

KX9980R

5K DisplayPort Dual Display KVM over IP Receiver



The KX9980 5K DisplayPort Dual Display KVM over IP transmitter is a high-performance IP-based Dual Display transmitter, where the transmitter can transmit a computer's keyboard, video, mouse, and USB signals to the receiver for providing separate console accesses from both the transmitter's and receiver's locations. The setup allows extended access to computer systems via a USB dual DisplayPort console (USB keyboard, USB mouse, Dual DisplayPort monitors) over Intranet, enabling users to place the computers in secure and temperature-controlled environments, which may be isolated from the user workstation.

The KX9980 supports two DisplayPort video displays for delivering video resolutions of up to 5K (5120 x 2880 @ 30 Hz), and offers flawless and lossless video quality with zero latency. The KX9980 is equipped with one RJ-45 port and two SFP+ slots. 10-Gbps SFP+ fiber module expansions are supported for fiber optic network connections and a transmission distance of up to 10 km. For connection flexibility, both the KX9980 transmitter and receiver models can be connected either directly to each other or via a high-speed network over a copper-based or fiber-based LAN. The KX9980 also features dual power supply capability for power redundancy to ensure reliable service. The KX9980 can be set up at the workstation, mounted onto a wall or at the rear of a rack with its space-saving 0U rack-mount design.

As an IP-based matrix extender, the KX9980 can be installed in flexible configurations, including point-to-point, point-to-multipoint, multipoint-to-point, and multipoint-to-multipoint. When combined with the KVM over IP Matrix Manager ([CCKM](#)), it can be integrated into a KVM over IP matrix system (multipoint-to-multipoint) for providing more flexible applications in different working environments.

By integrating [CCKM](#) with KX9980, IT administrators can benefit from advanced features such as auto detection of all KX9980 devices on the same subnet for fast installation or configuration, username / password authentication and authorization, and the ability to define different types of connections that can be switched and shared. Security features of the KX9980 include 256-bit AES encryption for secured data transmissions, as well as RADIUS, LDAP, Active Directory, TACACS+ for third-party authentication services. In conclusion, the KX9980 offers the most convenient solution for providing full digital extension over a network for control room applications, such as air traffic control (ATC), traffic management centers, and broadcast distribution monitoring systems.

Note: The SFP+ module ([2A-141G](#) / [2A-142G](#)) is sold separately. Contact your ATEN dealer for product information.



Features

• Advanced Features¹

- Lossless video compression up to 5120 x 2880 for dual display, including UHD or DCI with zero latency
- Native DP signal processing with color depth 24, 30, 36 bits
- Supports Adobe RGB
- Supports USB isochronous transfer to enable USB camera and USB speaker usage between transmitter and receiver
- ATEN Matrix Link – allows users to instantly link transmitters and receivers to perform real-time port and profile switching on an iPad
- Boundless Switching – simply move the mouse cursor across screen borders to switch between different receivers (Rx)
- Fast Switching – switches between different remote video resolutions on a local display within 0.3 seconds
- Push and Pull – share content instantly to / from a single Rx or video wall by just one click
- Video walls – create multiple video walls with up to 12 x 12 (144 displays max.) in each layout
- Advanced Scheduling – improve efficiency and save costs by allowing connections to be set based on time and date
- Virtual Transmitter – independently stream video, audio, USB, and serial sources from different Tx
- Internal and external authentication support – supports LDAP, Active Directory, RADIUS, and TACACS+
- Advanced User Authorization Settings – administrators can set up to four access modes on Tx devices for collaboration or prevention of interference among users
- Configurable user and group permissions for access and control of KX devices
- Tx grouping of up to 4 sets of KX transmitters to support multi-display applications
- Rx access control – users at the Tx local console can enable / disable Rx control privilege by simply pressing a control button

Note:

1. These advanced functions are supported when the KX transmitters are paired with KX receivers and managed by [CCKM](#).
2. The KVM over IP Access Control Box ([2XRT-0015G](#)) is sold separately. Contact your ATEN dealer for product information.

