ATEN Control System

ATEN Control Box + ATEN Configurator + ATEN Control System App

The **ATEN Control System**, incorporating the **ATEN Control Box (VK2100 / VK1100)**, the **ATEN Configurator (VK6000)** and the **ATEN Control System App**, is a standard Ethernet-based management system that connects all the hardware devices in a room or large facility to provide centralized control directly and effortlessly via a mobile device and tablet computer. The **VK2100 / VK1100 Control Box** works as the main controller that provides connectivity to all the hardware devices found in a room. After connecting the hardware, the **VK6000 Configurator** software provides simple setup of the devices with easy step by step configuration. The **ATEN Control System App** then connects you to the **VK2100 / VK1100 Control Box** from any iOS, Android or Windows mobile device / tablet computer which empowers you with mobility to control all the hardware devices, in different rooms, whenever and however you like.

The **VK2100 / VK1100 Control Box** easily deploys into an existing installation and integrates seamlessly with ATEN VanCryst pro-A/V products and nearly any other hardware devices found in a room, including A/V equipment, lighting, conference systems, air conditioning, motion sensors, power switches and many more. The **VK2100 / VK1100 Control Box** serves as the central platform where hardware devices are connected - to be monitored, managed and controlled directly via a tailor-made GUI from any iOS, Android or Windows mobile device.

The **VK6000 Configurator** software facilitates a quick setup and control of the devices in a few easy steps via an intuitive GUI. The VK6000 walks you through configuring the hardware, designing the interface and uploading viewer profiles to the VK2100 / VK1100 Control Box. To provide control of the hardware devices, Viewer Profiles are imported via the **ATEN Control System App** from any iOS, Android or Windows mobile device. Through an Ethernet connection, the **ATEN Control System App** enables you to import and update Viewer Profiles from the **VK2100 / VK1100 Control Box** via a point-n-tap user interface. Each Viewer Profile provides a customized control GUI that grants you quick access to target and control hardware devices. Use of any profile is protected with password authentication to ensure system access.

The **ATEN Control System** is perfectly applicable in meeting rooms, conference centers, boardrooms, classrooms or any room that requires central and mobile control of a variety of hardware devices through a streamlined management system with optimum efficiency and performance.

VK2100 Front view

VK1100 Front view

VK2100 Rear view

VK1100 Rear view

Features

VK2100 Control Box

- Supports various interface connections:
  - 6 x Serial ports
  - 4 x IR/Serial ports
  - 4 x Relay channels
  - 4 x I/O channels
  - 1 x Ethernet port
- 4 x DC output for power supply connections
- 1 x USB port for easy profile upload
- IR Learning function for adding IR device drivers
- Easily configure system settings via web GUI
- LED indication for hardware status and active messages
- Supports SSH tool to monitor the input and output signals of the Control Box
- Rack-mountable

VK1100 Compact Control Box

- Supports various interface connections:
  - 2 x Serial ports
  - 2 x IR/Serial ports
  - 4 x Relay channels
  - 1 x Ethernet port
- 1 x USB port for easy profile upload
- IR learning function for adding IR device drivers
- Easily configure system settings via web GUI
- LED indication for hardware status and active messages
- Supports SSH tool to monitor the input and output signals of the Control Box

VK6000 Configurator Software

- Simple profile setup with easy configuration steps via intuitive GUI
- Custom design the GUI and controls to use on mobile devices and tablet computers
- Built-in Database Generator for device driver setup and overall device management
- Built-in ATEN Library comprising 10,000+ device drivers and complete ATEN VanCryst product drivers
- Supports Telnet, TCP, ONVIF, and PJLink protocols for controlling IP-based devices over a network
- Two-way communication enables user-defined event monitoring to automatically trigger the next actions
- Test tool to verify commands in action before uploading the profile to the VK2100 / VK1100 Control Box
- Simulator to simulate and review the customized GUI before uploading

ATEN Control System App

- Allows administrators central control of multiple rooms via profiles on a mobile device or tablet computer
- Restrict user access to profiles via password authentication
- Synchronization of system controls amongst multiple mobile devices and tablet computers
- Any iOS, Android, or Windows mobile device can be used to control the system – no need to purchase costly exclusive user panels

