you need?



## The software

Intelligent, practical control interfaces

### Audio interfaces

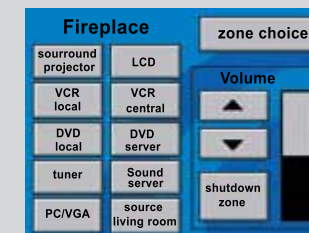
(for CD, radio, sound server, record player)  
For the operation of both centrally and locally positioned sound systems. In each room, different sound sources can be played at the same time and at different volumes.

### Video interfaces

(for plasma, LCD, projection, DVD, satellite, home cinema)  
These interfaces access the central DVD server and the satellite system and include the easy operation of local video components. A different video source can be played in every room, although all that can be seen is the television and, if need be, a DVD player.

### Lights and mood lighting, lighting

Predefined mood lighting for exterior and interior lighting can be called up and altered (dimmed) and the current status can be checked.



# Amenity rooms (and dreams) become reality, part 2

How well laid-out user interfaces enhance each living space

## Windows and blinds

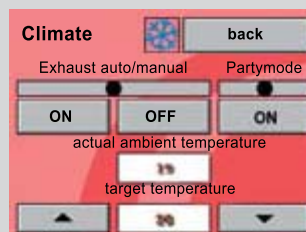
Bus-compatible (e.g. EIB) blinds can be lowered and raised automatically or “manually”; windows can be opened and closed automatically.

## Air conditioning and heating

Information is provided on the status of the air conditioning and heating (current temperature), which can be set to run automatically. The ventilation and/or temperature can be regulated as required by simply entering the desired setting on the touch screen.

## Security systems (surveillance cameras, alarm systems)

This sector includes the operation of, information on and status reports on alarm systems as well as access to surveillance cameras, which can also be remotely controlled using these interfaces.



# The software

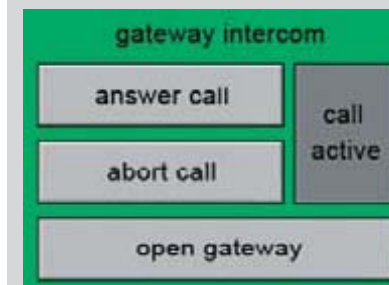
Intelligent, practical control interfaces

## Door openers and intercom

These systems can also be operated with the greatest of ease; it is even possible to see video messages on the touch panels.

## Internet

Wireless internet connections for laptops and PCs (Wireless LAN) can be installed in various rooms. Some touch panels allow internet access, too, while the control systems can also be operated from a PC.



## Also featuring: custom-made products

nothing is too difficult for checkpointmedia

It is not always possible to meet multimedia requirements with conventional products. This is especially true when a firm's policy and reputation mean that it insists on the best solution, i.e. the most distinctive solution, as a matter of principle. For this reason, checkpointmedia gives innovation pride of place and also develops special models tailor-made to the requirements of the individual client.



Red Bull Hangar-7 – truncated cone speaker under construction



Red Bull Hangar-7 – truncated cone speaker components



Red Bull Hangar-7 – truncated cone speaker

Examples of successfully implemented special solutions:

### The truncated cone speaker

The task was to provide a restaurant with sound from concealed loudspeakers. However, the room was cooled by means of cooling ceilings and this meant that there was no space free for loudspeakers. To solve this problem, checkpointmedia made a hole in the ceiling in the shape of a truncated cone to house the speakers.

### Loudspeaker made of polycarbonate sheets

Task: to provide the sound for the "Doppler Foyer" in the Red Bull Hangar-7 using concealed speakers. The idea was to fix transparent polycarbonate sheets with adhesive film to the walls; the polycarbonate sheets would be lit from behind by daylight. checkpointmedia "transformed" the polycarbonate sheets into loudspeakers, cutting the feeder cables into the sheets so that they could not be seen.

