

Inclusive Living Environments For People with Neurodiversity

General Design Recommendations and
Practical Solutions For Everyday Life

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Foreword

Designing a home that is both functional and appealing gives an opportunity to support the individual needs and preferences of people with neurodiversity, particularly on the autism spectrum. This guide is for anyone who is neurodivergent themselves or who wants to support people with neurodiversity in the process of furnishing their home.

Our aim is to provide you with practical tips and knowledge to create a home that meets individual requirements while providing a high level of comfort and well-being. Therefore, a participatory design process consistently should be pursued! This means that the individual preferences and needs of the future residents are perceived and taken into account at every step of the process. These may differ from general recommendations, thus emphasizing the uniqueness and individuality of each person and their living space.

To facilitate the furnishing process, we provide you with comprehensive information. The content ranges from choosing the right comfort set-up to the optimal room organization as well as technical solutions. We hope that this guide will be a valuable resource for you and inspire you to find creative and tailored solutions for your living spaces.

Good luck and enjoy!

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General Design Guidelines

By adjusting environmental stimuli – such as light, sounds, smells or temperature – rooms and living environments can be designed to make everyday life easier for people with sensory sensitivities. The design options start with general preferences and can be extended to the individual senses and their specific modulation options.

General Characteristics and Preferences

Although there is a wide range of personal preferences, sensory and personality psychology has identified some general needs that apply to several neurodivergent individuals, especially on the autism spectrum. However, keep in mind that individual needs may vary!

Order

A high need for order describes a preference for a structured, organized and chaos-free environment. This can affect spatial, temporal and content-related order (Häußler, 2016). This need is often particularly pronounced in people on the autism spectrum, and a lack of order can trigger anxiety. Control over their environment plays a crucial role in how a person perceives their daily life.

- Establish structured daily routines and leisure activities (e.g. visual timetables).
- Keep rooms free of unnecessary items.
- Use (built-in) cupboards, drawers or organizers, to store materials neatly.
- Use color coding systems or labeled storage boxes.



Predictability

Predictability is the ability to predict and control future events in order to reduce uncertainty and anxiety. Individuals on the autism spectrum often prefer familiar spaces and predictable routines, such as music with a clearly defined structure, so that they do not have to process new and unpredictable stimuli that can cause stress. People tend to seek out routines and rituals that give them a sense of continuity and stability.

- Create checklists for daily routines. These lists help to complete tasks in a fixed order and thus provide security.
- Use analog or digital time management systems (see “Day Structuring and Time Management”), such as calendars or clocks.
- Set up the home before the neurodiverse person moves in to avoid changes later on.
- Try to create stable conditions (e.g., the same weekly schedule).



Security

Security is a basic need for every human being and forms the basis for well-being and development. For neurodivergent individuals or those with sensory sensitivities, security can be particularly important. For example, for these individuals, security may mean creating a calm and controlled environment so that they do not feel overwhelmed by sudden or loud noises.

- Create safe retreats at home.
- To create safety, order and predictability are important prerequisites (see *Tool Boxes* Order and Predictability)



Tips for the General Environmental Design

Even if there is overlap in the preferences of neurodivergent individuals, the design process must always involve and take into account the individual with their unique perceptions. The following tips are intended to provide a general orientation for people with sensory sensitivities.

Lightning and Colours

- Use dimmable lamps with different intensities so that the brightness can be adjusted to suit current needs.
- Lights that are too bright or dim are quickly perceived as disturbing and are best avoided.
- Natural light is generally preferable to artificial light.
- Install curtains so that you can easily regulate the amount of light entering the rooms.
- Avoid colors that are too bright or too strong, as they attract a lot of attention and can lead to visual overload. However, keep in mind that some people find intense colors pleasant. Therefore, always tailor your color choices to individual preferences.
- Neat and tidy rooms reduce visual stimuli and create a feeling of calm.

Odours

- Avoid scented candles, strongly scented cleaning products or diffusers with strong aromas
- Use unscented cleaning products or those with very delicate scents
- Install air purifiers to keep the environment free of strong and unpleasant odours
- Choose extractor hoods with excellent air flow to prevent cooking odours from spreading throughout the rest of the house.

