Real
Smart Home
Compendium.

No Gimmicks.
Real Smart Homes.

LOXONE

I hope you enjoy our Compendium and above all, your Loxone Smart Home.

Thomas Moser
Founder

What is a Real Smart Home from Loxone?

A Real Smart Home from Loxone simplifies life in a new build or renovated home. It minimises the need to manually control a house and can save you up to 50,000 tasks a year. This gives you more time for the important things in life.

The home, built to provide people with a safe place to relax, sleep and entertain, has undergone significant change in recent centuries. A typical 21st century house has lots of devices and appliances which, when used properly, can make life easier for its occupants, maximising their comfort and minimising their energy consumption. If these devices and appliances are too demanding, however, it quickly makes the occupants want to return to the "good old days".

In most homes, there are rooms which serve different purposes. Here's a brief summary of the main things we use a home for:

- Cooking
- Eating
- Relaxing
- Entertaining
- Working
- Sleeping

Essential features of a 21st century home:

- Access, security & safety
- Energy management
- Lighting
- Multimedia
- Shading
- Temperature Control
- Ventilation
- Wellness

All of these features together can be regarded as an orchestra. An orchestra only performs well when it works in harmony. An orchestra also has a conductor, who is mainly responsible for the quality of the music.

In a smart home, the conductor is the Loxone Miniserver. It turns the individual features and components into one overall unit that is harmoniously coordinated. As far as possible, every component and system within the home should perform its duties automatically, without manual intervention. When completed, this orchestra is conducted by the Miniserver and is called: a Real Smart Home.

A Real Smart Home is not a random collection of gimmicks. A product's ability to be controlled via a smartphone does not make it a smart home, or even a smart home component. Many products on the market lack the ability to be integrated. This ability to be integrated, or to be guided by a conductor in order to offer greater functionality to the homeowner, is the basis for a truly smart home.

Features of a smart home

I describe features as thematic components, which can also be thought of as the sections of an orchestra, such as the violins. The features of a Loxone Smart Home can be fully or partially used. Some features may be more or less appropriate for your home, depending on where in the world you are located. In this section, I describe the essential features you may like to consider.

Shading

There are several different types of shading which can be automated in a home. For now, we'll focus on shading for windows as this is probably the most important.

In terms of shading your home from the sun, there's a difference between external and internal sun protection. I primarily describe external sun protection, as this is usually better designed and more suitable for a motorised system.

Shutters

External shutters, which are very common in homes throughout Europe, are usually mounted on the outside of windows or facades. They provide sound insulation, visual privacy, sun protection and thermal insulation.

Image: Shutters (Source: Roma)

Shutters are now driven by tubular motors, something that was previously done by hand. Available in a wide range of materials and colours for use around the world, shutters are usually extremely robust and withstand almost any weather conditions. Depending on the application, a possible drawback is that they may block the external view.

Venetian blinds

Unlike shutters, the angle of Venetian blind slats can be altered. Venetian blinds can offer sun protection and visual privacy. When used to provide sun protection, the external view is maintained, albeit to a limited extent.

Venetian blinds are more delicately built than shutters and can be raised using a motor, which is usually discreetly hidden out of view inside the blind tube. Furthermore, you can also adjust the angle of the slats themselves, although this is more complex as it requires a little more precision.

Depending on their size, external Venetian blinds are susceptible to wind and ice in winter. Although these slats come in a variety of designs and colours, it is advisable to opt for a colour that reflects sunlight as much as possible.

Unlimited flexibility – for a variety of shading types

A Loxone Smart Home is infinitely flexible and adapts to you and your individual needs. No matter if it's blind control, awning control or roller shutter control, you can integrate different shade types into your home from a variety of manufacturers.
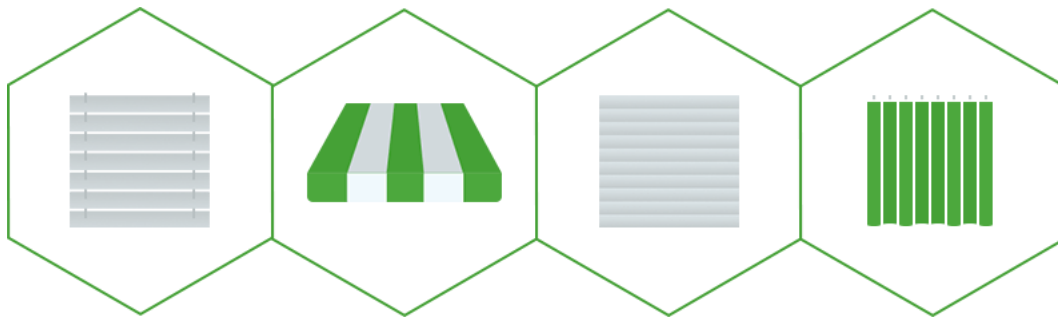
Room Climate