### Soundlounger

"Passagio", the innovative range of sound furniture, not only produces gentle sounds for you to hear but lets you feel them as well! The soundloungers turn their sounds, which are either preset or your own personal favourite melodies, into vibrations you can feel. checkpointmedia contributed substantially to the development of the technology contained in the soundloungers.



Red Bull Hangar-7 – Doppler Foyer prototype



Prototype Soundloungers

## checkpointmedia's own-brand products

A name to remember!

checkpointmedia's golden rule: Innovation in every field. Standard consumer products are often unsuitable for the requirements of a particular job. This is why checkpointmedia's specialists design their own products to meet special challenges.

### Underwater loudspeakers

checkpointmedia's specialists developed a prototype for an underwater speaker with exceptional sound quality for playing music in swimming pools. The speaker can be concealed underwater, and the principles of its construction mean it is far better suited for underwater sound production than conventional systems.

### Subwoofers built into walls

To boost the lower range of concealable speaker panels, a super-flat subwoofer (only 8 cm deep) was developed that is ideal for installation in walls and ceilings.



Prototype for underwater loudspeakers



checkpointmedia in-wall subwoofer

### checkpointmedia PhonoPreAmp.

A phono pre-amplifier with truly "state-of-the-art" qualities. The pre-amp is structured unobtrusively and in modules and is available for both MM and MC systems. It is extremely flexible, offering many possible adaptations to both systems. Adaptations tailor-made to the client's requirements are also possible. The wiring to the stylus connections is completely symmetrical, which prevents any capacitive coupling. In other words, it's a must for all record enthusiasts and music fans.

### checkpointmedia Cresnet hub

Facilitates the setting up of Crestron control infrastructure and guarantees frictionless communication between Crestron appliances, e.g. between the control centre and the touch panels (Crestron-compatible 12-port hub and mains adaptor with 600W bus power plus serial interface for status reports).



checkpointmedia's own-brand Cresnet hub

# Amenity rooms (and dreams) become reality, part 3

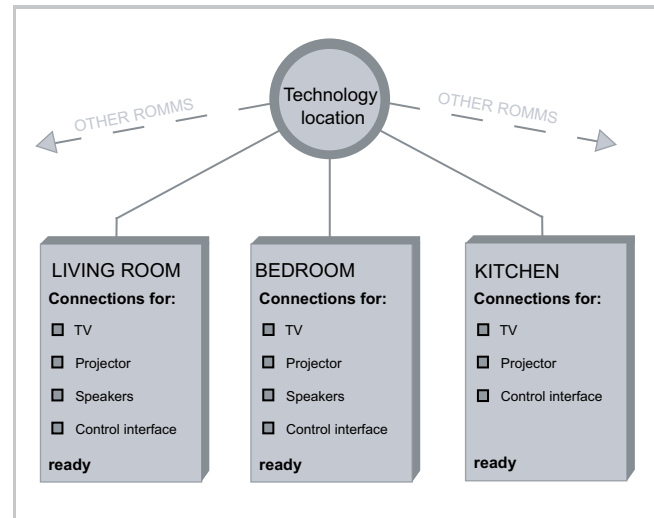
Project implementation as a series of modular possibilities

The implementation of Smart Home projects can be broken down into a number of different working phases and time units. It is not necessary to integrate or install all the elements and appliances at once; some things need only be thought about and planned, because they can be carried out at a later date. And what about existing appliances? No problem – they too can be easily included.