Textures

- When choosing fabrics, just as with sofas, blankets or paints, look preferably for soft and cozy textures.
- Natural fabrics such as cotton or linen are often better tolerated than synthetic fabrics.

Noises

- Soundproof windows or double glazing reduce noise from outside.
- You can also place sound-absorbing materials in rooms or add some sound-absorbing furniture (e.g., carpets, cushions, etc.).
- To attenuate acute environmental noise, noise protection devices such as headphones or earplugs can be used.
- In the household, low-noise appliances can be used (e.g., vacuum cleaner, washing machine).
- To promote relaxation even in challenging situations, a sound system can be set up that emits soothing sounds or music.
- Room dividers or shelves can dampen sound waves indoors.

Temperature

- Install thermal curtains to regulate the temperature in your home and provide insulation. They help against both heat and cold.
- Install heating and cooling systems. Air conditioning is not available everywhere, but fans can also provide relief on hot days. An additional auxiliary heater could be used against the cold.
- Use smart thermostats to regulate the temperature in your home efficiently.
- Use heat-regulating measures when furnishing your home (e.g., carpets for floor insulation).
- Install external shading, such as awnings, to protect your home from direct sunlight.
- Apart from home furnishings, there are also special cooling vests available.

Location of Apartment

Many neurodivergent people feel more comfortable in quiet environments without many stimuli. Cities are often very loud, hectic, and confusing. There is a lot going on at once, which can quickly become overwhelming and stressful. Places in nature such as parks, forests, or gardens are often much more pleasant. They are quieter, greener, and easier to relax in.

- **Look for a quiet environment.** Preferably away from heavy traffic, major roads, noisy neighbors, or factories.
- **Live near green spaces.** Parks, gardens, or quiet courtyards create a relaxed atmosphere.
- **Avoid places with lots of stimuli.** For example, areas with bright advertising signs or restaurants with strong smells.
- **Pay attention to safety and a good neighborhood.** A friendly environment with social amenities can help you feel comfortable and safe.
- **Good transport connections are important.** There should be buses, trains, and shopping facilities nearby – this allows you to remain flexible and independent.



It is not always possible to choose an apartment freely according to these criteria. Often an apartment is already available and a move is associated with a high expenditure of resources. In this case, you also have the option of using non-invasive methods to shield the home from stimuli as much as possible. You can find inspiration for this in the “Tips for general environmental design” section above.

Spatial Organization

Neurodivergent individuals generally benefit from spaces that quickly adapt to their current emotional and sensory needs. To provide the necessary stability despite this flexibility, some aspects can be implemented:

- **Keep things tidy and create space.** Fewer objects in the room help to reduce stimuli. You can find more information on this in the “Tool Box: Tidiness in Everyday Life.”
- **Arrange the furniture symmetrically.** A uniform and clear arrangement creates calm. Leave the furniture in place as much as possible.
- **Set up a retreat.** For example, a cozy corner with pillows, soft lighting, and soothing music. Weighted blankets or small toys to feel (fidget toys) can also help you relax.
- **Avoid rooms with too many purposes.** Each area should have a specific function— e.g., one place for working, another for relaxing. Clear boundaries (e.g., with rugs or room dividers) make this easier to understand.
- **Use labels with pictures or symbols.** This makes it easy to see what is stored where — for example, on boxes, drawers, or shelves.
- **Organize things by color.** Colors help to sort materials and documents better and find them more quickly.
- **Choose comfortable and suitable furniture.** Furniture should fit the body well and help you feel comfortable. Ergonomic furniture supports the body when sitting or lying down.



Keeping Order

Maintaining order in everyday life is often a challenge. Ideally, support from trusted people is available, but various strategies for independent implementation can also be considered.

