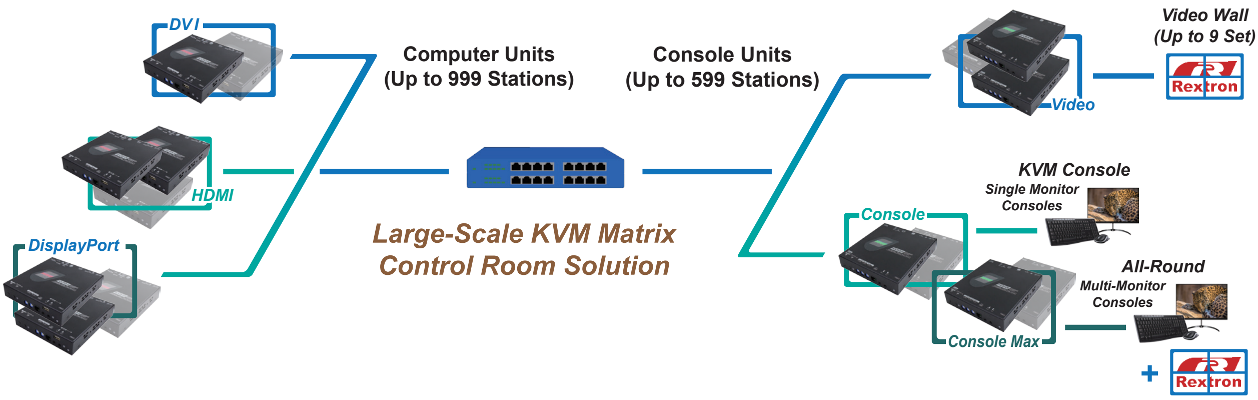
NVDAK-1000 Series

Large-Scale KVM Control System
with Intuitive Hotkey Control,Easy Installation,Video Wall



Overview

Rextron has released in 2021 the large-scale Intuitive KVM control system, NVDAK-1000 series, which focus on intuitive hotkey control of the whole system and easy installation. This is to mitigate the massive efforts to plan and to install the KVM Matrix system, and greatly reduces the time to train user and system administrator.

The Installation can be done with a simple 3-step process :
1. Turn switches to set ID and function based on actual deployment
2. Make Physical Connections
3. Scan System

Though the installation is simple, the large-scale control center can expand up to 999 stations with video wall support. Each user can easily switch any console to any computer in the control system with intuitive hotkey commands. To fulfill multi-tasking requirements, the units include multi-monitor options (single~quad). To optimize cost-efficiency, there are 3 receiver unit options : 1. Video unit for video wall applications 2. Console Unit for KVM console applications 3. Console-MAX unit for all-round purposes. For the environments where power outlets numbers are limited, Power-over-Ethernet models are also provided. All these options and features are towards one purpose – to deliver the best service with minimum effort.

Solution	Traditional KVM Matrix	Intuitive KVM Matrix
Installation Interface	WEB and Serial	Hardware Switches
Installtion Time	Long	Short
Installtion Personel	Expert	Regular Personel
Operation Interface	WEB	Intuitive Hotkey
Training Time	Long	Short
Configuration Adjustment	Slow	Fast

Features

3-Step Easy Installation

- ***3-Step Easy Installation*** Saves Installation Cost and Time :
  1. Unit ID Setting and Unit Function Setting via Switches
  2. Making Physical Cable Connections
  3. Full System Scan

Intuitive Control Methods

- ***Intuitive Control System*** Features Fast and Easy Controls :
  - Push Button Control
  - Keyboard Hotkey
  - Keypad Simplified Hotkey
  - 1-Click Control (Optional : Using Programming Key)
  - Mouse Roaming Switch (Optional : Using Mouse Roaming KM Switch)

Video Wall

- Minimum Configurations by Dialing Rotary Switches
- 2x2 ~ 5x5 Standard Symmetric Video Walls
- 1x2 ~ 3x8 Special Aspect Ratio Video Walls
- Video Wall Horizontal & Vertical Bezel Compensation
- Up to 9 Video Walls Allowed
- Up to 5 Sub Video Walls Per Video Wall Allowed
- Video Wall Merge & Disband
- Video Wall Rotation
- Video Wall Synchronized Switching
- Work with Multi-View KVM Switch (Optional)

Multi-Monitor

- ***Single/Dual/Triple/Quad Monitors Configurations*** Available to Boost Work Efficiency of Multi-Tasking Users. Multi-Monitor Console May Be Assigned A Multi-Monitor Source As a Whole, or Each Video Output of A Multi-Monitor Console May Be Assigned An Individual Single-Monitor Source.

