

# ATEN Control System

## VK2200 Control Box Gen. 2

## VK1200 Compact Control Box Gen. 2

VK2200 / VK1200, ATEN's second-generation Control Box, boasts the highest performance processor within the series. Equipped with a quad-core CPU and 2 GB / 1 GB memory, VK2200 / VK1200 provides real-time response and status updates and can process complex, high-loading events with customized GUI designs, as well as multiuser access control to connected devices. VK2200 / VK1200 features dual, isolated LAN ports — Control LAN and LAN. The Control LAN allows managed devices to be securely protected within a separate network, independent from the corporate network, for fulfilling high-security and stability demand. On the other hand, the LAN can be connected to ATEN Unizon, a centralized platform streamlining daily AV / IT management, which provides users with the convenience to monitor, troubleshoot, and maintain multiple systems all at once.

The VK2200 / VK1200 Control Box can be used to easily manage any room setting, and can be deployed into an existing installation by seamless integration with ATEN VanCryst ProAV products, as well as nearly any hardware or software device found in a room, including AV equipment, lighting, conference systems, air conditioning, motion sensors, power switches, and many more. VK2200 / VK1200 is the perfect solution for managing mass device deployments especially in strict security settings with high performance requirements, such as government agencies, military facilities, corporate organizations, and healthcare institutions.

VK2200 / VK1200 is a part of ATEN's Control System Series, a standard Ethernet-based management system, which consists of hardware, configurator software, control interfaces and related services, to control any hardware and software devices within a room setting, such as boardrooms and lecture halls, and to provide direct, centralized management effortlessly via user-defined GUIs from any mobile device, ATEN Keypad and Touch Panel.

VK2200 Front View



VK2200 Rear View



VK1200 Front View



VK1200 Rear View



## Features

### VK2200 / VK1200 Control Box Gen. 2

- High performance processor embedded with quad-core CPU and 2 / 1 GB memory for designing and controlling complex projects
- Dual, isolated LAN for secured communication among IT devices
- Supports various interface connections for hardware-software integration and mobile device control
- DC outputs for power supply connections
- USB port for easy project upload
- LCD display shows the option for configuration and information display
- IR learning function for adding IR device drivers
- Supports native KNX IP for building management systems
- Telnet, TCP, UDP, HTTP, HTTPS, ONVIF, and PLink compliant
- Supports centralized control and management by ATEN Unizon™.
- Supports project file backup
- Web GUI for easy system configuration
- Supports SSH communication for data monitoring
- LED indication of connection and hardware status
- 2 free licenses for mobile control\*

**Note:** If you require more than 2 licenses, contact the local sales representative. For more information on licenses, see Specifications.