It is often advisable and necessary to make only the basic preparations for future extension of the system. All the necessary provisions for possible updates should also be made. The following diagrams show some of the possible additions that can be made and how they can be implemented:

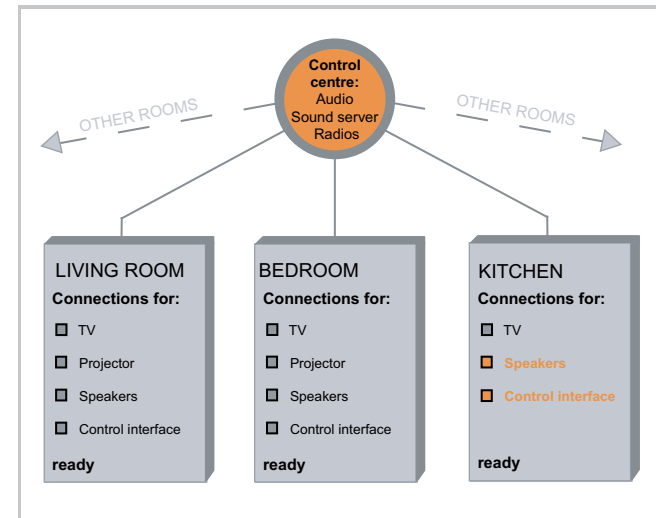
## Module 1

Empty pipes laid for loudspeakers to be installed locally or for speakers also built into the dry construction. Positions for control panels already determined, but as yet no appliances installed. These will be added at a later date.



## Module 2

Empty pipes laid and loudspeakers installed locally plus simple audio centre and appliances. In individual rooms, e.g. the living room, local appliances can be added later as all the necessary preparations have been made.

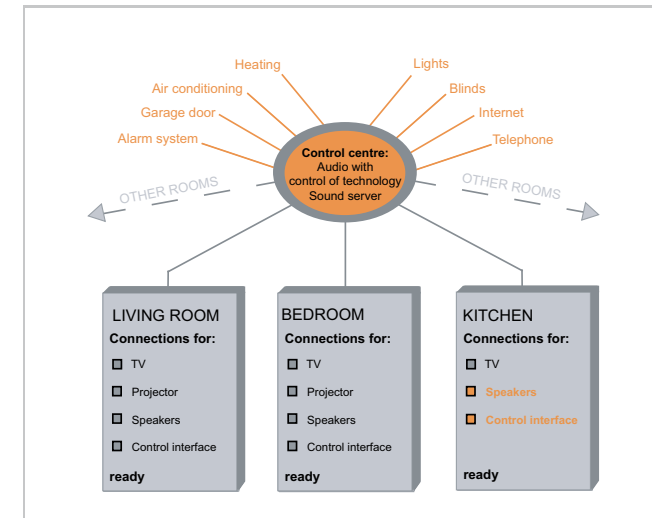


## The connection to domestic appliances: clear responsibilities, good partners

Before work on any job begins checkpointmedia makes sure as a matter of principle that the various tasks and responsibilities of all the professionals involved in construction are absolutely clear and precisely defined. As an audio and video technology specialist checkpointmedia never takes on the programming of heating and alarm systems, mood lighting etc. The control panels installed by checkpointmedia only replace the input interfaces supplied by the other specialists, to prevent countless different and complicated panels having to be installed all over the property. Each contractor performs its tasks independently of all the others. However, in project meetings with all the contractors checkpointmedia will, of course, program all the required data and switches on the control panels and assume responsibility for all the information and instructions.

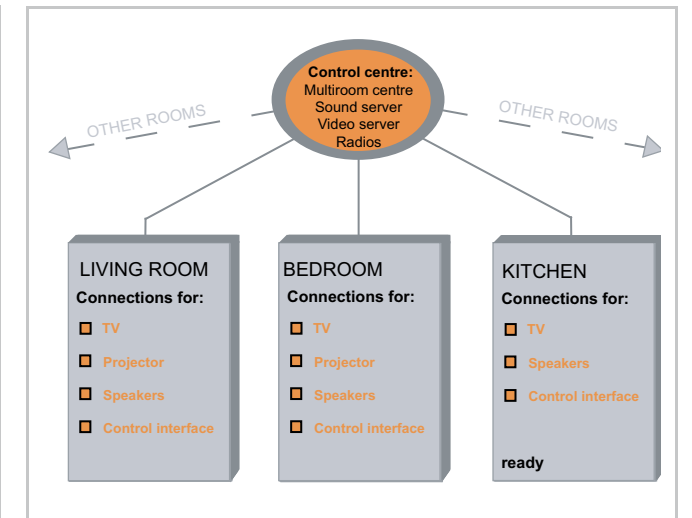
## Module 3

Empty pipes laid and loudspeakers installed locally plus audio centre with additional controls from a complete control interface (lighting, blinds, air conditioning, door opener etc.), but no installation yet of local appliances yet (audio, video).