- **Make tidying up a regular part of your day.** Set a specific time for it. This will help tidying up become a habit.
- **Work in small steps. 10–15 minutes is often enough.** The Time Timer (see chapter “Day Structuring and Time Management”) can help with this.
- **Use the “one room system”.** Only tidy up one room or area at a time. This will help you keep track of things and stay motivated.
- **Use household appliances.** A robot vacuum cleaner can vacuum automatically, saving you time and energy.
- **Use baskets or boxes for tidying up.** This allows you to put everything away quickly. It looks tidy and you can find things more easily.
- **Get help if you find it difficult.** If you can't tidy up on your own, a (professional) tidying support may assist.



Practical Solutions

Recently, the potential of assistive technologies and home automation to improve the quality of life and autonomy of people with neurodivergences has been increasingly recognised. The possibilities here range from smart home components to apps and time management strategies.

Smart Home

Smart home technologies have a wide range of applications for both neurodivergent and neurotypical people. There are a large number of brands that vary in their product selection, price range and compatibility with other devices (see chapter on compatibility). The following brands are listed as examples and additional ones can be researched independently:

- Amazon
- Ikea
- Shelly
- Homematic IP
- Philips Hue
- Bosch
- Tado

Each brand has individual advantages and disadvantages. To make it easier to implement, all application scenarios are dealt with in this guide using a single brand. The provider Shelly was selected due to its fair price-performance ratio and wide range of products. However, the scenarios can also be recreated or supplemented with products from other brands.



This guide presents so-called “plug & play” products that do not require complicated installation. For people with an affinity for technology, there is also the option of using more complex products with a wider range of functions.


Shelly uses the Smart Control app as its control center, in which automated scenes can be generated. The scenarios described below are designed to make everyday life easier and in particular to meet the needs of people on the autism spectrum. In addition, you can also create customized scenarios based on your individual needs. There are no limits to your imagination!

What is a scene?



Scenes are predefined actions. Conditions are created are created (If), and when they occur, certain processes are triggered automatically (Then). An example would be the automatic switching on of a lamp (Then) as soon as the front door opens (If). An action could also be a notification via tablet or cell phone.

Setting: To create a scene, select the following in the Shelly Control app

- Tablet: My home → All scenes → Add scene (+)
- Mobile Phone:  → All scenes → Add scene (+)

Application scenarios

The following scenarios describe the function, the required products and the creation of the required scene. A price categorization is also provided. Please bear in mind that products can also be used for several scenes and the price may therefore be lower. The categorization is based on the index below:

€	1 - 50€
€€	50 - 100€
€€€	> 100€

You will find the installation instructions for all products used in the scenarios in a separate document (see “Installation instructions”).

Indication of Person(s)

Function

Receive a notification if one or more people are present in a certain area.

Price: €

Product(s)

- Shelly BLU Motion*
- Gateway: Is required if no gateways are already integrated through other scenes.

Scene

- If: Add condition: Condition: device-based → Select device: room and then motion sensor → Device property: motion detected → Consider properties as: trigger → Consider properties as: trigger: Trigger → View the properties as: Trigger
- Then: Select action: Notify action → Notification type: select your desired notification type (phone/email/Alexa/activity log) → Notification setting:
- Enter your desired notification text and choose between standard notification or alarm
- Active time: Here you can restrict the times at which you want to be notified. For example, select the days of the week and times when you usually leave the house.
- Further options: Activate the scene so that it is activated automatically in future.
- Select room: Select the relevant room
- Name the scene and save it
- Note: If you would also like a visual indication, you can have your smart light bulb light up as soon as the motion detector is activated.



***Gateway Information**

A gateway is the bridge that establishes a connection between the device and the Shelly ecosystem

When is a gateway necessary?

For all Shelly BLU products and generally all devices that only have a Bluetooth function. They are also marked with an asterisk (“*”) in the rest of the guide. Check the information on the manufacturer's website in each individual case.

Gateway products:

Conventional gateway product from Shelly

All Shelly Plus, Pro or Gen3 devices

- Note: A gateway is already included with the Shelly BLU TRV

Please keep in mind that the gateway can only act as a bridge for a limited number of products!