## Installation Setup

### Connect hardware



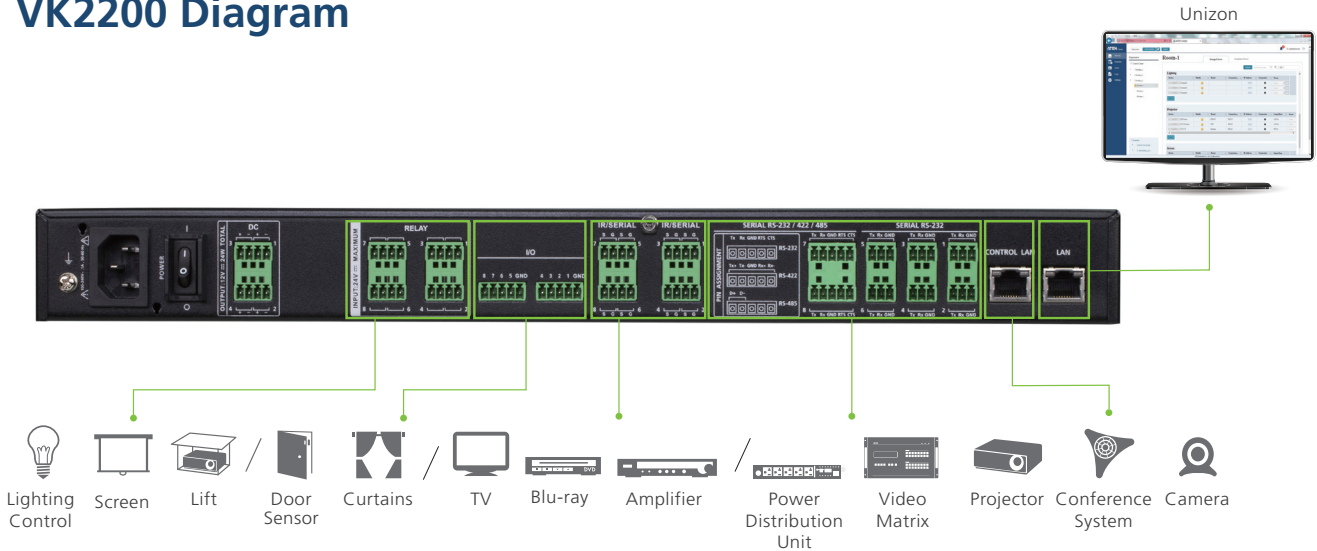
### Configure settings



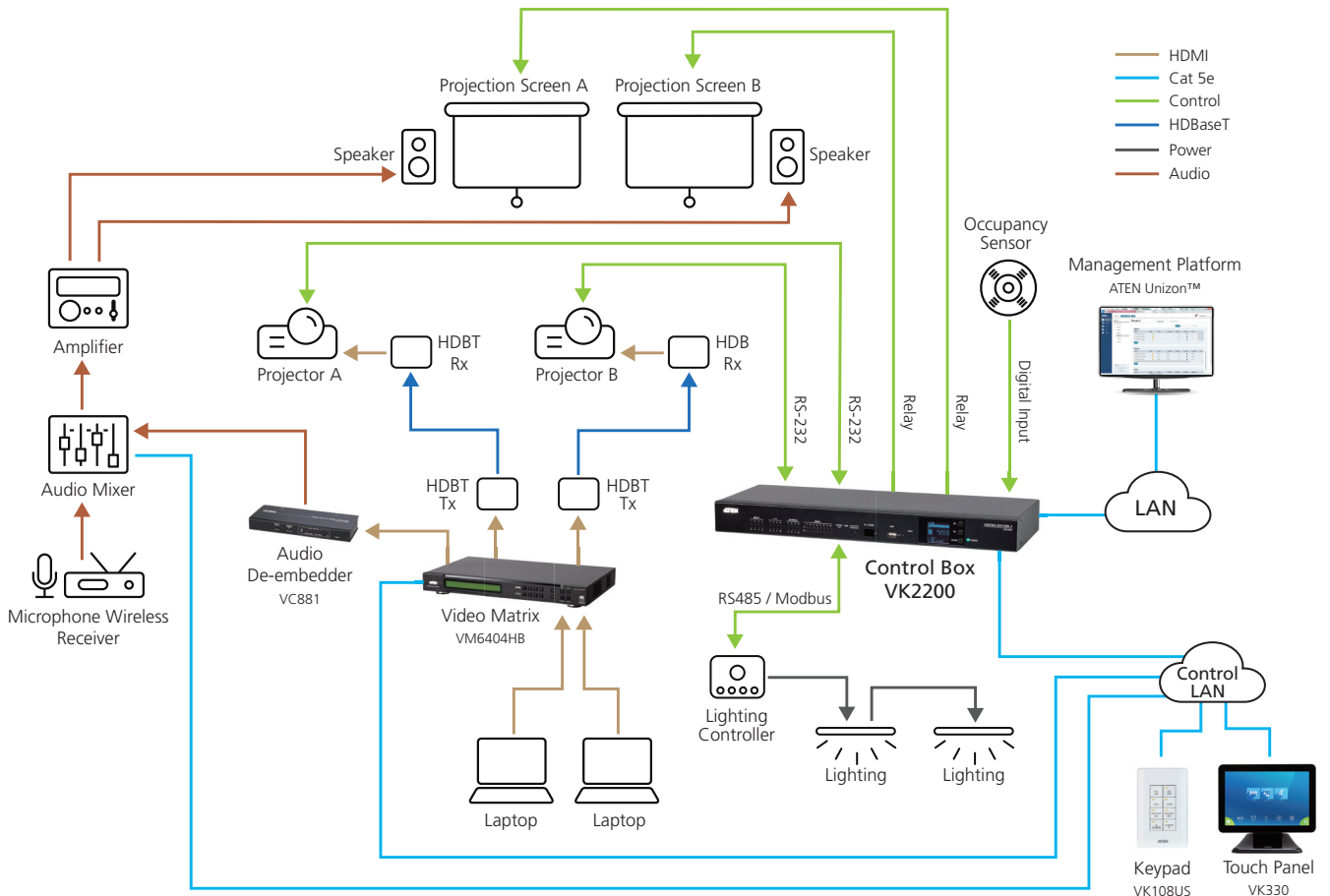
### Download app



## VK2200 Diagram



## Reference Solution Diagram



## Highlights

### The latest generation of the ATEN Control Box

The latest generation of the ATEN Control Box is designed with major enhancements to satisfy even the most complex of setups, and features:

<b>More Processing Power and Memory</b>	High performance processor embedded with quad-core CPU and 2 / 1 GB memory for designing and controlling complex projects.
<b>Higher Level of Security</b>	Dual, isolated LAN design supporting secured communication protocols such as HTTPS and SSH.
<b>Major Software Upgrades</b>	Advanced drivers with bidirectional control and feedback as well as 4 times more software objects such as buttons and macros.
<b>Centralized Management</b>	ATEN Unizon™ support for centralized management of devices across rooms, floors and even buildings.
<b>LCD Display</b>	LCD display shows the option for configuration and information display

### The advantages of the ATEN Control System

The ATEN Control System has been developed with a series of advantages making it easily adaptable to varying applications in a wide range of settings, including but not limited to corporate and education facilities and conference halls or any other space that requires complete control.

<b>Control Automation</b>	Your devices can interact and respond to each other intelligently through pre-programmed actions to perform a fully automated series of advanced operations.
<b>Real-time Synchronization</b>	Equipment status synchronizes in real-time across all control interfaces for conflict-free control among multiple simultaneous users.
<b>Simplified Configuration</b>	Easy setup control sequences without extensive programming knowledge and decrease time spent on manual configuration with our advanced driver database.
<b>Effortless Expansion</b>	Highly expandable with a wide range of ATEN expansion boxes, access to device drivers, and support for popular control standards and protocols including KNX, over IP, HTTP(s), Telnet, TCP, UDP.
<b>User-centered Convenience</b>	An advanced, single-software solution enabling users to create their own control interfaces for any mobile device. Specific needs can be efficiently tailored by selecting from a database of control actions and GUIs for effortless deployment.
<b>Mobile Control</b>	Support for iOS, Android and Windows mobile devices facilitates centralized control of different rooms via user-defined profiles with simple point-n-tap operations.
<b>Integration Partners</b>	ATEN collaborates with professional AV partners to provide complete solutions for applications of all sizes.