## Module 4

Central controls, technology and multimedia with local systems according to the client's wishes, control of technology (lighting, blinds, air conditioning, door opener etc.) from the interface: the complete installation of everything that goes to make a Smart Home.





## checkpointmedia's clients all want the same thing

unique, user-friendly solutions of the very highest quality

### **Austrian Theatre Museum**

Exhibition technology and a film collage on Hans Moser

### **Blue Space: Liquid Relaxing Area**

Creation of an innovative relaxing room in the Caracalla thermal baths in Baden-Baden (for sha & GTT)

### **Children's museum, Graz**

Audio and video technology in the exhibition and discovery area, purchase of the hardware and sound environment in the auditorium

### **Dommuseum Salzburg**

Projection for the Salzburg Special Exhibition 2003: (Archbishop Paris Lodron, 1619-1653, statesman between war and peace)

### **Epstein Palace**

Corporate design, website, exhibition furniture and all media stations for the permanent exhibition

### **House of Music/Museum of the Vienna Philharmonic**

Interactive Waltz Dice Game, large-screen projection and sound

### **Illwerke**

Video and audio impressions in the "power room"

### **IT - SC**

Multifunctional A/V infrastructure in presentation and conference rooms

### **Kunsthalle Leoben**

Installation of an outdoor sound collage for the Genghis Khan exhibition

### **Mobilkom Austria - a1 lounge**

Sound in the a1 lounge in Mariahilfer Strasse, Vienna

### **Mozarthaus Vienna**

Conception and realization of the multimedia attractions in the exhibition area and the function room

### **MTC / ADAC**

Multimedia equipment for the touring exhibition "100 Years of ADAC"

### **Museum Wildalpen**

Electronic controls for the video cinema

### **Museum of Natural History**

Exhibition technology and media stations

### **Musikverein**

Audio technology in the four new halls

### **Parliament, Vienna**

All multimedia stations in the new visitors' centre including an approx. 20 m<sup>2</sup> rear projection wall

### **Red Bull: Hangar-7**

Planning and equipment of the entire audio/video technology as well as of the multimedia attractions.

### **Und monastery**

Website & multimedia equipment for this new centre of gastronomy, culture and events in Krems



There are, of course, also many private clients who place their trust in checkpointmedia's creative technology. They, however, prefer to remain anonymous.

## Stefan Reiter, Stefan Unger, Virgil Widrich

Proprietors and management of checkpointmedia



Mag. Stefan Reiter

**Project and technical management, concept creation especially in the fields of e-commerce and web presence.**

Born in 1967 in Vienna, degree course in business management. Freelance multimedia producer since 1996; project manager, copywriter, technical manager on numerous CD-ROM and internet projects.



Stefan Unger

**Audio and video equipment, special solutions.**

Born in 1971 in Schlieren/Switzerland. Works with top-of-the-range A/V systems for private use (stereo systems, multiroom, home cinema) and high-tech hardware for exhibitions, museums, theme parks; develops solutions and their control systems for auditoriums.



Virgil Widrich

**Production management and concept creation for film and multimedia.**

Born in 1967 in Salzburg. Besides continuous work on film, video and multimedia he also creates concepts and scripts. His short film "Copy Shop" won 35 international awards and was nominated for the Oscar in 2002.

## How to contact checkpointmedia

We look forward to hearing from you!

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