Optional Expansion Boxes

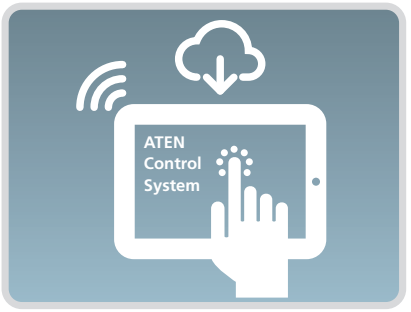
Model Number	Model Name
VK224	4-Port **Serial** Expansion Box
VK236	6-Port **IR/Serial** Expansion Box
VK248	8-Channel **Relay** Expansion Box

Installation Setup

Connect hardware

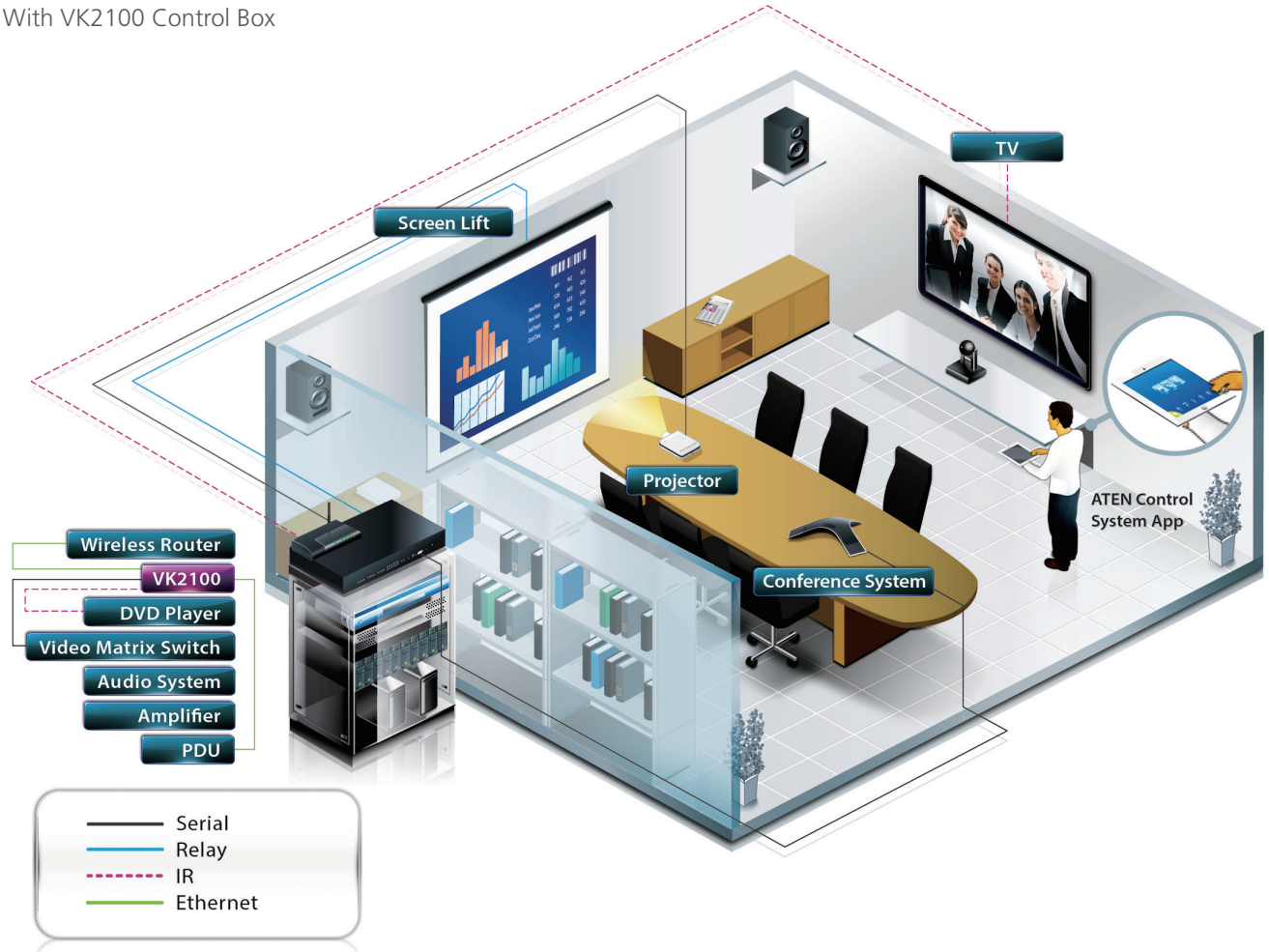
Configure settings

Download app



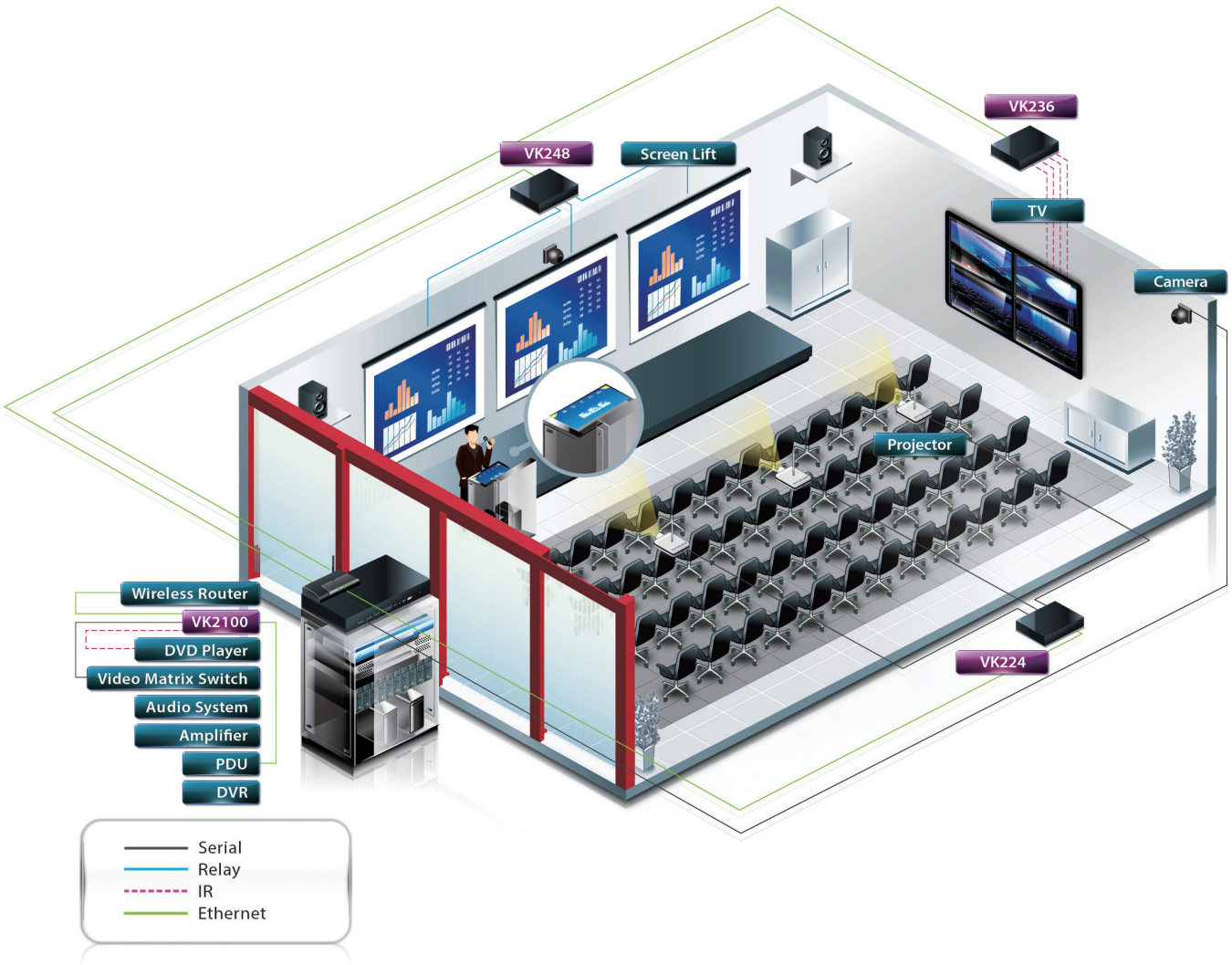
Simple Solution

With VK2100 Control Box



Expandable Solution

With VK2100 Control Box and Expansion Boxes
(VK224+VK236+VK248)