## Specifications

	VK2200	VK2100
<b>Memory</b>		
SDRAM	2 GB	1 GB
Flash	8 GB	8 GB
<b>Interfaces</b>		
Serial	<ul style="list-style-type: none"> <li>• 2 x Programmable Bidirectional RS-232 / 422 / 485 Port (2 x 5-Pole Terminal Block Connector, configurable via pin assignments) <ul style="list-style-type: none"> <li>– Baud Rate: 300 ~ 115200 (default: 9600)</li> <li>– Data Bit: 8 (default) or 7</li> <li>– Stop Bit: 1 (default) or 2</li> <li>– Parity: None (default), Even or Odd</li> <li>– Flow Control: None (default) or RTS / CTS</li> </ul> </li> <li>• 6 x Bidirectional RS-232 Port</li> <li>• (6 x 3-Pole Terminal Block Connector) <ul style="list-style-type: none"> <li>– Baud Rate: 300 ~ 115200 (default: 9600)</li> <li>– Data Bit: 8 (default) or 7</li> <li>– Stop Bit: 1 (default) or 2</li> <li>– Parity: None (default), Even or Odd</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• 1 x Programmable Bidirectional RS-232/422/485 Port (1 x 5-Pole Terminal Block Connector, configurable via pin assignments) <ul style="list-style-type: none"> <li>– Baud Rate: 300 ~ 115200 (default: 9600)</li> <li>– Data Bit: 8 (default) or 7</li> <li>– Stop Bit: 1 (default) or 2</li> <li>– Parity: None (default), Even or Odd</li> <li>– Flow Control: None (default) or RTS/CTS</li> </ul> </li> <li>• 1 x Bidirectional RS-232 Port (1 x 3-Pole Terminal Block Connector) <ul style="list-style-type: none"> <li>– Baud Rate: 300 ~ 115200 (default: 9600)</li> <li>– Data Bit: 8 (default) or 7</li> <li>– Stop Bit: 1 (default) or 2</li> <li>– Parity: None (default), Even or Odd</li> </ul> </li> </ul>
IR/Serial	<ul style="list-style-type: none"> <li>• 8 x Programmable IR / Unidirectional RS-232 Port (4 x 4-Pole Terminal Block Connector) <ul style="list-style-type: none"> <li>IR: TTL level (0 to 5 V) <ul style="list-style-type: none"> <li>– Carrier Frequency: 10 ~ 455 kHz</li> </ul> </li> <li>Serial: Unidirectional RS-232 (0 ~ 5 V) <ul style="list-style-type: none"> <li>– Baud Rate: 300 ~ 115200 (default: 9600)</li> <li>– Data Bit: 8 (default) or 7</li> <li>– Stop Bit: 1 (default) or 2</li> <li>– Parity: None (default), Even or Odd</li> </ul> </li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• 2 x Programmable IR / Unidirectional RS-232 Port (2 x 2-Pole Terminal Block Connector) <ul style="list-style-type: none"> <li>IR: TTL level (0 to 5 V) <ul style="list-style-type: none"> <li>– Carrier Frequency: 10 ~ 455 kHz</li> </ul> </li> <li>Serial: Unidirectional RS-232 (0 ~ 5 V) <ul style="list-style-type: none"> <li>– Baud Rate: 300 ~ 115200 (default: 9600)</li> <li>– Data Bit: 8 (default) or 7</li> <li>– Stop Bit: 1 (default) or 2</li> <li>– Parity: None (default), Even or Odd</li> </ul> </li> </ul> </li> </ul>
Relay	<ul style="list-style-type: none"> <li>• 8 x Relay Channel (4 x 4-Pole Terminal Block Connector)</li> <li>• Normally open, isolated Relays</li> <li>• Contact Rating: Max 24 V DC, 2 A</li> </ul>	<ul style="list-style-type: none"> <li>• 4 x Relay Channel (2 x 4-Pole Terminal Block Connector)</li> <li>• Normally open, isolated Relays</li> <li>• Contact Rating: Max 24 V DC, 2 A</li> </ul>
I/O	<ul style="list-style-type: none"> <li>• 8 x Programmable Digital Input / Output Channel (2 x 5-Pole Terminal Block Connector) <ul style="list-style-type: none"> <li>Digital Output: 300 mA sink from 24 V DC</li> <li>Digital Input: <ul style="list-style-type: none"> <li>– VDC Mode <ul style="list-style-type: none"> <li>Input Voltage Range: 0 ~ 24 V DC</li> <li>Programmable Range: 1 ~ 24 V DC</li> </ul> </li> <li>– Dry Contact Mode <ul style="list-style-type: none"> <li>Pull-up 2 kΩ to + 12 V DC</li> </ul> </li> </ul> </li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• 2 x Programmable Digital Input / Output Channel (1 x 3-Pole Terminal Block Connector) <ul style="list-style-type: none"> <li>Digital Output: 300 mA sink from 24 DC</li> <li>Digital Input: <ul style="list-style-type: none"> <li>– VDC Mode <ul style="list-style-type: none"> <li>Input Voltage Range: 0 ~ 24 V DC</li> <li>Programmable Range: 1 ~ 24 V DC</li> </ul> </li> <li>– Dry Contact Mode <ul style="list-style-type: none"> <li>Pull-up 2 kΩ to + 12 V DC</li> </ul> </li> </ul> </li> </ul> </li> </ul>
Ethernet	<ul style="list-style-type: none"> <li>• 2 x RJ-45 Female, 10 / 100 / 1000 Base-T</li> <li>• Supported Protocol: ARP, ICMP, TCP/IP, DHCP, HTTPS, SSH</li> <li>Control LAN: <ul style="list-style-type: none"> <li>• Support DHCP Server</li> <li>• DHCP mode - The following default IP settings will be used if no IP is assigned within 30 seconds: <ul style="list-style-type: none"> <li>IP: 192.168.0.60</li> <li>Subnet Mask: 255.255.255.0</li> </ul> </li> </ul> </li> <li>LAN: <ul style="list-style-type: none"> <li>• DHCP mode - The following default IP settings will be used if no IP is assigned within 30 seconds: <ul style="list-style-type: none"> <li>IP: 192.168.1.60</li> <li>Subnet Mask: 255.255.255.0</li> </ul> </li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• 2 x RJ-45 Female, 10 / 100 / 1000 Base-T</li> <li>• Supported Protocol: ARP, ICMP, TCP/IP, DHCP, HTTPS, SSH</li> <li>Control LAN: <ul style="list-style-type: none"> <li>• Support DHCP Server</li> <li>• DHCP mode - The following default IP settings will be used if no IP is assigned within 30 seconds: <ul style="list-style-type: none"> <li>IP: 192.168.0.60</li> <li>Subnet Mask: 255.255.255.0</li> </ul> </li> </ul> </li> <li>LAN: <ul style="list-style-type: none"> <li>• DHCP mode - The following default IP settings will be used if no IP is assigned within 30 seconds: <ul style="list-style-type: none"> <li>IP: 192.168.1.60</li> <li>Subnet Mask: 255.255.255.0</li> </ul> </li> </ul> </li> </ul>
V DC	<ul style="list-style-type: none"> <li>• 4 x 12 V DC Output Port (2 x 4-Pole Terminal Block Connector)</li> <li>• Power Supply: 12 V DC, 2 A Max (shared by 4 ports)</li> </ul>	<ul style="list-style-type: none"> <li>• 1 x 12 V DC Output Port (1 x 2-Pole Terminal Block Connector);</li> <li>• Power Supply: 12 V DC, 1 A Max</li> </ul>
<b>USB</b>	1 x USB Type A	1 x USB Type A
<b>Switches</b>		
Power	1 x On/Off Switch	1 x On/Off Switch
<b>IR Learning</b>	1 x IR Receiver LED	1 x IR Receiver LED