• Hardware

- Support dual display with 32:9 ultra-wide resolution (combined) or two individual displays
- Supports DisplayPort video resolutions – up to 5120 x 1440 @ 60 Hz (4:4:4), 5120 x 2880 @ 30 Hz (4:4:4), 4096 x 2160 @ 60 Hz (4:4:4), 1920 x 1080 @ 240 Hz (4:4:4) (CVT-RB), 2560 x 1440 @ 144 Hz (4:4:4) per display
- DisplayPort 1.2 compliant
- Stereo speakers and microphone support
- High-speed USB Storage Transmission support
- Auto-MDIX – automatically detects cable type
- Built-in 8 kV / 15 kV ESD protection and 2 kV surge protection
- Supports power redundancy – KX9980 has 2 DC jacks for power redundancy
- Supports network failover – 1 RJ-45 & 2 SFP+ slots for network failover to ensure constant availability for missioncritical applications
- Supports 10-Gbps SFP+ fiber module expansions for up to 10 km*
- The housing meets IEC 60945 standards for maritime control room use and has passed environmental tests
- Rack Mountable – Mounting options:
 - [2X-021G](#) Dual Rack Mount Kit
 - [2X-031G](#) Single Rack Mount Kit
- Includes an industrial-grade power adapter – supports operating temperature of 0 – 50 °C to ensure durability and adaptability under harsh environmental conditions

Note:

*The SFP+ module ([2A-141G](#) / [2A-142G](#)) is sold separately. Contact your ATEN dealer for product information.

• Management

- Integration with KVM over IP Matrix Manager ([CCKM](#)) – a software enabling easy configurations of all KX devices with an intuitive web-based GUI
- Dual console operation – controls user's system from both the transmitter's and receiver's keyboard, monitor, and mouse
- OSD (On Screen Display) – enables configuration of both Tx / Rx devices on the receiver's display screen
- EDID Expert™ – selects optimum EDID settings to prevent video compatibility issue caused by different monitors
- On-screen Preview (Panel Array™Mode) – allows users to view the video of up to 36 displays on one screen
- Video Compression Level – allows users to increase / decrease the video quality to adjust for appropriate network bandwidth
- Command Line Interface – administrators can control all KX devices via RS-232 or Telnet by issuing commands or 3rdparty application
- Supports hotkey commands
- RS-232 serial ports – allows users to connect to a serial terminal for TextMenu, CLI, or to serial devices such as touch screens and barcode scanners
- All KX Tx models are compatible to be used with all Rx models

• Security

- Dedicated LAN port for KX direct connections – can be isolated from the corporate network
- Secured data transmission – 256-bit AES encryption for all data being transmitted from the transmitter to the receiver
- Supports industry standard Transport Layer Security (TLS) protocol