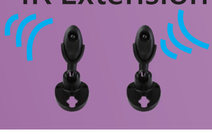
Various Video Interfaces

- ***DVI/HDMI/DisplayPort/USB-C Video Interfaces*** Available to Match User's Computers or Video Sources. Users May Select HDMI / DisplayPort / DVI / USB-C for Computer Unit to Match Their Existing Computer. Since HDMI Takes Almost 100% of Market Share of Monitor, Console Units Applys HDMI Interface.

Video Resolution Options

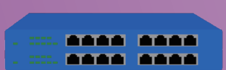
- ***4K / 1080P Units*** Available to Allow Optimum Desktop Area. In Computer Management Applications 1080P Resolution Covers Most Tasks while 4K Resolution Comes in Handy for Traffic Control or Mission Control Applications.

Bidirectional IR Extension



- ***Bidirectional IR Control*** Enables Broader Source/Device Control Capability, and The Wired Receiver/Transmitter Are Allowed to Be Placed at Optimum Locations. While The Rx-to-Tx IR Extension Is USed to Control The Video Source, The Tx-to-Rx IR Extension May Be Used to Control A Projector or A Large LED Display.

Power over Ethernet



- ***Power over Ethernet Units*** Available to Further Simplify Power Connection, and Allows Installation In The Environments Where Power Outlets Are Scarce

Features

EDID Management

- ***EDID Management*** Allows Users to Manage The EDID Information to Optimize Monitor Compatibility. User May Either Apply Auto-EDID Which Conveys The EDID of Connected Monitor Directly, or Apply EDID-Copy Which Conveys Stored EDID to The Computer.

USB 2.0 Extension

- ***USB 2.0 Extension*** Allows Users to Transfer USB 2.0 and USB HID Signal between Computer Units and Console Units. User May Enable/Disable Synchronized Switching of USB 2.0 to Protect USB Storage.

User-Define Group

- ***User-Define Groups*** Allows Users to Tie Together Several Console Units or Video Walls for Synchronized Switching Application. This Is Applied Mostly in Education Industry as Video Broadcasting Application.

Name Entitling

- ***Name Entitling Function*** Allows Users to Entitle Meaningful Names to Console Units / Computer Units / Video Walls / Sub Video Walls / Groups. It Is Mostly Applied to Indicate The Location of Units when The Deployment Is Decentralized.

Channel Anchoring

- ***Channel Anchoring*** Allows Users to Store Faforite Channel Mapping So That User Can Resume The Favorite Channel Mapping Quickly. This Function Is Perfect for Control Center and Video Broadcasting Applications.

IP Segment Seperation

- ***IP Segment Seperation*** Allows Multiple KVM Control Systems to Share One LAN. This Function Is Ideal for Building KVM Control System for

Optional Programming Keyboard

- ***Optional Programming Key*** Allows to Store Hotkey Commands onto F1~F12 and Numpad Keys for Further Simplification of Intuitive Control Method. This Is Ideal for Industrial Control Applications.

Wireless Controls

- ***Wireless Controls*** Allows Several Types of Wireless Controls Including Wireless Keyboard / Wireless Mouse / Wireless Keypad / IR Remote, to Facilitate Both KVM and Video Wireless Applications.

Unit Options

Computer Unit (Video Sender)	
Video Interface Options	1080P DVI 1080P HDMI 4K HDMI 4K DisplayPort 4K USB-C
Multi-Monitor Options	Single-Monitor Dual-Monitor Triple-Monitor Quad-Monitor
USB 2.0 Extension	USB 2.0 x 1 (B Connector)
Bidirection IR Extension	3.5mm IR Jack x 2
Audio Extension	3.5mm Audio Jack x 1
MAX. Computer Units	999
PoE Options	with PoE without PoE

The computer units (video senders) connect to computers or video sources, providing 1080P / 4K video interface options of DVI / HDMI / DisplayPort / USB-C. Users can also connect multi-monitor computers to the system by using dual-monitor computer units (video senders). One dual-monitor computer unit plus one single-monitor computer unit should be applied to the triple-monitor computer, and two dual-monitor computer unit should be applied to the quad-monitor computer. The computer units can also be connected to KVM switches by configuring the hotkey leading code to right-Ctrl so that user can apply left-Ctrl to control the KVM switch and right-Ctrl to control the KVM control system.