Wandering

Function

Get notified as soon as the front door or a door/window in general is opened at unusual times.

Price: €

Product(s)

- Shelly BLU Door Window*
- Gateway: Is required if no gateways are already integrated through other scenes.

Scene

- If: Add condition: Condition: device-based → Select device: room and then door sensor → Device property: door status: open → View properties as: Trigger → View the properties as: Trigger
- Then: Select action: Notify action → Notification type: select your desired notification type (phone/email/Alexa/activity log) → Notification setting: enter your desired notification text and choose between standard notification or alarm
- Active time: Optional (e.g. between 10 pm and 7 am from Monday to Friday)
- Further options: Activate the scene so that it is activated automatically in the future.
- Select room: Select the relevant room
- Name the scene and save it



Securing Dangerous Objects

Function

Get notified when access is gained to a cupboard, drawer, etc.

Price: €

Product(s)

- Shelly BLU Door Window*
- Gateway: Is required if no gateways are already integrated through other scenes.

Scene

- If: Add condition: Condition: device-based → Select device: room and then door sensor → Device property: door status: open → View properties as: Trigger → View the properties as: Trigger
- Then → Select action: Notify action → Notification type: select your desired notification type (phone/email/Alexa/activity log) → Notification setting: enter your desired notification text and choose between standard notification or alarm
- Active time: Optional
- Further options: Activate the scene so that it is automatically activated in the future.
- Select room: Select the relevant room
- Name the scene and save it



Automatic Lighting in Poor Lighting Conditions

Function

Automatic lighting when entering a room, if lighting conditions are poor.

Price: €

Product(s)

- E27: Shelly Duo, Shelly Duo - RGBW (color selection) OR Shelly Vintage A60
- GU10: Shelly Duo GU10 White OR Shelly Duo GU10 RGBW (color selection)
- Shelly BLU Motion*
- Gateway: Is required if no gateways are already integrated through other scenes.

Scene

- If:
 - Add condition 1: Condition: device-based → Select device: room and then motion sensor → Device property: motion detected → View properties as: Trigger → View the properties as: Trigger AND
 - Add condition 2: Condition: Device-based → Device: Select room and then motion sensor → Device property: Brightness detection - If below 20 lux → View properties as: Trigger → View the properties as: Trigger
- Then → Select action: Notify action → Notification type: select your desired notification type (phone/email/Alexa/activity log) → Notification setting: enter your desired notification text and choose between standard notification or alarm
- Active time: Optional
- Further options: Activate the scene so that it is automatically activated in the future.
- Select room: Select the relevant room
- Name the scene and save it



Maintaining the Individual Comfort Temperature

Function

Get support in maintaining your individual comfort temperature.

Price: €€

Product(s)

- Shelly H&T OR Shelly H&T Gen3 with additional display function
- Shelly BLU TRV* (OR Shelly Plug in combination with a parking heater
- Shelly Plug in combination with a fan OR air conditioning system
- Gateway: Is required if the Shelly H&T Gen3 or Shelly Plug is not used. If gateways are already integrated via other scenes, no additional gateway is required.

Scene

You need 2 scenes for this application scenario. One scene to switch on the heating when the temperature falls below the comfort temperature and a second scene to switch on the fan when the temperature-based comfort range is exceeded.

- Scene 1: Avoidance of falling below the comfort temperature
- If → Add conditions: Condition: Device-based → Device: Select room and then temperature sensor → Device property: Temperature detection → If the temperature is: Less than 16°C → Consider properties as: Trigger
- Then 1 → Select action: Device action → Device: Select room and smart thermostat → Change status: Change target temperature → Select desired temperature → Delay action: An action delay does not have to be selected
- Then 2 → → Select action: Notify action → Notification type: Select your desired notification type (phone/email/Alexa/activity log) → Notification setting: Enter your desired notification text and choose between standard notification or alarm
- Active time: Optional
- Further options: Activate the scene so that it is automatically activated in future.
- Select room: Select the relevant room
- Give the scene a name and save it.



