



# CUSTOMER SUCCESS STORY

## INTERACTION OF AV MEDIA TECHNOLOGY IN THE SMART HOME

Foto: Smart Life AV

Securely turn on and off AV tech in a connected home from anywhere

### **Objective:**

Turn on and off plugged-in AV devices throughout the smart home with intelligent control and secure access from anywhere

### **Product solution:**

*Expert Power Control 8041-1*

Power Distribution Unit (PDU) with 12 switchable IEC C13 load outputs, accurate input power metering and seamless integration with Crestron Home OS

## Reliability and energy efficiency in the Smart Home

When it comes to smart homes, everything revolves around the digitally connected home. This is the case with the modernisation project of a homeowner and father of two in Northwood, London.

Ease of use, quick setup and simple integration are essential for both the integrator and the homeowner. This starts with the installation of the in-home entertainment systems, which should be easy for the integrator to install. It should be even easier for the family to operate and control the AV installations, while the maintenance of all the connected systems should be effortless.

In order to watch your favourite film or the home team's football match without interruption, the AV technology needs to be fail-safe. Failure of IT and AV equipment can ultimately lead to frustration for all family members.

In terms of energy efficiency, it is also important that the AV technology in the smart home can be switched off when not in use. This minimises the user's carbon footprint and reduces the home's electricity costs.

*"The synergy between GUDE Expert Power Control 8041-1 and Crestron Home OS is a real game changer.*

*The homeowner can combine comfort with energy efficiency in his renovated luxury home. The family benefits from convenient and secure homecontrol, while saving energy and electricity costs during operation".*



**MIKE RANPURA**  
Director Smart Life AV

*Sony 4K Smart TV with Sonos Playbar in the living room.  
Foto: © Smart Life AV*



## 1 | Private property becomes a smart home

The homeowner had little contact to smart homes before his renovation plan five years ago. He had only used Sonos Arc soundbars in his living room. But that was not enough for him, and he began to delve deeper into the smart home.

But the father of the family has very little idea of how to put it into practice. So he sought professional help. To make sure the project is a success, he consulted interior designers and Smart Life AV to help him meet the unique requirements of a smart home.

To control and manage the AV technology in the smart home, Mike Ranpura, managing director of Smart Life AV, chose a Power Distribution Unit (PDU) from GUDE.

Using Crestron Home OS and the PDU, family members can remotely turn on and off a network switch and Sonos Amp. Crestron Home OS provides a modern and easy-to-use interface on touch panels or mobile phones to remote-control AV devices such as Apple TV or Sky Q. By combining AV technology, the family can now control and switch these devices safely and conveniently. In the event of a malfunction, the system can be quickly restarted. In addition to the Crestron Home OS switching functionality, the luxury home is equipped with Domotz networking software to monitor the home network and its availability.



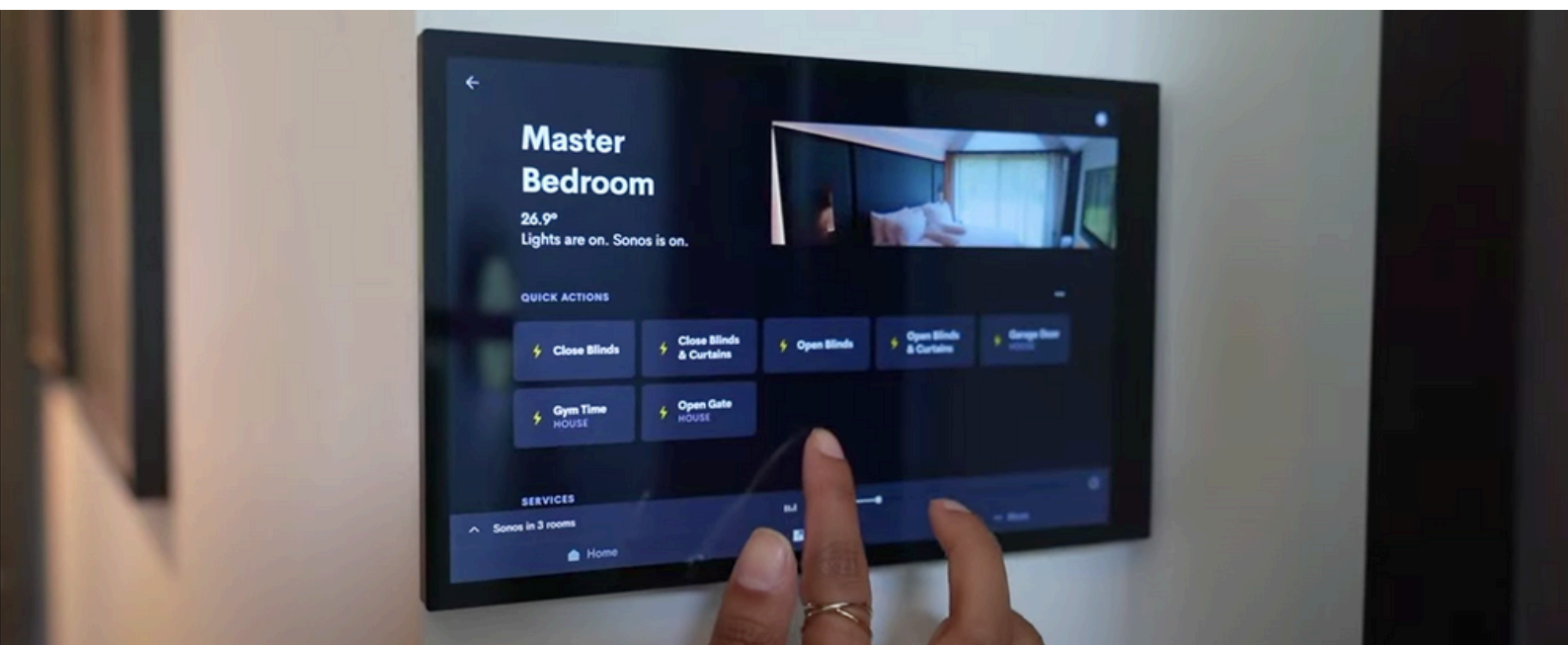
*Connections of the Expert Power Control 8041-1.  
Foto: © GUDE Systems*