Heat can originate from various sources, be that heat pumps, fossil fuels or biomass energy - the range is now more varied than ever. The problem is that most heat sources can be only partially controlled. Furthermore, many heat sources are still reliant on the outside temperature to dictate when to heat the home or not. This method is concerning; modern houses are essentially thermally cut off from their environment. Insulation and blinds, as well as reductions in energy consumption, lead to more self-sufficient, less environmentally-dependent domestic operation. Heating systems that control the supply of heat according to the outside temperature are unsuitable for a modern house and cannot be described as smart. It is important to be able to control the heat source in order to optimally control energy levels at any time of the year, day and night. Often, there are days in winter when snow blankets the ground, yet the sun is shining brightly, and the room warms up, so there's no need to have the heating on. Other times, when the weather is damp and gloomy, the outside temperature may be higher, yet the heating is needed. The outside temperature should play a minor role in controlling the supply of heat. We should no longer be investing in heat sources that cannot be controlled. The easiest way to control a heat source is to adjust the flow temperature of individual heating circuits. Temperatures can be adjusted using valves. The room requiring the most heat determines the flow temperature.

Air-Conditioning

The use of active aircon, which uses energy to reduce the temperature, varies substantially from region to region. It is widely used in warmer areas and virtually non-existent in colder climates. As with heating, control is essential. Air is usually the transport medium for centralised cooling functions, as there is an almost unmanageable condensation problem with underfloor aircon using water. Just as a cold beer from the fridge fogs up, so do the cooling pipes, and condensation must be dissipated in order to prevent damage to the fabric of the building. Active aircon would be an ideal solution in combination with a ventilation system. I consider aircon that uses cooler night air to be a diluted form of active aircon. Cool night air can easily be transported into buildings via ventilation systems and stored in the fabric of the building to provide relief on the next warm day. Only with intelligent control, however. Welcome to the smart home. Without a smart home, you can't really have precise control of temperatures, especially when using a passive method, such as a free, night-cooling system.

Passive aircon is provided by intelligent shading systems. The sun shines at up to almost 1,400W/m^2 depending on the region and season. We can convert this energy into low-efficiency electricity, use it for hot water, or when we don't need it, we can keep the sun out with shading. It costs next to nothing to cool your home via shading and it significantly contributes to comfortable living and energy savings.

Lighting

Fortunately, lighting has evolved from the original tungsten filament. However, its development has been mixed, with some lighting inventions that could not be used in private homes until today's modern LED technology. Halogen bulbs and fluorescent lamps are a thing of the past.

Lighting is important - it can illuminate our living space, help us to work and even create special moods. Lighting in all its forms and natural occurrences significantly affects our emotions and our mood. Coloured lighting can boost creativity and provide positive energy.

Probably the most effective lighting is that which best mimics sunlight. Even if artificial lighting can never quite replicate the light spectrum of the sun, it does offer many possibilities. In this regard, the humble lightbulb has set the bar very high. When choosing lighting for your home, remember that it's not just about how a light looks, but also the quality of light it emits. The CRI (Colour Rendering Index) should be as high as possible. For this reason, Loxone LED products have always focused on warm white light with a very high, affordable CRI.

Food supposedly tastes best in sunlight; artificial light should produce a similar feeling. We recommend you have a warm white light above the table when eating in order to showcase your meals in all their splendour.

Coloured lighting is highly effective for creating a certain mood within a room. It can, for example, help create a cosy glow in a room so that you can relax after dinner with a glass of wine. Coloured lighting creates joie de vivre - we should make the most of it!

Access

Simple and secure access control

An access solution should be as easy as possible for authorised users and as obstructive as possible for those trying to gain unauthorised entry. Several types of access control are now available, and almost anything is possible, from biometric, to code-based systems.

A Real Smart Home combines two types of access: a keyless system, where the building can be entered via a PIN code, and access via a NFC Key Fob. In addition, a Real Smart Home can be used to assign different permissions for family, friends, tradespeople etc. Time-limited PIN codes are also part of the functional scope of a Real Smart Home.

The front door – always in view

In a smart home, it should always be possible to keep an eye on what is happening outside your front door at anytime and from anywhere. A fully integrated video intercom system helps fulfil this need. This allows instant notifications when someone rings the doorbell. You can then see and speak with whoever is at the door if you would like to do so.