Vdieo Unit (Video Receiver)	
Video Interface Options	1080P HDMI 4K HDMI
Multi-Monitor Options	Single-Monitor
Bidirection IR Extension	3.5mm IR Jack x 2
Audio Extension	3.5mm Audio Jack x 1
MAX. Computer Units	599
PoE Options	with PoE without PoE
Video Wall Support	Up to 9 Sets
Control Methods	IR Remote / Push Button / Serial / Wired Selector

The video units (video senders) connect to monitor or display and capable of forming up to 9 sets of video walls, providing 1080P / 4K HDMI video interface options. It is ideal for Pro AV broadcasting applications or to from video wall in control rooms. The bidirectional IR extension function is perfect to control video source and displays. Though the control methods are generally IR control and serial control, user may also apply one console unit in the video wall application to enable hotkey control via that console unit.

Console Unit (Video Receiver)	
Video Interface Options	1080P HDMI 4K HDMI
Multi-Monitor Options	Single-Monitor
USB Extension	USB 2.0 x 1 (A Connector) USB HID x 2 (A Connector) (Keyboard / Mouse) USB HID x 1 (A Connector) (Keypad)
Bidirection IR Extension	3.5mm IR Jack x 2
Audio Extension	3.5mm Audio Jack x 1
MAX. Computer Units	99
PoE Options	with PoE without PoE
Video Wall Support	1 Set
Control Methods	IR Remote / Push Button / Serial / Wired Selector / Keyboard Hotkey / Keypad Hotkey / (Mouse Roaming)

The console units (video senders) connect to KVM consoles for KVM control room applications and other small-scale multi-to-multi KVM matrix applications. The USB interface supports keyboard hotkey and simplified keypad hotkey, and the optional KM switch may be hooked up for mouse roaming switching control. User may also apply multi-view KVM switch to incorporate 8 stations into 1 multi-view Mouse Roaming KVM console. The 1-set video wall support satisfies most control rooms' video wall configurations. The PoE model allows easier connection in the environments where power outlets are scarce.

Console Max Unit (Video Receiver)	
Video Interface Options	1080P HDMI 4K HDMI
Multi-Monitor Options	Single-Monitor Dual-Monitor Triple-Monitor Quad-Monitor
USB Extension	USB 2.0 x 1 (A Connector) USB HID x 2 (A Connector) (Keyboard / Mouse) USB HID x 1 (A Connector) (Keypad)
Bidirection IR Extension	3.5mm IR Jack x 2
Audio Extension	3.5mm Audio Jack x 1
MAX. Computer Units	599
PoE Options	with PoE without PoE
Video Wall Support	Up to 9 Set
Control Methods	IR Remote / Push Button / Serial / Wired Selector / Keyboard Hotkey / Keypad Hotkey / (Mouse Roaming)