A thermostatic radiator valve (TRV) regulates the room temperature by controlling the hot water flow in the radiator. Shelly BLU TRV* allows you to automate the control.



Notifications about Temperature Deviations

Function

Get notified as soon as it is too hot or too cold.

Price: €

Product(s)

- Shelly H&T OR Shelly H&T Gen3 with additional display function
- Gateway: Is required if the Shelly H&T Gen3 is not used. If gateways are already integrated through other scenes, no additional gateway is required.

Scene

- If → Add conditions: Condition: device-based → Device: select room and then temperature sensor → Device property: temperature detection → If temperature is: less than 16°C/ greater than 25°C → Consider properties as: Trigger
- Then → Select action: Notify action → Notification type: select your desired notification type (phone/email/Alexa/activity log) → Notification setting: enter your desired notification text and choose between standard notification or alarm
- Active time: Optional
- Further options: Activate the scene so that it is automatically activated in the future.
- Select room: Select the appropriate room



Schedules For Smart Temperature Control

Function

Automatic heating control, adapted to individual daily schedules.

Price: €€

Product(s)

- Thermostatic valve: Shelly BLU TRV* OR Shelly Plug combination with a parking heater
- Gateway: Required

Szene

- You do not need to create a scene for this scenario.
- To create custom schedules, please follow the steps below:
Dashboard → smart thermostatic valve → Schedule → Set schedules.



Smart Ventilation: Automatic Heating Switch-Off

Function

Automatic switch-off of the heating as soon as one or more windows are opened/tilted.

Price: €-€€

Product(s)

- Shelly BLU TRV* OR Shelly Plug in combination with a parking heater
- Shelly BLU Door Window*
- Gateway: Is required if no gateways are already integrated through other scenes.

Scene

- If: Add conditions: Condition: device-based → Select device: room and then window sensor → Device property: door status: open → Consider properties as: Trigger
- Then → Select action: Device action → Device action → Device: Select room and smart thermostat → Change status: Change target temperature → Select desired temperature (e.g. 4 degrees) → Delay action: An action delay does not have to be selected
- Active time: Optional
- Further options: Activate the scene so that it is activated automatically in future.
- Select room: Select the corresponding room
- Give the scene a name and save it



Flooding and Leakage Warning

Function

Get notified when water is leaking or overflowing.

Price: €

Product(s)

- Shelly Flood
- Gateway: Not required

Scene

- If: Add condition: Condition: device-based → Device: select room and then flood sensor → Device property: a flood / When the sensor detects a flood → Consider properties as: Trigger
- Consider the properties as: Trigger
- Then → Select action: Notify action → Notification type: select your desired notification type (phone/email/Alexa/activity log) → Notification setting: enter your desired notification text and choose between standard notification or alarm
- Active time: Optional
- Further options: Activate the scene so that it is automatically activated in the future.
- Select room: Select the relevant room
- Name the scene and save it



Warning in case of Smoke Development

Function

Get notified if smoke develops.

Price: €

Product(s)

- Shelly Plus Smoke Alarm
- Gateway: Not required

Scene

- If: Add condition: Condition: device-based → Device: select room and then smoke monitor → Device property: when the sensor detects smoke → Consider properties as: Trigger
- View the properties as: Trigger
- Then → Select action: Notify action → Notification type: select your desired notification type (phone/email/Alexa/activity log) → Notification setting: enter your desired notification text and choose between standard notification or alarm
- Active time: Optional
- Further options: Activate the scene so that it is automatically activated in the future.
- Select room: Select the relevant room
- Name the scene and save it



Warning in Case of Gas Development

Function

Get notified if gas is released.

Price: €

Product(s)

- Shelly GAS
- Gateway: Not required

Scene

- If: Add condition: Condition: device-based → Device: select room and then gas sensor → Device property: when the sensor detects a gas → Consider properties as: Trigger
- View the properties as: Trigger
- Then → Select action: Notify action → Notification type: select your desired notification type (phone/email/Alexa/activity log) → Notification setting: enter your desired notification text and choose between standard notification or alarm
- Active time: Optional
- Further options: Activate the scene so that it is automatically activated in the future.
- Select room: Select the relevant room
- Name the scene and save it



Notification in Case of High Humidity

Function

Get notified as soon as the room needs to be ventilated.