Multimedia

Multimedia can encompass many things: music, films, TV, and entertainment. However, multimedia devices are changing. The transformation of these devices has been very fast in recent years. The first commercial CD was produced in 1982. Today, it's almost obsolete. We have since revolutionised the way we store and listen to music; today, streaming services have conquered the world. The entire world of music is available at very little cost, instantly. This technology boasts wonderful features: we can now create playlists featuring our favourite music for all our applications and listen to these anytime, anywhere. We can now enjoy an unprecedented abundance and quality of music.

Music is timeless. New genres are constantly being added, while older ones are enjoying a renaissance. What has changed in recent years are the devices we use to listen to these. My once outrageously expensive CD changer is now worthless. The control of these devices is relatively unchanged, however. Multimedia combines rapidly changing technologies with enduring ones such as the Loxone Smart Home. The control should therefore focus on essential functions. In terms of multimedia, the smart home should do what a good remote control has done for years. In an age of 4K, modern technology must be able to keep up. When it comes to music, 30-year-old speakers and amplifiers still produce wonderful sound, even for the most up-to-date music. It's time to fully integrate music into our homes. Video will follow when it has been fully established,

which will take time. Until then, we should focus on controlling it: switching it off when leaving a room, adjusting everything correctly when turning it on, and controlling important functions during its use.

Ventilation

There are various forms of ventilation. In new buildings, it is often centrally managed. In renovated homes, usually decentrally. Both systems have advantages and disadvantages. The biggest drawback of centralised systems is probably temperature homogenisation. If we want a healthy sleeping temperature in the bedroom, cosy warmth in the bathroom and a pleasant temperature in the lounge, then this typically isn't possible with a centralised system, since it is usually only able to deliver a single temperature in all rooms. If the system is capable of being controlled, we have the option of influencing the temperature via the integrated heat exchangers. In theory, ventilation could be used for heating, cooling and maintaining the temperature. Unfortunately, a centralised system often only has one temperature for all of the fresh air supplied throughout the house. Care should be taken to ensure that temperature does not suffer at the expense of air quality when it comes to quality of living. It would be better to group rooms according to their use and operate two systems - one for rooms requiring a lot of heat and another for rooms that are rarely used, for example.

Alternatively, it is also possible to use so-called decentralised ventilation with heat exchangers. The advantage of these is that they can be used individually depending on the room requirements, provided they can be controlled. Without the ability to be controlled, ventilation can play havoc with temperature levels.

Windows

Windows have many functions, from letting in light to regulating ventilation and temperature. At the moment, very few windows are motorised, and even fewer are automated. I would like to see innovations when it comes to windows. Window ventilation would be perfect, as would motorised opening and locking.

Windows are a common point-of-entry for intruders. They can be monitored via both window contacts and glass breakage detectors. When used intelligently, these sensors can be extremely versatile. If it starts to rain, you can see which windows are open, and perhaps even close the shutters automatically to avoid the risk of water coming in. The choice is yours.

Wellness Facilities
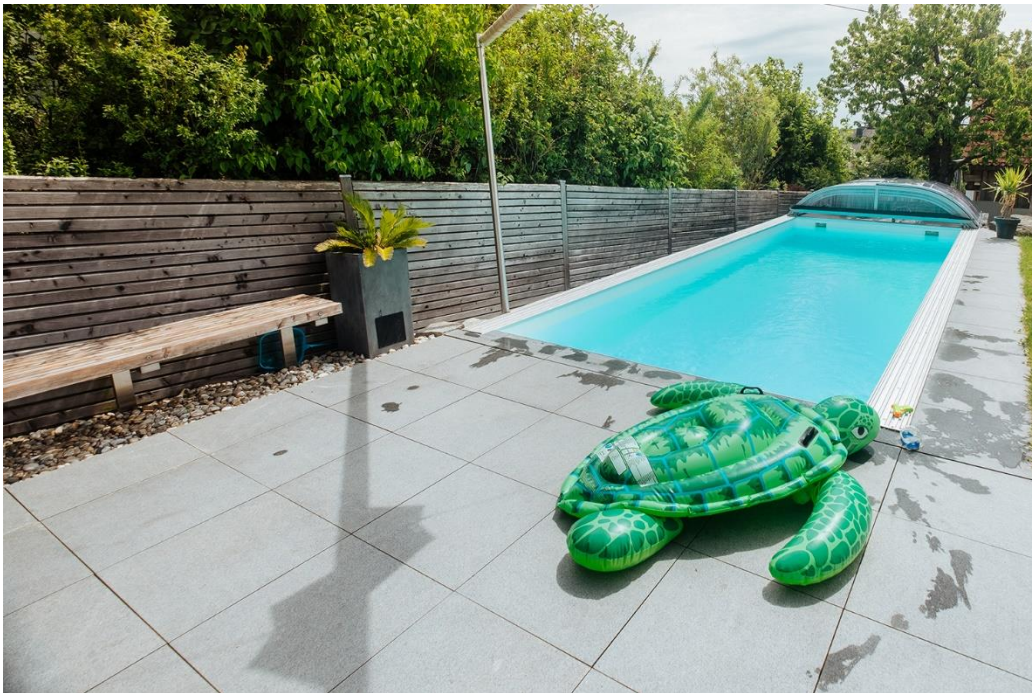
Depending on where you live and the type of home you have, this could be an extremely diverse list: a hot tub, swimming pool, sauna, steam room, etc. Regardless, all of these wellness facilities tend to use a lot of energy. Intelligent control can generate comfort with minimum energy use. I could leave the hot tub warm all week, even though I'm only going to use it at the weekend, or I could heat it intelligently. How about controlling the backwash, rinse and filter cycles of your swimming pool from the comfort of your sofa? Simple control functions, maintenance options and monitoring enable incredible functionality with very little technology.