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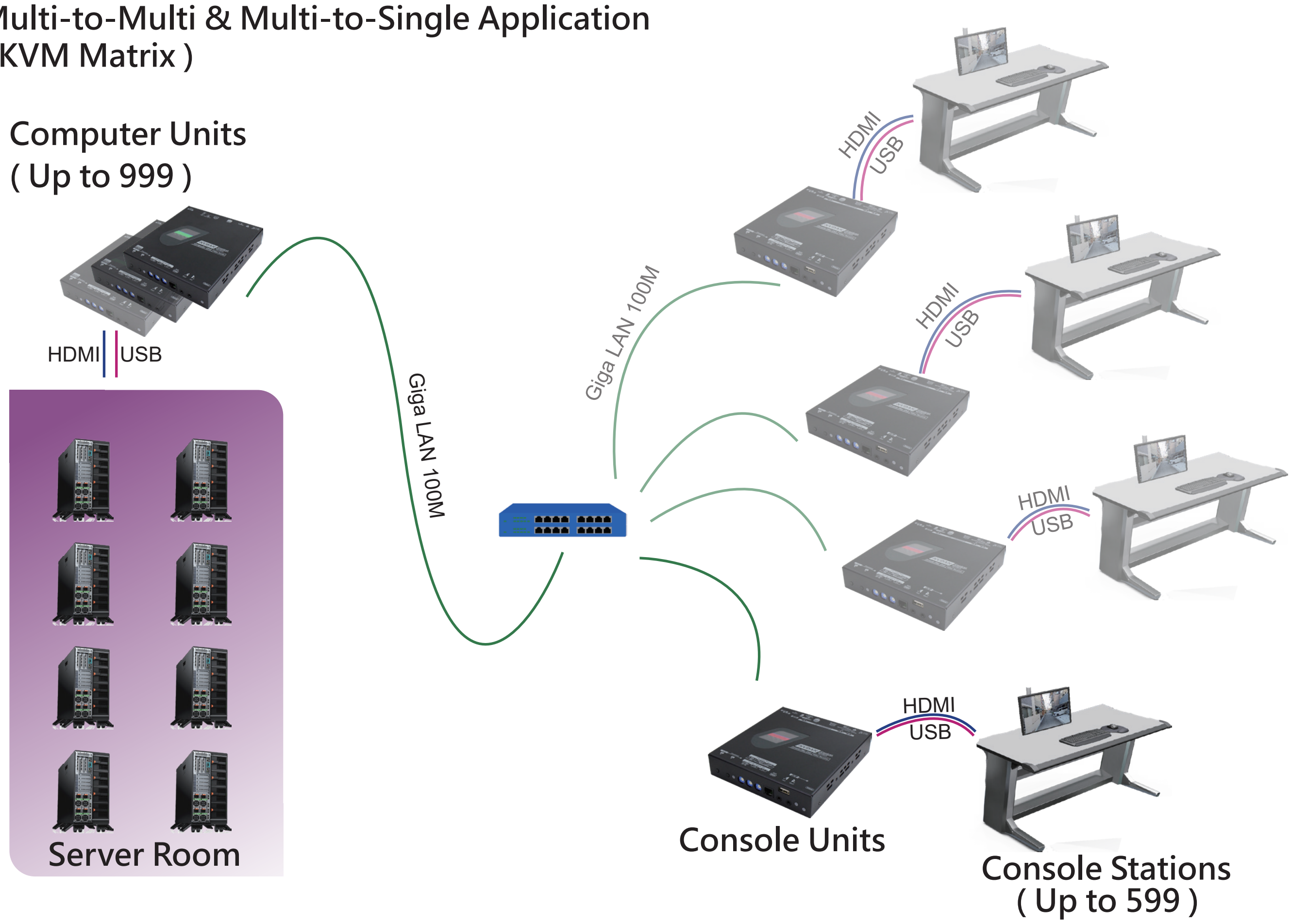