Price: €

Product(s)

- Shelly H&T OR Shelly H&T Gen3
- Optional: Smart Shelly light bulb with RGBW (e.g. Shelly Duo - RGBW E27, Shelly Duo GU10 RGBW GU10)
- Gateway: Not required

Scene

- You need two actions here if you also want to set a light alarm.
- If: Add condition: Condition: Device-based → Select Device: Room and then Shelly H&T Sensor → Device property: Humidity detection - If the humidity is greater than 60% → Consider the properties as: Trigger
- Then
- Select action 1: Notify action → Notification type: select your desired notification type (phone/email/Alexa/activity log) → Notification setting: enter your desired notification text and choose between standard notification or alarm
- Select action 2: Device action → Device action → Device: select room and smart bulb → Change status: Select color and brightness → Delay action: An action delay does not have to be selected
- Active time: Optional
- Further options: Activate the scene so that it is automatically activated in future.
- Select room: Select the corresponding room
- Name the scene and save it



General Informations about Smart Home

Product Compatibility

Smart home systems can be connected to each other in different ways. There are three types of connection flexibility, each with its own advantages and disadvantages:

- Open systems: These offer a high degree of flexibility. This means that products from different manufacturers can be easily combined with one another.
 - Matter: This is a cross-manufacturer connection standard for smart homes. Products with this label can be easily linked together.
- Closed systems: Only products from the same manufacturer can be connected to each other. In return, they offer a high level of convenience and security.
- Semi-open systems: An intermediate solution in which products from other manufacturers can be partially added to fundamentally closed systems.

This varying compatibility is due to the use of different radio standards.

Radio Standards

Radio standards define how devices in smart homes communicate with each other and have individual characteristics:

- *Matter* and *Thread* offer high interoperability and can support devices on multiple platforms (e.g., Google, Amazon, Apple).
- *Zigbee* and *Z-Wave* require hubs, which act as a kind of “technical interpreter” for compatibility with other standards.
- *Wi-Fi* and *Bluetooth* are widely supported but typically require integration via hubs or cloud services for multi-standard compatibility.

Technical Interpreters

In some cases, “technical interpreters” can be used for cross-standard communication. Hubs, centers, bridges, or gateways are synonymous terms for devices that help different products overcome communication barriers. This is particularly necessary for radio standards with low compatibility (e.g., Zigbee).

To find a compatible hub, you first need to select the right “language,” as not every translator can decipher all radio standards. As with radio standards, there are also different types of hubs:

- Specific hubs: Only the manufacturer's own products can be linked together.
- Hubs with multiple wireless standards: You can link multiple wireless standards together (e.g., Homee, Homey).
- Voice assistants: Some can function as hubs, provided they are compatible with the respective voice assistant (e.g., Amazon Alexa).

Privacy and Security Information

In the EU, smart home providers are required to comply with the General Data Protection Regulation (GDPR). This means that personal data must be fully protected. To further ensure the security of your data, keep your software and security updates up to date, use two-factor authentication, and store your data appropriately.

Product List

This overview lists all the products used in the scenes described:

- Shelly BLU Gateway
- Shelly BLU TRV
- Shelly BLU Door Window
- Shelly H&T
- Shelly H&T Gen3
- Shelly Plug Smart Gen3
- Shelly Duo
- Shelly BLU Motion
- Shelly Wall Switch
- Shelly Flood
- Shelly Gas
- Shelly Smoke Alarm

Additional assistive Technologies

Even beyond smart home components, a wide range of (technical) aids can be used to make everyday life easier.

Mindfulness Apps

The use of mindfulness apps has been shown to have a positive effect on perceived stress levels, anxiety, and psychological well-being (Gál et al., 2021; Linardon et al., 2024). People with sensory sensitivity or anxiety could therefore benefit from using these apps. Mindfulness can be used as needed or preventively. Combining the apps with voice assistants or other smart devices makes it easy to integrate them into everyday life.