If solar energy is available, why not use it to heat the pool? Simple functions such as these are entirely normal in a smart home and almost taken for granted.

Energy Management

Solar power generation systems are available in various forms. A thermal solar system, for example, can result in significant energy savings in a region with high heating demand, provided there are lots of sunny days. Thermal energy can often be used for heating until late autumn and even in winter. Now somewhat out of fashion, a thermal solar system is a simple and cost-effective way of using the sun's energy. If heat distribution is integrated with a smart home, free energy can be transported to those rooms that do not receive direct sunlight and therefore require heat...energy entirely free of charge.

Photovoltaic systems convert the sun's energy into electricity. In the coming years, electricity generation will continue to gain importance. Until just a few years ago, electric cars were only available as toys. Now people are driving hundreds of miles in them on a single charge. Distribution and correct usage are important, especially with electricity.

Solar energy has one major drawback - it is not always available when needed, which means that energy management is more important than ever. Harvesting energy and using it wisely without wasting it is the aim. This is easy in a smart home. Many of our applications are not time-critical and can operate when the sun shines. In many cases, this also includes charging a car.

Safety & Security

There are various scenarios that require alarms. Sometimes for protecting possessions, but mostly for protecting people.

Protecting the occupants

There are essentially two alarm systems for protecting people: smoke alarms and carbon monoxide alarms. Thanks to smoke alarms, the risk of dying from a fire at home can be greatly reduced. Of course, these systems also help to protect possessions, but this is not the purpose for which they were intended.

Despite these precautions, there are still too many totally unnecessary incidents. Smoke alarms are mandatory for all newly built homes, but regulations differ for existing properties. Regardless, we strongly advise installing smoke alarms as part of any Loxone Smart Home. The Smoke Detector Air can work autonomously or as part of a smart home system. It can be especially effective if integrated into your smart home system since the alarm can also make use of lighting, shading and multimedia. Ventilation can also be switched off to prevent smoke from being distributed throughout the house to reduce the risk of death by smoke inhalation. When you are planning fire safety in your home, always seek fire safety information from authorised sources, and follow all building regulations.

Protection from break-Ins

Burglar alarms are also becoming increasingly important. Their protection is multifaceted. When we're away from home they can deter intruders and protect our possessions however when we are at home, they ultimately protect our safety. The different stages of a Loxone alarm are designed to deter intruders. The entire house is initially illuminated by the flashing lights. The blinds are raised to make the house as 'transparent' as possible. Occupants are alerted. If required, the security services are called. Although burglary statistics are declining in some parts of the world, the demand for security is high and justifiably so. In a Real Smart Home, there are sufficient sensors to be able to add smart home security at next to no cost.

Sensors in a smart home

Sensors that work correctly and deliver relevant values are the backbone of the smart home.

Presence Detection

Detecting someone's presence in a house and in every room is extremely important for most control functions. Presence detection should be available in every room. In some rooms, such as the bedroom, for example, movement is more important than presence. In the bedroom, the light should only come on at night if we get out of bed to go to the toilet, for example. In the dining and living room, however, it is important to detect presence. Even if we do not move while reading on the sofa, the light should not go out. In a Real Smart Home, we use presence detection to control the lighting, multimedia, climate and more.

Temperature Measurement

Wellness and satisfaction depend on many factors. One crucial factor is temperature. Temperature measurement is certainly one of the oldest measurements invented by man. Temperature and humidity measurement is now standard in every Loxone Touch (except the Touch for Nano) to ensure that we no longer have to worry about this. Modern houses are inert, which is precisely why we need to regulate the temperature room-by-room in order to compensate for this inertia.