Highlights

Intelligent Control	The **ATEN Control System** makes the interactions between your hardware devices smarter. Pre-programmed actions and triggers can provide a fully automated series of advanced operations that allow your devices to respond to each other intelligently, making your whole solution run smarter and smoother.
Optimized Performance	The **ATEN Control System** has optimized the communication protocols that not only maintain a near-zero 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 System can be deployed in 3 easy steps: connect the hardware, configure the system and upload profiles via a smart mobile app. 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 you 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 you 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.
User Centered Convenience	An advanced, single-software solution creates an intuitive interface for any mobile device, while specific needs are customizable by selecting from an extensive library of actions and design elements to customize the control panel. In addition, the **ATEN Control System** provides various support services that include driver downloads, database generation and upgrade tools – to help system integrators build easy-to-control environments effortlessly.
On-the-Go Control	Intuitive system control can start with one room and scale up to multiple rooms in the same area or across regions. Toggling between profiles on an iOS, Android or Windows mobile device facilitates control of different rooms with simple point-n-tap operations. In addition, multiple mobile devices can be authorized with access to control the same room or multiple rooms, providing you with flexible, enhanced mobility, and tight security.

Specifications

Function	VK2100	VK1100
Interfaces		
Serial	• 4 x Programmable Bi-directional RS-232/422/485 Port (4 x DB9 Male Connector, configurable via pin assignments) – 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 – Flow Control: None (default) or RTS/CTS • 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	• 2 x Programmable Bi-directional RS-232/422/485 Port (2 x DB9 Male Connector, configurable via pin assignments); – 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; – Flow Control: None (default) RTS/CTS
IR/Serial	• 4 x Programmable IR / Uni-directional RS-232 Port (2 x 4-Pole Terminal Block Connector) **IR:** TTL level (0 to 5 V) – Carrier Frequency: 10 KHz~455 KHz **Serial:** Uni-directional RS-232 (+ - 5 V) – 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	• 2 x Programmable IR / Uni-directional RS-232 Port (1 x 3-Pole Terminal Block Connector); **IR:** – Carrier Frequency: 10KHz~455KHz; **Serial:** – 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
I/O	• 4 x Programmable Digital Input / Output Channel (1 x 5-Pole Terminal Block Connector) Digital Output: 250 mA sink from 12 VDC Digital Input: – VDC Mode Input Voltage Range: 0 to 24 VDC Programmable Range: 1 to 24 VDC; – Dry Contact Mode Pull-up 2k ohms to + 12 VDC	N/A
Relay	• 4 x Relay Channel (2 x 4-Pole Terminal Block Connector) • Normally open, isolated relays • Contact Rating: Max 24 VDC, 2A	• 4 x Relay Channel (2 x 4-Pole Terminal Block Connector); • Normally open, isolated Relays; • Contact Rating: Max 24 VDC, 2A

Function	VK2100	VK1100
VDC	• 4 x 12 VDC Output Port (2 x 4-Pole Terminal Block Connector) • Power Supply: 12 VDC, 2A Max (shared by 4 ports)	• 1 x 12 VDC Output Port (1 x 2-Pole Terminal Block Connector); • Power Supply: 12 VDC, 1A Max
Ethernet	• 1 x RJ-45 Female, 10/100Base-T • Supported Protocol: 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	• 1 x RJ-45 Female, 10/100Base-T • Supported Protocol: 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
Switch		
Controller ID	1 x 16-segment Switch	1 x 16-segment Switch
Power	1 x On/Off Switch	1 x On/Off Switch
IR Learning	1 x IR Receiver LED	1 x IR Receiver LED
Reset Button	1 x Semi-recessed Pushbutton	1 x Semi-recessed Pushbutton
USB	1 x USB Type A	1 x USB Type A
Power		
Consumption	40 W	20 W
Maximum Input Power Rating	100-240 VAC, 50-60Hz	100-240 VAC, 50-60Hz
Environmental		
Operating Temperature	0° to 50° C	0° to 50° C
Storage Temperature	- 20° to 60° C	- 20° to 60° C
Humidity	0 - 80% RH, Non-Condensing	0 - 80% RH, Non-Condensing
Physical Properties		
Housing	Metal	Metal
Weight	2.64 kg	1.19 kg
Dimensions (L x W x H)	43.72 x 16.32 x 4.40 cm	21.50 x 16.23 x 4.18 cm

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