- Popular mindfulness apps include [Calm](#), [Headspace](#), [7Mind](#), and [Balloon](#). Prices and content vary depending on the app.
- You can also find free instructions for meditation, mindfulness, and breathing exercises on YouTube.



Finances

Financial tracking apps allow you to keep track of your income and expenses and automatically alert you if you are about to exceed your budget or miss payment deadlines. Automations such as automatic bill payment can reduce the stress of deadlines and prevent late payments.

- Banks often offer their own apps for this purpose of smart online banking.
- Independent apps for tracking and managing household expenses include [Money Manager](#) and [Bluecoins](#).

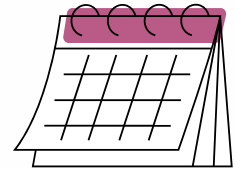
Noise Level Regulation

If loud background noise is perceived as a challenge, headphones with or without noise cancellation can help. They help to reduce acoustic distractions and create a quieter environment.

Day Structuring and Time Management

Visual aids in particular can provide guidance in everyday life. Various tools can be used.

- Use digital calendar apps to plan appointments and tasks and set reminders. You can activate verbal reminders using voice assistants. Clocks and calendars can be placed in several rooms for orientation.
- Use Time Timer to help with time management and concentration.
- Use visual schedules or checklists.
- Use partitions in the workplace to reduce distractions and increase well-being.



Sleep Quality

Sleep quality and quantity play a fundamental role in maintaining and improving physical and mental health (Baranwal et al., 2023). Therefore, examining one's own sleep behavior is part of a holistic approach to disease prevention.

In addition to various wearable devices, such as smartwatches, there are also various sleep trackers available on the market. These are placed under the mattress, making them very comfortable to use (e.g., Sleep Analyzer).

Smart Noise Recognition

Um Stress durch nicht kategorisierbare Geräusche zu vermeiden, kann auf die Funktion der „Geräuscherkennung“ bei Smartphones zurückgegriffen werden. Besitzen Sie auch einen Sprachassistenten, wie beispielsweise eine Amazon Alexa, können sogenannte Routinen mit der Geräuscherkennungsfunktion dazu erstellt werden (z.B. „piepsende Haushaltsgeräte → Benutzerdefinierter Text: „Der Geschirrspüler ist fertig, bitte schalte ihn aus.“).

Air Quality

If you would like to move away from Shelly products and monitor other air quality parameters in addition to humidity, you may consider supplementing your Amazon Alexa with the brand's own air quality monitor. Alternatively, IKEA also offers an air quality sensor that can be used with smart air purifiers and filters.

Environmental sensors

One product that integrates a wide range of environmental sensors—including air quality, temperature, humidity, and noise monitoring—is the air-Q Air Analysis Sensor.

air-Q basic

The air-Q is an innovative solution for monitoring indoor air quality in homes, offices, classrooms, and other indoor environments. Equipped with a wide range of sensors, it continuously measures air composition, indoor climate conditions, and environmental influences. The device analyzes the collected data in real time (at intervals of approximately 2–4 seconds), providing personalized and valuable recommendations to help improve comfort, well-being, and indoor environmental quality.

The air-Q app for iOS (from iOS 16.0) and Android (from Android 13.0) provides real-time measurements, charts, and analysis tools, as well as the air-Q Health Advisor, which offers personalized recommendations for improving air quality.



Ressources

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Further Information

- Information on the autism spectrum and projects conducted by the ENABLE research group can be found at www.autismus-freundlich.at
- The web application Canva was used to create this guide.

Authorship and Responsibilities

- The idea and conception for this guide were developed by A. Resch and L. Wohofsky (FH KÄRNTEN).
- The section “General design guidelines for an inclusive living environment” was partially written by G. Scavuzzo, F. Bettarello, and M. Di Prisco (DIA-UNITS).



Contact Options

Lukas Wohofsky | FH Kärnten
l.wohofsky@fh-kaernten.at

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