Water Sensor

The water sensor can help to prevent disaster by providing an early warning of water detection. Since most dishwashers are already fitted with this functionality and disconnect the water supply in the event of a fault, the water alarm should be placed in areas where water leaks are possible, such as under the sink, bath or in a utility room.

The water sensor can also prevent disaster in severe weather. Does your cellar flood during bad weather? If you don't often go down to the cellar, it might be weeks before you notice a flood. This can be avoided if you use the water alarm. Detection is very easy and effective via two contacts that issue an alarm signal when they come into contact with water.

Smoke Alarms

Smoke alarms are used to safeguard people by detecting smoke and warning occupants. The added benefit of protecting the house is obvious. Smoke alarms save lives and should be standard like ABS on cars. Smoke alarms have their own warning siren and operate autonomously using a battery. They also have an interface to the smart home which can then issue alerts throughout the house. Smoke detection technology is now mostly infrared-based and totally safe.

Window Sensors

Designed to identify the opening status of windows, these sensors can be used for alarm or convenience functions. Depending on the window type, it is useful to identify the status of the window - open, closed or tilted. A window contact prevents shades from shutting when the patio door is open. Accurate information alone - in the form of a window and door summary - is already extremely helpful when leaving the house or when a storm is approaching. These detection sensors are usually a very simple reed switch and are triggered by a permanent magnet. Detection is as reliable as it is easy and completely trouble-free.

Weather Station

Hardly anything affects people more than the weather. Almost everything we do depends on the weather. We build houses to be impervious to the weather, yet we like being outside enjoying it. On the one hand, weather sensors provide us with important, interesting information. On the other hand, they also provide important information for the smart home. If it is sunny, then the shading should be activated, provided the room is too warm and the sun is coming from a direction whereby it penetrates the window.

Switches

Even though the smart home functions eliminate the need to constantly press buttons, there are still applications in a smart home that require switches. Turning the music up or off, changing the lighting mood, raising or lowering the blinds - are just a few of these. The Loxone Smart Home with the Loxone switch standard is probably the most advanced system on the planet. Each switch in every room should have the same functions, thereby eliminating the need for labels and complex user learning. The only thing you need to do is choose your type and colour of switch; the rest does what it is supposed to do: simply work.

The Loxone Switch Standard
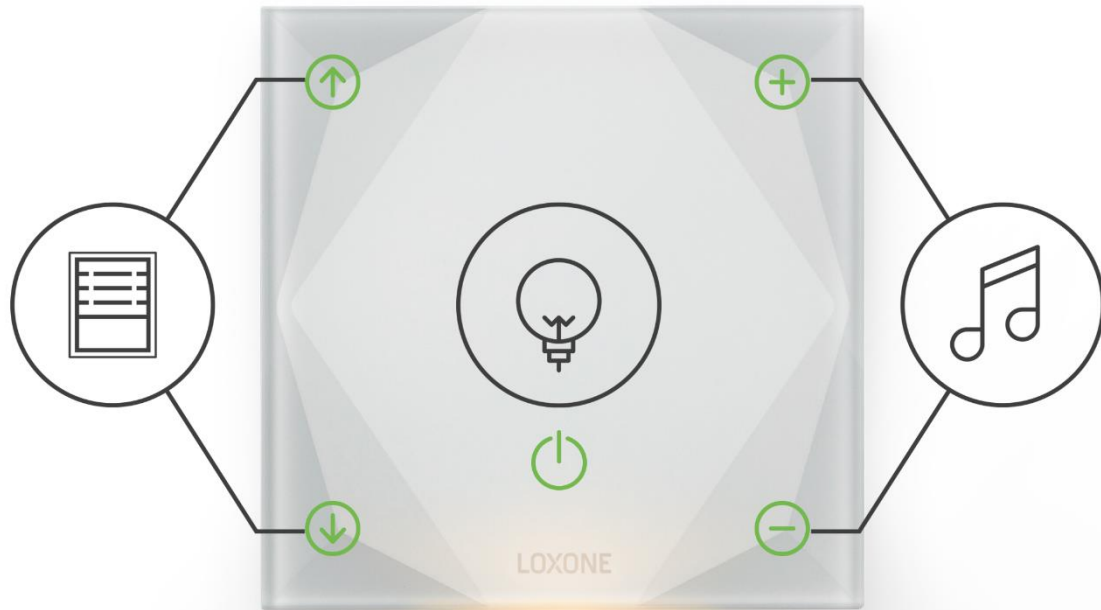
Single tap

With a single tap on the centre of a Touch Pure you can switch the lights on and scroll through predefined lighting moods.

You can control the volume and playback of music, and the blinds by simply tapping on the respective corner touch points.

