Instant comfort

A control-panel that improves safety, comfort and efficiency in your home

Olaf Quittmann

Can switching on the lights get any easier than flicking a switch? It can if the switches to be flicked are spread over different rooms of your home. Remotely controlling and monitoring these from a single panel can greatly simplify operations. Centralized controls for heating, lighting, sunshades and other functions in buildings have existed for some time. But the complexities of installation, setup and operation have impeded their widespread adoption.

Busch-Jaeger, an ABB company, has developed an intuitive control system based around its European Installation Bus system EIB. A broad range of products can be connected to this bus, which is made for easy installation in both existing and new buildings. These products can then be controlled, programmed and monitored from sleek and stylish wall-mounted panels. These touch-screen units provide easy navigation of the available functions. Customized scenarios can be created and sequences automated.

Modern building control systems must fulfil many complex requirements. They must keep the premises and occupants safe, secure and comfortable and also be energy efficient.

ABB has a broad range of low voltage products, comprising some 5,500 items on sale in more than 60 countries.

The portfolio ranges from the simplest sockets and wall switches to sophisticated electronic devices controlling – manually or automatically, lighting, shading, safety and security.

The range includes programmable shutter actuators that can respond to temperature, light, frost wind and rain; safety and security devices detecting smoke, water, gas, vibrations and movement, and powerful data and telecommunications systems for communicating both inside and outside a building.

Many of these devices can be connected to ABB's intelligent building installation bus system – ABB i-bus® and ABB Powernet EIB and be accessed from any control panel in the building, or remotely via a mobile phone or the Internet.

In 2004, ABB augmented this range by adding three key products:

■ *LEANtouch* and *SMARTtouch* are touch screen display and control panels for ABB's two European Installation Bus (EIB) systems – ABB i-bus® and ABB Powernet EIB. The panels offer users up to 100 functions by touch-screen or remote control. This product is intended for use in offices and factories as well as in the home.

Besides enhancing comfort, functions allowed by the control panel improve home security, ie, they can be programmed to respond to movement or the opening and closing of doors and windows.

■ *AudioWorld*, a multi-room wireless sound system that can play a different channel in every room via control panels and loudspeakers.
■ *Carat*, an elegant wiring device in a choice of materials and colours to add a finishing touch to the switches and sockets in designer interiors.

The control panels permit greater coordination of the networked devices. Functions offered include standard control operations such as

EIB Bus

The EIB (European Installation Bus) system is a bus system for communication between low voltage devices in buildings. It can, for example, be used to remotely regulate room temperature, lights, blinds and other electric devices.

The installation of an EIB bus system is easy to achieve. It can be retrofitted to existing buildings or installed at construction. The bus can use a dedicated cable (ABB i-bus®), but can also be configured to transmit signals along existing electricity cables (ABB Powernet EIB). The latter is especially useful in retrofitting older buildings while minimizing disruption.

Busch-Jaeger is an ABB brand. Based in Germany, Busch-Jaeger celebrated its 125th anniversary in 2004.

switching and dimming lights, operating blinds and adjusting room temperature. Measurement and sensor

values can be displayed. But the system is more than the sum of its parts: The user can create scenarios so that different parameters must not be set individually. A single user action selecting a given scenario coordinates all devices to the desired setting. Scenarios can, for example, be made for reading, watching TV or leaving the room.

Besides enhancing comfort, such functions improve home security. They can be programmed to respond to inputs such as movement detection or the opening and closing of doors and windows. They can also simulate human presence in empty buildings by switching lights on and off.

The system has a protection system preventing unauthorized changes. This is useful for homes with children, for example, or for limiting manipulation by unauthorized persons in an office.

The ergonomic touch-screen user interface of LEANtouch and SMART-touch provides intuitive menus and makes the system simple to set up and operate. Commands are customizable to individual needs and preferences. Additionally, handwritten messages can be left by writing on the screen with a PDA stylus.

The control panel comes in a stunning modern design, and is available in three variants: a monochrome display with about 30 functions, and a monochrome or color display with about 100 functions.

At the touch of a finger, a cover under the display slides open to permit access to functional elements such as the socket for a memory card or the PDA stylus with which the panel can be operated.

For enhanced comfort, an infrared remote control is also available meaning the system can be operated from anywhere in the room.

With this control panel family, ABB has shown that functions of existing home devices can be greatly enhanced by fuller use of networking capabilities.

Olaf Quittmann
Lüdenscheid, Germany
olaf.quittmann@de.abb.com