
VK2100

ATEN Control System - Control Box



The ATEN Control System, incorporating the ATEN Control Box (VK2100 or [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 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 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 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 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 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 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.

Features

• VK2100 Control Box

- Supports various interface connections for hardware-software integration and the mobility of control
- 4 x DC outputs for power supply connections
- 1 x USB port for easy profile upload
- Easy ID pairing with Expansion Boxes and Keypads for Ethernet communication
- IR learning function for adding IR device drivers
- Supports native KNX IP for building management systems
- Telnet, TCP, UDP, HTTP, HTTPS, ONVIF, and PJLink compliant
- Supports project file backup
- Web GUI for easy system configuration
- Supports SSH communication for data monitoring
- LED indication of connection and hardware status
- Rack-mountable
- 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.

• VK6000 Configurator Software

- Simple profile setup with easy configuration steps via intuitive GUI
 - Customizable GUI to be used on mobile devices and PC
 - Supports [ControlAssist](#) that allows PC control (PC shutdown, media files, PowerPoint files)*
 - 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
 - Scheduling for repeating events
 - Programming-based Script Editor for complex monitoring scenario handling
 - 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
- *Note: For details on the supported PC control actions, refer to the ATEN Control System User Manual.

• 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

Specification

Interfaces	
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: 10KHz~455KHz; 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
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) 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
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
Relay	• 4 x Relay Channel (2 x 4-Pole Terminal Block Connector); • Normally open, isolated Relays; • Contact Rating: Max 24 VDC, 2A

VDC	• 4 x 12 VDC Output Port (2 x 4-Pole Terminal Block Connector); • Power Supply: 12 VDC, 2A Max (shared by 4 ports)
Ethernet	• 1 x RJ-45 Female, 10/100Base-T • Supported Protocol: 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 • Establishes VK2100 connection with the VK6000 (ATEN Configurator) and iPad (ATEN Control System App)
USB	1 x USB Type A
Switches	
Controller ID	1 x 16-segment Switch
Power	1 x On/Off Switch
IR Learning	1 x IR Receiver LED
Reset Button	1 x Semi-recessed Pushbutton
Power Consumption	AC110V:4.8W:135BTU/h AC220V:5.7W:140BTU/h Note: ● The measurement in Watts indicates the typical power consumption of the device with no external loading. ● The measurement in BTU/h indicates the power consumption of the device when it is fully loaded.
Power	
Maximum Input Power Rating	Internal Power: 100-240 VAC, 50-60 Hz
Environmental	
Operating Temperature	0 – 50°C
Storage Temperature	–20 – 60°C
Humidity	0 - 80% RH, Non-Condensing
Physical Properties	
Housing	Metal
Weight	2.64 kg (5.81 lb)
Dimensions (L x W x H)	43.72 x 16.32 x 4.40 cm (17.21 x 6.43 x 1.73 in.)
License	
Basic (free)	2 free licenses
Max. No. Allowed	16 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.
Note	For some of rack mount products, please note that the standard physical dimensions of WxDxH are expressed using a LxWxH format.

Diagram