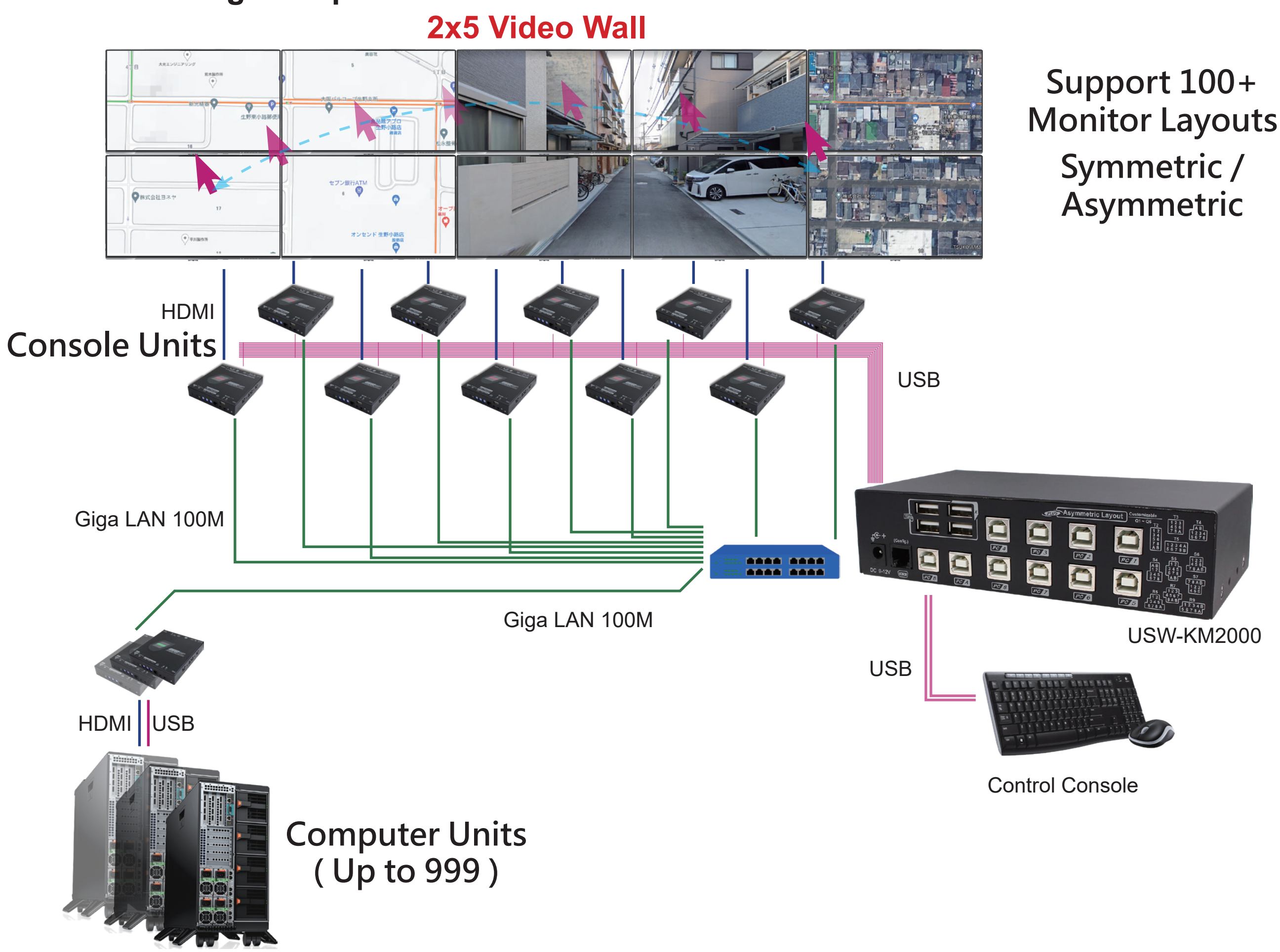
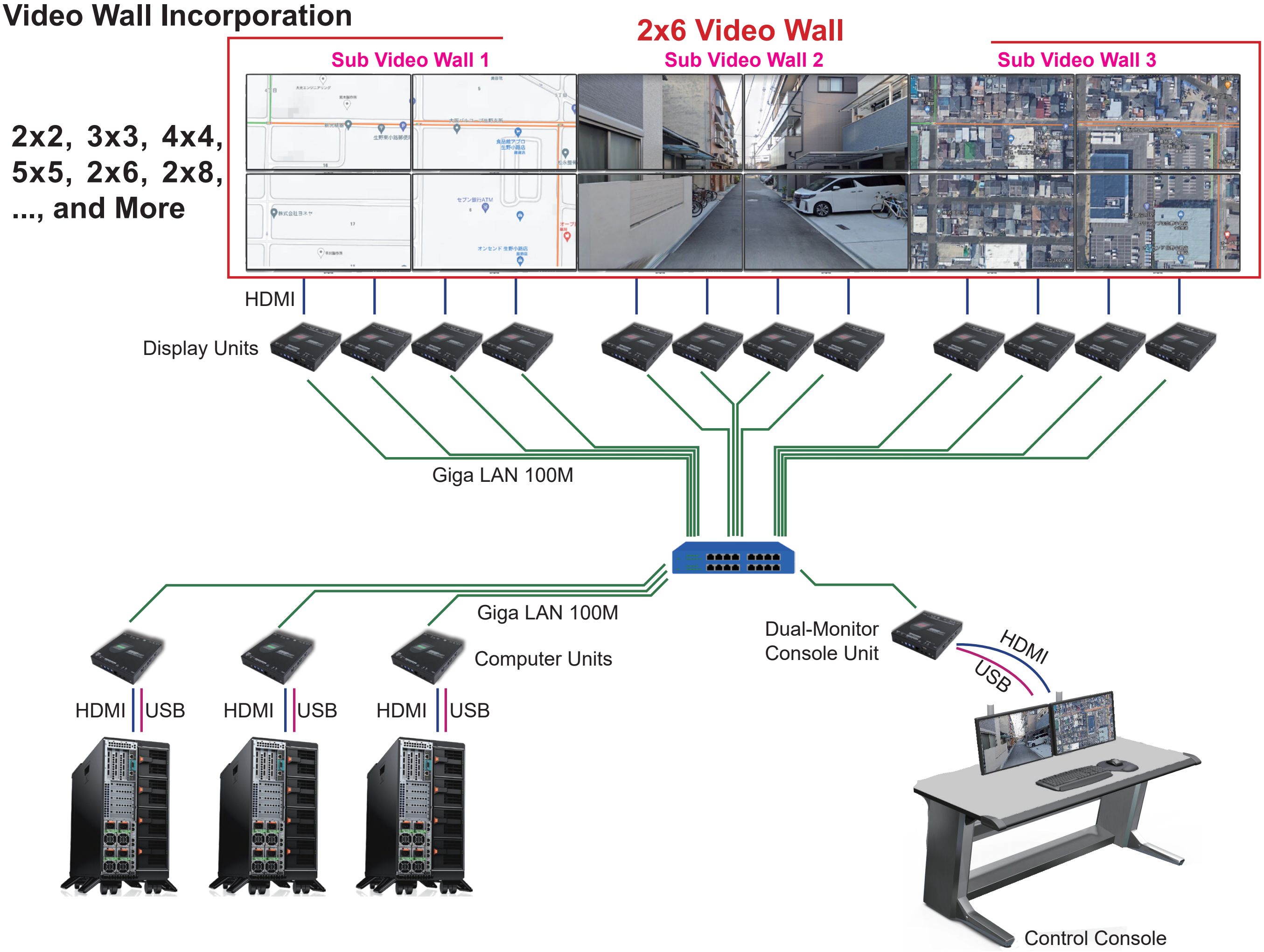
Multi-to-Multi & Multi-to-Single Application (KVM Matrix)



