ATEN Control System
VK0100 8-button Control Pad (US, 1 Gang)

The VK0100 is a fully-customizable 8-button Control Pad that integrates a controller with a keypad as an all-in-one solution. Aimed for small / medium meeting room or classroom control, the VK0100 offers a ready-to-use solution that easily connects the devices, configures via the intuitive VK6000 Configurator Software, and flexibly customizes keypad button functions and layout to fulfill most applications.

The ATEN Control System is an Ethernet-based management system that connects all the hardware devices found in a room for centralized control effortlessly. The VK0100 Control Pad not only plays the role as the main controller that connects the hardware devices, but also acts as a control interface with customizable buttons and layout. Created with flexibility in mind, the one-gang Control Pad can be laid out in 14 different combinations of 4 to 8 buttons that snap together as easy as Lego's. By connecting to the local network, users will find it's effortless using VK6000 software to configure the desired control of any connected device from the Control Pad. With the ready-to-go combo Control Pad, users have instant and smart control of the facilities from a Control Pad that can manage any device in the room.

White Front view	Black Front view	Rear view

Note: This model is also available in black color – Part number: VK01001, which is a built-to-order product. To place an order, please contact your regional ATEN representative.

Custom button placement on the Control Pad can be set in 14 different combinations of 4 to 8 buttons. The example above shows the 10 most commonly used.
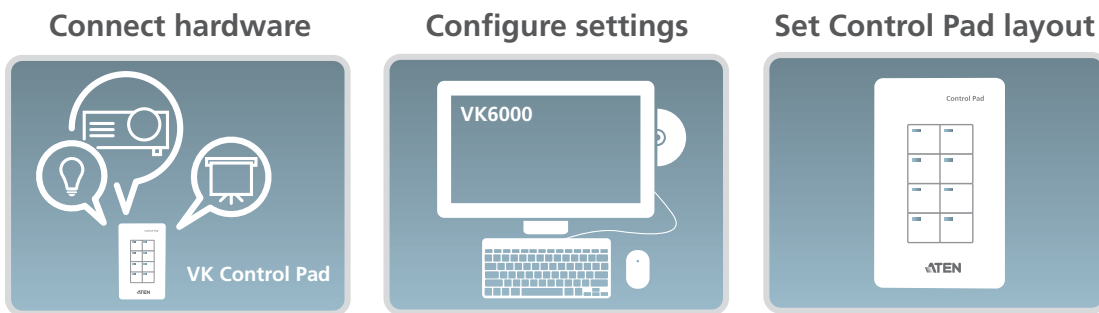
Features

- Supports various interface connections:
  - 2 x RS-232 ports
  - 2 x Relay channels
  - 1 x Digital input channel
  - 1 x Ethernet port
- Fully customizable with 14 layout combinations of 4 to 8 buttons
- Available in black or white color
- Web Viewer – integrated with 3rd-party systems or any web-based console for easier room equipment management
- Supports native KNX IP for building management systems
- TCP, UDP, Telnet, HTTP, HTTPS, WebSocket, ONVIF, and PJLink compliant
- Supports Modbus protocol - enables integration with Modbus devices, including TCP, RTU, and its checksum data
- Supports Telnet CLI (command-line interface) mode for third-party system integration
- Supports project file backup[1]
- Web GUI for easy system configuration
- Supports SSH communication for data monitoring[2]
- LED indication of connection and hardware status
- Dual-color LEDs for clear indication in dark environments
- Redundant power supplies – Power over Ethernet (PoE) and DC 5V (optional)
- Customized button engraving service
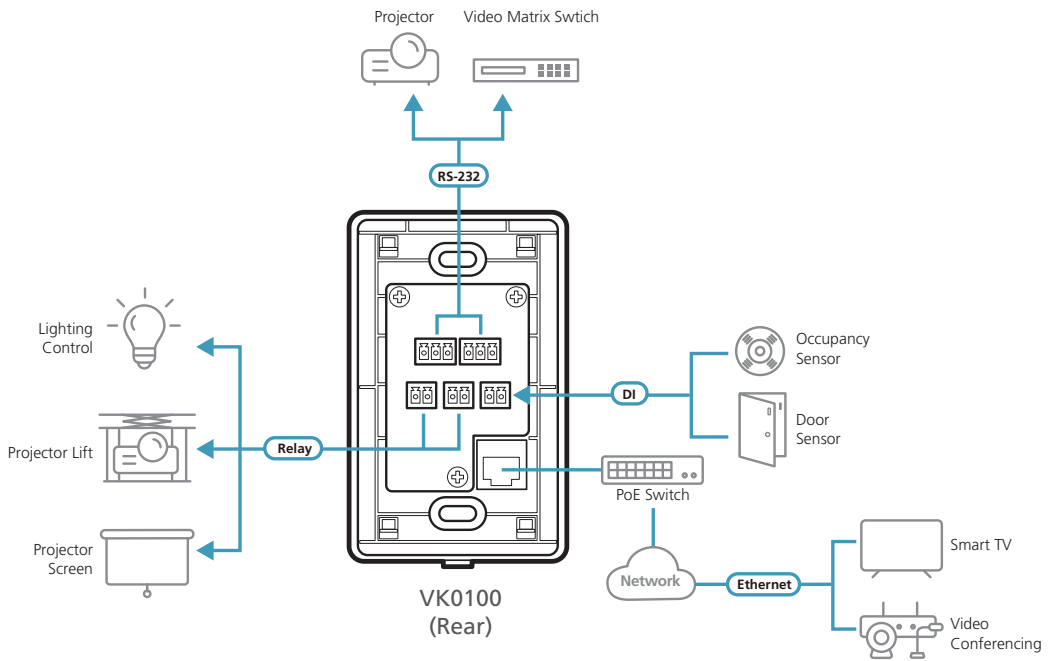- Allows for remote control via mobile device[3]