Multiple taps

Double-tap on the top right touch point to change the music source, double-tap the bottom right to stop the music.

A double-tap on the centre touch point will turn the entire room off.

On predefined switches, a triple-tap on the centre touch point switches off the entire house and arms the burlgar alarm.

Smart home specific devices

Speakers

The really great thing about speakers is that they stand the test of time. Even though advancing technology makes ever-smaller speakers sound increasingly good, a speaker that sounds good today will still sound good in 20 years' time. Speakers are primarily used to play music. If someone rings the doorbell, they act as a sounder. If an alarm is activated, they sound a warning bell, if an announcement is required, then that is also possible. They can even be used as part of a smart alarm clock. Timeless, as discreet as possible, with a great sound.

Siren

A siren should be used outside. This is intended to draw attention to the house, alert the neighbours and subsequently drive intruders away.

Sounder

Doorbell sounders used to be required, in times when speakers were not controlled via a multimedia server. Today, your multimedia system can use the speakers as a sounder when someone presses the doorbell.

Basic equipment

Network

The network plays a significant role in a smart home. All local devices using the Loxone Smart Home App connect to the Miniserver via the home's network. Special attention should be paid to the Wi-Fi range so that as much of the house as possible is covered. Smartphones and tablets need stable Wi-Fi for a good connection to the Miniserver. It is important that the environment does not hinder the Wi-Fi signal. Attention should be paid to coverage, so that it really is available everywhere. Walls, concrete ceilings, etc. sometimes act as a shield. Often, the underfloor heating distributor may be a suitable place for access points, provided the panel is not made of metal which could block signals. Important devices should always be assigned a static IP address, to establish properly sustainable connections. Important devices should still be provided with a cable. The bandwidth of a cable is much higher, even with the best Wi-Fi. In particular, multimedia equipment, TV, etc. should be routed via a network cable.

24V

The power supply to the LED devices is ideal for extra low voltage. If handled correctly, 24V offers many benefits. 24VDC SELV is considered to carry a low risk of dangerous electrical shock. Specially developed lighting designed for 24V has the advantage that a power supply does not have to be installed for each individual light. The brightness of 24V-based lights can be adjusted from 0-100% via PWM (pulse width modulation). This technology is simple and works well in the long term.

The provision of a 24V emergency power supply is also very easy. Often, however, little attention is paid to the power supplied to the appliances. Just as with 230V, improper cabling may cause the wires to overheat and cause a safety or fire hazard. Wires must be protected accordingly. 24V wiring must be protected according to the requirements of the wire cross-section. Another thing to consider is the drop in voltage of the wiring at high currents. To ensure that this is not critical, Loxone products usually have a universal input voltage and are therefore largely unaffected by voltage drops.

230V

230V is still the preferred voltage for all appliances, from fridges to vacuum cleaners. Although the cables are small, they can still handle extremely high outputs. Residual current circuit breakers to safeguard people and circuit breakers to protect wiring are well-established, sophisticated and ensure the necessary safety. Fatalities from domestic electricity are now, thankfully, almost non-existent. 230V appliances can be controlled via switchable contacts, dimmers and wave package controllers. It is important to use the correct dimming mode for lights with phase displacement.

App Control

Even though it is an add-on, the app is an important part of the smart home. Together with the web interface, it provides detailed information from the Miniserver and offers extensive control options. Setting the comfort temperature in the living room at important times of the week is just one of many thousand examples.

Nevertheless, the app should only play a supporting role and is not required for day-to-day operation. Relying solely on app control also raises some concerns; whilst smartphone generations change at least once a year, the smart home is intended to be enjoyed for many years. A smart home should be designed to last for at least 20 years. The dependence on rapidly changing devices is therefore a disadvantage. The supply of the latest generation apps, which keep pace with the speed of the smartphone market, is essential.

Basic functions in every room

Control

- Loxone Touch Pure (as shown on 'The Loxone Switch Standard')
- A motion sensor in every room
- Remote Air could be advantageous in certain rooms, such as the living room

Shading

- Shading is automated according to interior temperature, the position of the sun and the levels of solar irradiation
- Shading is specific depending on which windows are in direct sunlight
- In every room, you should have the ability to open and close the blinds via an intuitive switch, not a complicated remote or bank of switches
- External blinds and awnings are automatically retracted in order to mitigate any damage from high wind speeds
- Frost Protection
- Shading features are able to be controlled via an app
- If an exterior door is opened, the shading for that door opens and is also taken out of automatic mode, which ensures that you are not shut out of your home. The shading will stay like this for as long as the door is open. This feature requires a door contact