## 2 | Secure remote access and full control with GUDE Power Distribution Unit

The family's luxury home uses a wide range of devices to create a complete home experience. These include the Power Expert Control 8041-1 power distribution unit from GUDE, which controls the entire AV system via the Crestron Home OS. This interaction allows for easy and straightforward setup by the smart home integrator without any programming experience. By controlling this system, the family can access it from anywhere in the house: from the bedroom to the bathroom to the patio.

## 3 | Multiroom audio, lighting and simple home AV control

Sony TVs and Sonos Arc soundbars are integrated into the system of the family bedrooms and kitchen. The gym is also equipped with a Sony TV and Sonos Playbar. Content is delivered to the devices via the Sky Q box and Apple TV 4K. The AV enthusiast was already impressed by the Sonos speakers before the renovation, which have now been complemented by additional amplifiers. These include Crestron Reference Series in-ceiling speakers from Origin Acoustics and Bowers & Wilkins AM1 outdoor speakers for the garden.



Easy control of the Crestron TSW-1070R Touchpanel with Crestron Home OS.

Foto: © Smart Life AV

In addition to entertainment devices, HVAC (heating, ventilation and air conditioning) equipment such as climate control, lighting or blinds can be controlled. Lighting is provided by Crestron lighting modules (DIN-PWS60, DIN-CENCN2-POE, DIN-1DIMU4, DIN-8SW8-I, DIN-4DIMFLV4), Philips Hue and Ornluna ceiling lights.

Crestron Home provides accessible control for the whole family: the system can be managed via an app on family members' smartphones and tablets, Crestron TSW-1070R touch panels and Crestron TSR-310 remotes. The family also uses the Crestron system to control the garage door, the front gate, the electric heated towel rail and the mirror dehumidifiers in the bathroom.

Preconfigured scenes are also installed in the Smart Home. An example of this is the 'shower' scene for taking a shower in the bathroom. When the end user takes a shower, the extractor fan, mirror dehumidifier and towel rail switch on automatically. The heated towel rail ensures that the user receives a fresh, warm towel.

### 5 benefits at a glance

1. Remote access to switch TV systems and multiroom speakers on and off
2. Remote reboot if the Sky Q or Apple TV 4K software has hung up
3. Intuitive operation with Crestron Home OS via smartphone, tablet or central touch panels for all connected consumers
4. Overvoltage protection to protect devices such as Network Switches from voltage peaks and thus from possible defects
5. Cost savings in the 'shower' scenario, in which other electronic consumers in the bathroom are switched off when the user activates the shower

### 3 | Downtime protection and home network security

The benefits of remote control in the smart home are obvious: homeowners can remotely control connected devices such as TVs and multi-room audio systems. Individual outlets to which these devices are connected can be turned on and off without a family member being physically present in the room. In addition, the use of Crestron OS in conjunction with the PDU enables real-time monitoring of energy consumption. The AV enthusiast can see exactly how much power is being used at any given time, helping him to better understand their energy requirements and identify potential savings. This feature also has the added benefit of identifying potential overloads at an early stage and increasing the energy efficiency of the overall system.

The Expert Power Control 8041-1 also provides access to the devices connected to the PDU in the event of a problem. The father of the family can remotely restart or shut down the equipment if, for example, the software hangs or serious errors occur in the operating system. This minimises downtime and increases reliability. It also saves the homeowner the time it would otherwise take to intervene manually.

The PDU also has a built-in watchdog that uses a ping query to check that connected devices, such as the sound amplifier, are still available on the network. After six attempts, for example, it will automatically restart the connected device if there is no response.

*Bedroom with 4K Sony TV, Sonos Arc and automated curtains with remote access  
Foto: © Smart Life AV*



## 5 | Summary & outlook

The homeowner uses Crestron Home OS to control and manage all the end devices connected to the Expert Power Control 8041-1, such as Apple TV 4K or Sky Q. This makes the combination of control software and PDU a real benefit. The interaction between the two makes everyday life easier for the family, allowing them, for example, to switch lights on and off effortlessly. The father of the family can create automated scenes for everyday life to save energy and electricity costs when the family is not using the connected equipment.

Before family members get frustrated, they can trigger a remote restart via the Crestron Home app or Crestron touch panels. Alternatively, a watchdog is built into the PDU that Smart Life AV can activate for the family.

This regularly checks that the software on the connected Sky Q is still accessible - and if not, triggers a fully automatic restart.

For Smart Life AV, the project for this luxury home does not end with the commissioning: Even after the TVs, speakers and lighting have been permanently installed, Mike Ranpura's future role will be to maintain and support the smart home. Ranpura will take care of all software updates and patches, as well as troubleshooting and maintenance issues, such as fixing any outages, for the family. Again, the intelligent PDU supports the AV integrator with features such as secure remote access, energy metering and the ability to 'remote reboot'. Ultimately, this means that the family can continue to join the growing number of satisfied smart home owners.



*The Server Rack of Smart Life AV with integrated Expert Power Control 8041-1*

*Foto: © Smart Life AV*

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