• Virtual Media

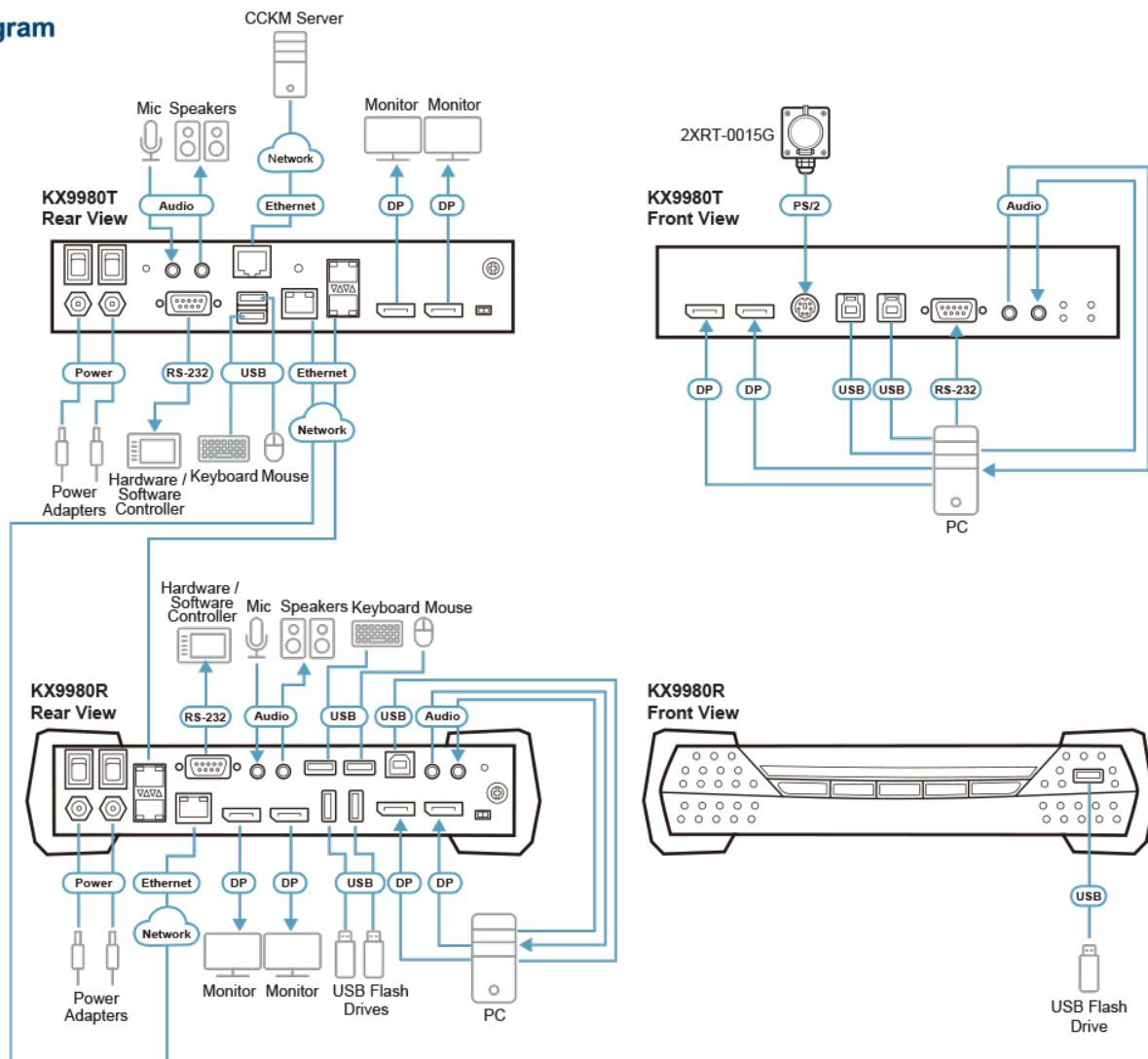
- Virtual Media mode enhances data transmission performance, and is ideal for file transfers, OS patching, software installations and diagnostic testing
- Supports USB 2.0 DVD / CD drives, USB mass storage devices, PC hard drives and ISO images
- Supports smart card / CAC reader

Specification

| | |
|------------------------|--|
| Connectors | |
| USB Port | 2 x USB Type A Female (White) |
| Console Ports | 2 x USB Type A Female (Blue) 1 x USB Type A Female (White) 2 x DisplayPort Female (Black) 1 x Mini Stereo Jack (Green) 1 x Mini Stereo Jack (Pink) 1 x DB-9 Male (Black) |
| Computer Ports | *Computer ports for future enhancements 1 x USB 2.0 Type B Female (white) 2 x DisplayPort Female (Black) 2 x Audio Jack Female (Pink for Mic., Green for Ear Phone, Front Panel) |
| Power | 2 x DC Jack (Black) |
| LAN Ports | 1 x RJ-45 (Black) 2 x SFP+ Slot |
| Switches | |
| OSD | 1 x Pushbutton |
| Port (Up) | 1 x Pushbutton |
| Port (Down) | 1 x Pushbutton |
| Reset | 1 x Semi-recessed Pushbutton |
| Power | 2 x Power Switch |
| LEDs | |
| 1000/10000 Mbps | 1 (1000: Orange / 10000: Green) |
| Power | 2 (Green) |
| Local | 1 (Green) |
| Remote | 1 (Green) |
| Emulation | |
| Keyboard / Mouse | USB |
| Power Consumption | DC12V:33W:237BTU/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. |
| Video Resolution | Up to Dual-Display: 5120 x 2880 @ 30Hz, 5120 x 1440 @ 60Hz, 4096 x 2160 @ 60Hz, 2560 x 1440 @ 144hz, 1920 x 1080 @ 240Hz |
| Latency | < 1ms |
| Environmental | |
| Operating Temperature | 0–50°C |
| Storage Temperature | -20–60°C |
| Humidity | 0–95% RH, Non-condensing |
| Physical Properties | |
| Housing | Metal |
| Weight | 1.69 kg (3.72 lb) |
| Dimensions (L x W x H) | 22.60 x 22.40 x 5.30 cm (8.9 x 8.82 x 2.09 in.) |
| Note | For some of rack mount products, please note that the standard physical dimensions of WxDxH are expressed using a LxWxH format. |

Diagram

► Diagram



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