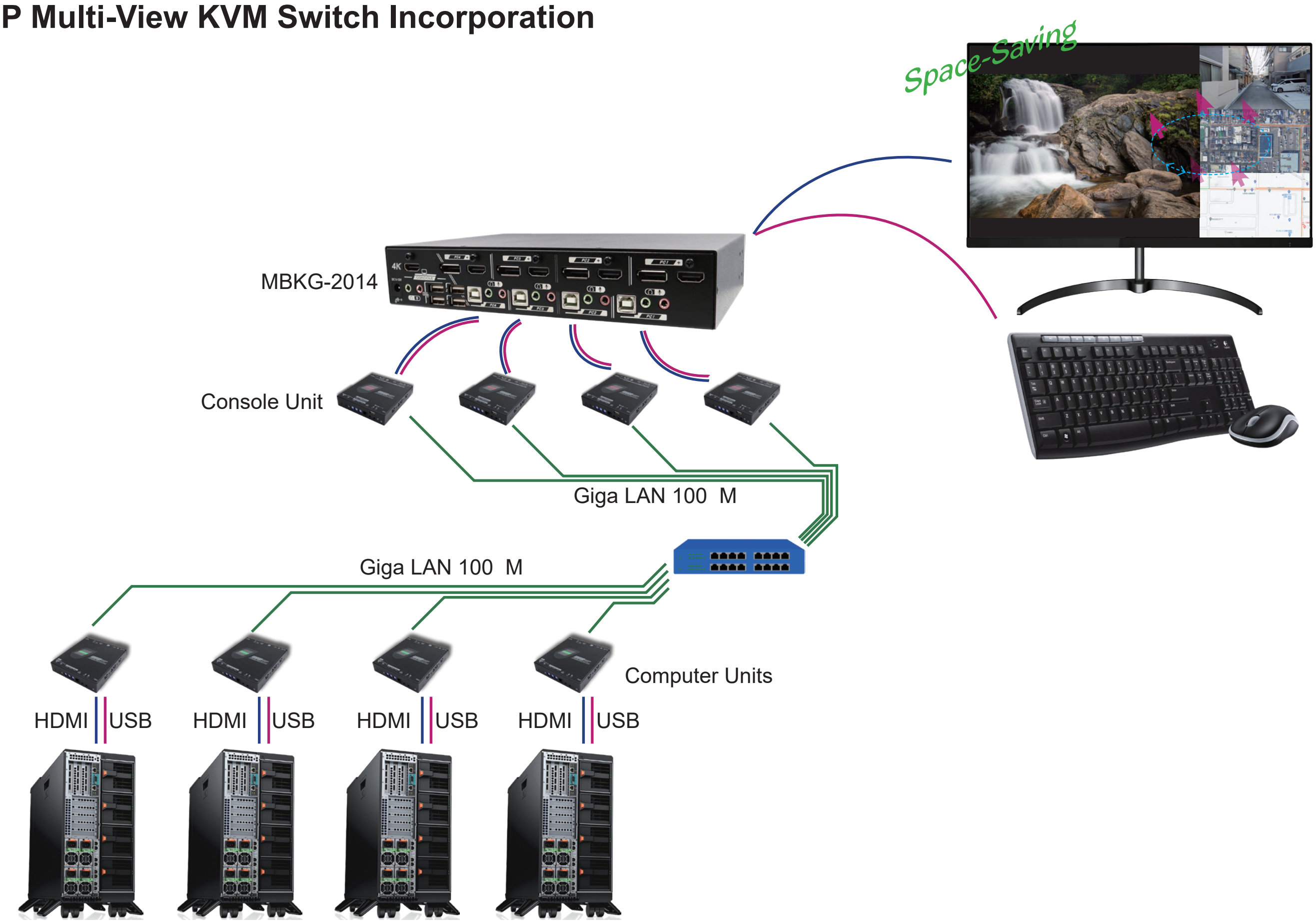
Mouse Roaming Incorporation



Video Wall Incorporation



PBP Multi-View KVM Switch Incorporation



Optional Peripherals

Programming Key

PKEY-1104

PKEY-1208

The programming key controller allows user to further simplifies keyboard hotkeys or keypad hotkeys into 1 click buttons. The commands can be stored on on-panel fast buttons, keyboard, keypad, or foot pedals. The programming procedure is on-line learning so that a computer is not required to do the learning procedure and makes it easy-to-use in all conditions.

Stores Key Combinations onto :

- **USB Keyboard F1~F12 & Numpad Keys**
- **USB Keypad**
- **Top-Pannel Fast Buttons x4 / x8 (PKEY-1104 / PKEY-1208)**
- **4 External Triggers (Support Foot-Pedals & Micro Switches)**
- **IR Remote Controller**

4-Port Mouse Roaming KM Switch

USW-KM304

10-Port Mouse Roaming KM Switch

USW-KM2000

The Mouse Roaming KM switch allows user to switch among console units by moving mouse cursor across screen borders. You can also build your KVM console based on preset monitor layouts. For the 10-port model, there are more than 100+ monitor layouts available, and you can also custom-make your own unique monitor layout by consulting us. The keypad port allows keypad hotkey directed to the console units and synchronized with Mouse Roaming switching to give the best users' experiences.

Switch among Computers by :

- **Moving Mouse Cursor across Screens**
- **Keyboard Hotkey**
- **Front Push Buttons**

Form Various Monitor Layouts :

- **Preset Symmetric Layouts**
- **Preset Asymmetric Layouts (USW-KM2000 Only)**
- **Custom-Made Layout (USW-KM2000 Only)**

4-Port PBP Multi-View KVM Switch

MBKG-2014

The PBP multi-view KVM switch allows users to minimize console spaces by integrating multiple consoles into multi-view in one monitor. The Mouse Roaming switching function also empowers user with the best user's experience.

Features :

- **Merge Multiple Consoles into One**
- **PBP Multi-View Minimizes Console Space**
- **Mouse Roaming Gives The Best User's Experience**