Lighting

- Each switchable or dimmable, white or coloured light can be individually configured to create different lighting moods to suit the way you are using the room, via the Loxone app
  - For example, a brighter lighting for eating, a softer light for reading and more relaxing light for the bathroom
- You can change lighting moods via the well-placed intuitive switches in every room
- A Room Off function should turn off all lights in that room
- With coloured lighting you can set up an automatic colour sequence – you can choose up to six different colours with change intervals up to one hour – this is done within the Loxone app and can be saved as a custom lighting mood
- Only possible with a motion detector and brightness sensor in the room:
  - Automated ambient lighting
  - Never worry about forgetting to turn the lights off. The lights are automatically turned off after a period of absence
- Orientation light on the Loxone Touch Pure

Intelligent Room Climate

- The temperature can be set individually for each room
- Temperatures and times can be adjusted for each room via the app
- Homes equipped with heating and cooling facilities intelligently use both systems to achieve the comfort temperature
- Integration of home ventilation systems should also be possible via hardware that is compatible with the interface
  - Thanks to corporate partnerships the Leaf 1 Air/Tree and Internorm I-tec products can be fully integrated into a Loxone Smart Home for complete control of room climate
- A Room Off function should revert the heating back to the original schedule
- Open windows are detected by the window and door contacts. The energy supply is then optimally adjusted, taking into account the external temperature, to ensure that no energy is wasted through open windows
- If presence detection systems are in place, the heating schedule is automatically extended if you stay in the room longer than anticipated

Intelligent Multiroom Audio System – Loxone Music Server

- With Loxone, you can seamlessly play your favourite music in any room. You can also conveniently select and change songs using the app
- The music can easily be adjusted or turned on or off from the intuitive switches in each room
- Music can automatically start playing in rooms with motion sensors. This is conveniently disabled with a Good Night function
- You can configure up to 8 music favourites per room
- With free TuneIn integration, you have the largest selection of internet radio to choose from
- Streaming services such as Spotify can be fully integrated into the system
- The doorbell sound can be played at varying volumes depending on the room
- Alarm and notification sounds are played throughout the home

Additional functions according to room type:

Bedroom

Shading
- The shading works in harmony with the alarm to ensure the slats on the blinds will partially open in the morning

Gradually wake with light
- Goodnight Mode can be activated when going to bed (with a triple tap on the Loxone Touch Pure) so you can go to bed with the comfort of knowing that your home will wake you in the morning
- Before the alarm sound goes off, you will be softly woken from your slumber by a gentle fading in of light

Gradually wake with music
- The Music Server will help you start the day right by playing an alarm tone
- The alarm clock function, along with the lights and music, will be switched off by the standard Room Off action
- Alarm times and schedules can be individually set within the app so that you always wake up at the right time

Thoroughfare

Lighting
- Ambient lighting is automatically turned on and off based on motion

House Off
- When the last person leaves the house for the day, they should have the ability to enable a House Off feature
- This could entail a triple tap on a switch located next to the front door

Whole House

- In this section, you can find functions which are not room specific such as the burglar alarm
- Plus, when a Loxone Smart Home is configured with the free Loxone Config, you will also find features under Whole House such as:

Door and window monitor
- This shows you, at a glance, the open/closed status of all windows.

Important convenience functions

Convenience functions (also known as central functions) are events that turn a control system into a smart home. These are essential for comfortable living and contribute significantly to the quality of a smart home.

Leaving the house

When the last occupant leaves the house, they should use the Leaving House function to activate the All Out Mode.

Action:
Loxone Remote Air, Loxone NFC Code Touch, a button in the app, or triple-click on the Loxone Touch

Event:

- All shading to automatic mode
- All lights switch off
- Burglar alarm armed with delay
- Presence simulation on
- Heating returns to the set schedule
- All garage doors close
- Music Server & all music zones switch off
- All media (TV, set-top boxes etc.) switch off
- All wellness facilities switch off
- All Out Mode activated

    The All Out Mode provides other specific functions.

Frost Protection

Event:
If the temperature falls below 1°C and it is raining, then the Frost Protection operating mode should be activated. Frost Protection mode helps to prevent pipes from freezing and bursting during colder weather.

Action:
External shading is disabled

• The Frost Protection Mode can be disabled by pressing a switch in the app or automatically when the outside temperature returns to >10°.

Goodnight

When the last occupant in the house goes to bed, they should activate the Goodnight function.

Action:
Triple click the Loxone Touch in any of the bedrooms.

Event:

- All lights switch off
- Burglar alarm armed without motion sensors
- Heating set to run according to schedule
- All garage doors close
- Music Server & all music zones switch off
- All media (TV, set-top boxes etc.) switch off
- All wellness facilities switch off
- Night Mode activated

    Night Mode provides other specific functions. When Night Mode is enabled, music is no longer activated by movement and lighting is dimmed by default. This mode is disabled via the Good Morning function in every room.