	VK2200	VK2100
<b>Panel Spec</b>		
Resolution	128 x 64	128 x 64
Size	1.6"	1.6"
<b>Pushbuttons</b>		
Select	3 x Pushbuttons (Up, Down, Enter)	3 x Pushbuttons (Up, Down, Enter)
<b>Reset Button</b>	1 x Semi-recessed Pushbutton	1 x Semi-recessed Pushbutton
<b>Power Consumption</b>	AC 110 V : 5.7 W : 139 BTU AC 220 V : 6.8 W : 144 BTU	AC 110 V : 4.7 W : 81 BTU AC 220 V : 4.5 W : 81 BTU
<b>Power</b>		
Maximum Input Power Rating	Internal Power: 100 - 240 V AC, 50 - 60 Hz	Internal Power: 100 - 240 V AC, 50 - 60 Hz
<b>Environmental</b>		
Operating Temperature	0 – 50 °C	0 – 50 °C
Storage Temperature	-20 – 60 °C	-20 – 60 °C
Humidity	0 - 80% RH, Non-Condensing	0 - 80% RH, Non-Condensing
<b>Physical Properties</b>		
Housing	Metal	Metal
Weight	2.62 kg	1.23 kg
Dimensions (L x W x H)	43.24 x 16.32 x 4.40 cm	20.00 x 16.41 x 4.40 cm
<b>License</b>		
Basic (free)	2 free licenses	2 free licenses
Max. No. Allowed	32 licenses	32 licenses

**Note :** The ATEN Control Box comes with two free licenses which are stored in the device itself. Each time a mobile device connects to an ATEN Control Box for remote control, one license on the Control Box will be occupied. To purchase and add additional licenses to your ATEN Control Box, contact your local sales representative for more information.

### Optional Expansion Boxes

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

### Optional Rack Mount Kit (for VK1200)

Model Number	Model Name
2X-049G	Rack Mount Kit
2X-021G	Dual Rack Mount Kit

#### ATEN International Co., Ltd.

3F., No.125, Sec. 2, Datung Rd., Sijhih District., New Taipei City 221, Taiwan  
 Phone: 886-2-8692-6789 Fax: 886-2-8692-6767  
 www.aten.com E-mail: marketing@aten.com

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