Note:

1. Each ATEN Control Box is capable of backing up one project file.

2. The SSH protocol can be used for monitoring the receiving/transmission data of the Control Pad.

3. Mobile device control requires a license. Please refer to the Specifications or contact your local sales representative for more details about licenses.
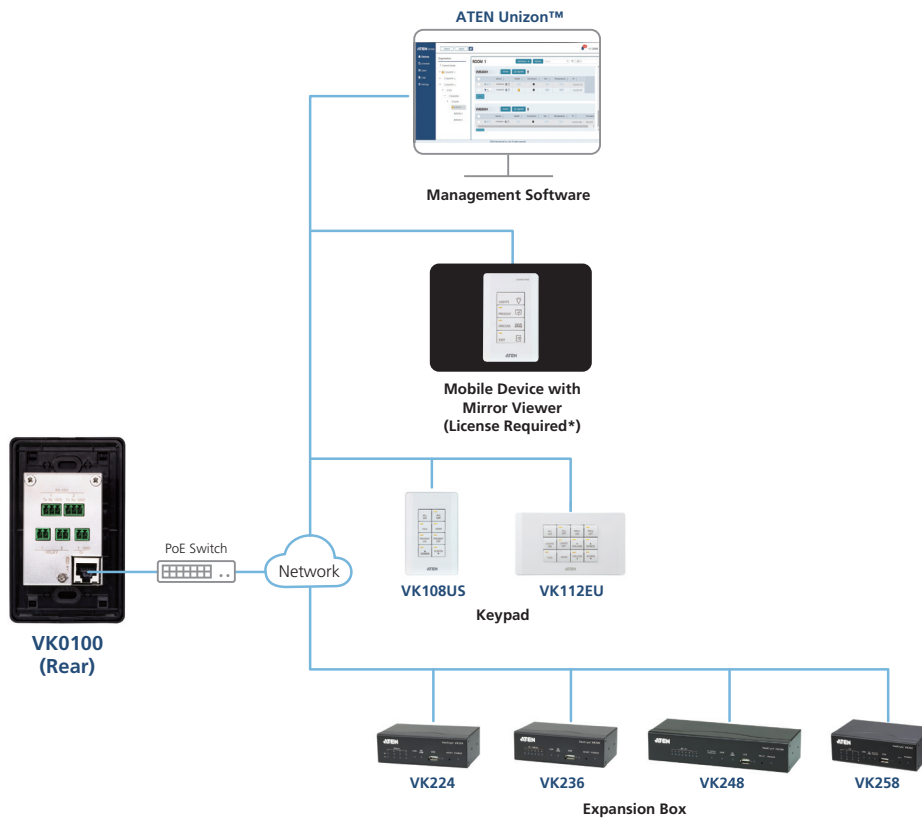
Installation Setup

Connect hardware

VK Control Pad

Configure settings

VK6000

Set Control Pad layout

Control Pad

Simple Solution
With VK0100 Control Pad

Projector   Video Matrix Swtich

RS-232

Lighting Control

Projector Lift

Relay

Projector Screen

VK0100 (Rear)

Occupancy Sensor

DI

Door Sensor

PoE Switch

Network

Ethernet

Smart TV

Video Conferencing

Scenario Diagram

ATEN Unizon™

Management Software

Mobile Device with Mirror Viewer (License Required*)

VK0100 (Rear)

PoE Switch

Network

VK108US   **VK112EU**

Keypad

VK224   **VK236**   **VK248**   **VK258**

Expansion Box

Note: Please contact the local sales representative for more information on licenses.