Good Morning

The alarm clock function triggers the Good Morning function.

Action:
A pulse is triggered (3 minutes before the alarm time)

Event:

- Blinds are raised or slats adjusted
- Music server wakes up, ready to play the alarm tone or music at the specified time
- Alarm clock sounds
- The Goodnight function is disabled

Storm Protection

Exterior shutters should be fully retracted or moved into the safety position to protect them during storms and high winds.

For this to work properly, the wind speed must be measured at the house itself.

Event:
If the wind speed exceeds 45 km/h, the Storm Protection operating mode is triggered.

Action:
The Storm Protection alarm moves all shutters into the safety position. The Storm Protection mode is disabled when the wind speed has fallen below 30 km/h for a period of X.

Away from home

For extended absences. This means an absence of more than three days, when the Away Mode should be activated. As this is usually rare, the function should be enabled via the app. As an exception, I would like to mention holiday homes. In this case, the Away Mode should be enabled instead of the Leaving House function.

Event:
Press the Away Mode button in the app

Action:
Away Mode is enabled. Away Mode lowers the room temperatures to Frost Protection. Water temperatures are also set to Frost Protection.

The easiest thing is to create a calendar entry to activate this function when booking your holiday.

Upon returning from your absence, be sure to disable this mode prior to your arrival home, in order for the heating system to reach your comfort temperature in time for your arrival. This can be done via the app.

If you forget to disable this function, don't worry – it will automatically be deactivated when you arrive home and enter the house.

Panic Alarm

A panic situation can be defused with the help of the smart home. The panic alarm could be triggered, for example, if you are woken at night and think you can hear an intruder in your home.

Event:
Press the panic button, which could be a button on the Loxone Remote Air or Loxone Touch.

Action:
All blinds are raised and lights flash throughout the house for two minutes. Warning sirens are not activated so that any noise in the house can still be heard.

Burglar Alarm

The burglar alarm is primarily intended to deter intruders. Intruders should be detected as quickly as possible and attention drawn to the house by as much commotion as possible. Due to possible false alarms, alarm levels should be used.

Event:
Alarm is triggered in any of the rooms within the house.

Action:
- Silent alarm, 0 second delay, Music Server starts and alarm operating mode is activated
- Audible alarm, 20 second delay, alarm sound plays on all speakers in the house, Caller Service alerts homeowner
- Visual alarm, 40 second delay, all light controllers switch to alarm lighting, all lights start flashing at 50% brightness to avoid power supply damage
- All blinds are raised
- External alarm, 150 second delay, external alarm siren sounds (until acknowledged, maximum 120 seconds)

Technical Alarms

There are various types of technical alarms. Fire alarms, water alarms, power failure alarms, water falling below the minimum level in a fountain etc.

Event:
Triggering the fire & water alarm control panel or another sensor

Action:
- Preliminary alarm, 0 second delay, alarm lighting throughout the house, technical alarm operating mode is activated, app notification, alert via the Caller Service
- Main alarm, 120 second delay, alarm warning bells via speakers and external warning bells

Leaving a room

Essentially it switches the room to standby mode.

Event:
Double tapping the Loxone Touch

Action:
- Automatic blind reset
- Multimedia off
- Media controls off
- Lights off
- Heating schedule reset

Entering the house

When an occupant enters the house, they should enable the At Home Mode.

Action:
Loxone Remote Air, Loxone NFC Code Touch, or a button in the app

Event:
- Alarm systems off
- Presence simulation off
- Away Mode deactivated

The At Home Mode provides other specific functions.

Loxone online services

Weather Service

With our unique online service, you get exact weather data from a professional weather provider directly via your Miniserver. This data is used for shading, heating and much more.

Caller Service

No matter where you are!

- Immediately informed when it matters
- In the event of an alarm, you can be immediately informed on your phone
  - This can include the Miniserver phoning you when the burglar alarm is triggered
  - Due to this phone call, you can then react instantly to the potential danger, or at least acknowledge the alarm
- Customise notifications to suit your needs:
  - Your Miniserver can call you in the event of the escape of water, if the garage door is left open at night, etc.

Get in touch to discuss your project

We hope you've found this compendium a useful resource. There are more than 85,000 Loxone Smart Homes around the world following these ideas - saving families thousands of tasks and giving them more time for the important things in life. Contact us to discover, for yourself, the possibilities of living in a Real Smart Home.

Contact Details

Loxone UK Ltd
+441183130140
office@loxone.co.uk
www.loxone.com

LOXONE

No Gimmicks.
Real
Smart
Homes.

loxone.com