● Network

Highlights

Intelligent Control	The **ATEN Control System** makes the interactions between hardware devices smarter. Pre-programmed actions and triggers can provide a fully automated series of advanced operations that allow the devices to respond to each other intelligently, making the whole solution run smarter and smoother.
Optimized Performance	The **ATEN Control System** has optimized the communication protocols that not only maintain a close-to-zero second response time but also feature data encryption for extra protection.
Simplified Setup	No matter how large the room or how complicated the hardware, the **ATEN Control Pad** can be deployed in 3 easy steps: connect the hardware, configure the system, and set the Control Pad layout. Through an intuitive GUI, the process for setting up the controls for every room is simple and customizable, via straightforward predefined commands and macros that do not require users to have complicated programming skills.
Effortless Expandability	With a range of expansion boxes available, the **ATEN Control System** installation can grow to accommodate additional Serial, Relay and IR devices. Furthermore, the **ATEN Library** has 10,000+ device drivers and grows as users add new devices to the existing database via the **Database Generator**, making it expandable and easily manageable, whatever the size or scope of the installation.
Fully Customizable with Ease	The VK0100's customizability allows system integrators to fulfill diverse applications with ease. The hardware supports 2 button sizes that can form 14 layout combinations of 4 to 8 buttons, while the VK6000 software provides versatile modes for each button: normal, toggle, press and release, and long press. Furthermore, the swappable buttons allow the keypad layout to be changed even when it's online and mounted to the wall. This superior flexibility facilitates system integrators who need to quickly answer to customer requirements and changes that are demanded.
Single Cable Installation	The VK0100's LAN port supports Power over Ethernet (PoE) that allows both data and electric power to be transmitted over one single Ethernet cable, eliminating the need of an extra power source and extra wiring. For applications that require power redundancy or direct electrical supply, the VK0100 can also be powered via a 5 VDC power adapter.

Specifications

	VK0100
Interfaces	
Keypad Layout	4~8 buttons customizable in 14 keypad layouts
Serial	• 2 x Bi-directional RS-232 Port (2 x 3-Pole Terminal Block Connector); – Baud Rate: 300 to 115200 (default: 9600); – Data Bit: 8 (default) or 7; – Stop Bit: 1 (default) or 2; – Parity: None (default), even or odd
Relay	• 2 x Relay Channel (2 x 2-Pole Terminal Block Connector); • Normally open, isolated Relays; • Contact Rating: Max 24 VDC, 1A

I/O	• 1 x Digital Input Channel
	  (1 x 2-Pole Terminal Block Connector);
	– VDC Mode
	  Input Voltage Range: 0 to 5 VDC;
	  Programmable Range: 1 to 5 VDC;
	– Dry Contact Mode
	  Pull-up 2k ohms to + 5 VDC

Ethernet	• 1 x RJ-45 Female, 10 / 100 Base-T
	• Protocol Supported: ARP, ICMP, TCP / IP, DHCP, HTTPS, SSH
	• DHCP-enabled. The following default IP settings will be used if no IP is assigned within 30 seconds:
	  IP: 192.168.0.60
	  Subnet Mask: 255.255.255.0

Switches	
Controller ID	1 x 16-segment Switch
Reset Button	1 x Semi-recessed Pushbutton
Power Consumption	DC5V:1.1W:5BTU; POE:1.375W:6BTU
Environmental	
Operating Temperature	0 – 50 °C
Storage Temperature	-20 – 60 °C
Humidity	0 – 80% RH, Non-Condensing
Physical Properties	
Housing	Plastic
Weight	0.16 kg
Dimensions (L x W x H)	11.63 x 7.06 x 4.80 cm
Faceplate Dimension (L x W x H)	7.42 x 11.92 x 0.92 cm

Optional Expansion Boxes

Model Number	Model Name
VK224	4-Port **Serial** Expansion Box
VK236	6-Port **IR/Serial** Expansion Box
VK248	8-Channel **Relay** Expansion Box
VK258	8-Channel **Digital I/O** Expansion Box

Optional Keypads

Model Number	Model Name
VK108US	8-Button Keypad (US, 1 Gang)
VK112EU	12-Button keypad (EU, 2 Gang)

Optional Touch Panel

Model Number	Model Name
VK330	10.1" Touch Panel