

PS/2_USB_Combo KVM Extender

KE-PK0101-MB
KE-UK0101-MB
KE-CK0101-MB

User Manual

◀ V1.0 ▶



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1. Introduction

To locate PC, Server or KVM switch up to 300 meters away from your controlling keyboard, mouse and VGA monitor. " KVM Extender-Tx " transmitter converts PS/2 or USB keyboard signal , PS/2 or USB mouse signal and VGA monitor signal to composite signal being easily transmitted to a long distance over popular Ethernet CAT-5 cable. " KVM Extender-Rx " receiver is to get the composite signal and return PS/2 or USB keyboard, PS/2 or USB mouse and VGA monitor signal back.

You can easily go remote management for collecting dispersive computers control into one dedicated central control center, demonstration room, meeting room or at your desk. CAT-5 STP (Shielded Twisted Pair) cable/ UTP (Unshielded Twisted Pair) cable or enhanced cable like CAT-5e/CAT-6 cable is very popular applied to LAN network. KVM CAT-5 extender uses the same existing network construction to transfer local console signal to remote management side.

KVM CAT-5 extender is able to move your console --- keyboard, Mouse and Monitor to a suitable control field conveniently over LAN network. You just need install a pair of extender --- transmitter and receiver at local side and remote side individually. It also saves your cable layout and cable installation cost.

PS/2 KVM Extender Kit (KE-PK0101-MB)

PS/2 KVM Extender transmitter (KE-PK0101-TB)



PS/2 KVM Extender receiver (KE-PK0101-RB)



USB KVM Extender kit (KE-UK0101-MB)

USB KVM Extender transmitter (KE-UK0101-TB)



USB KVM Extender receiver (KE-UK0101-RB)



Combo KVM Extender Kit (KE-CK0101-MB)

Combo KVM Extender transmitter (KE-CK0101-TB)



Combe KVM Extender receiver (KE-CK0101-RB)



<KVM Extender Diagram>

1.1 Main Features

- Works with single PC, Server or KVM Switch's console port or PC port
- No software installation
- Works with CAT-5, CAT-5e, CAT-6 Ethernet LAN cable
- Easily install in few minutes and video knob on KVM Extender receiver to adjust it for set up the best video signal quality
- Compatible with DOS, MS Windows series, Netware, Linux and Unix
- VGA resolution up to 1920 X 1440 (up to 300 meters approximately)
- Local LED and Remote transmission LED indication

2. Package Contents

2.1 PS/2 KVM Extender Kit (KE-PK0101-MB)

PS/2 KVM Extender-Tx (KE-PK0101-TB)	1 PCS
PS/2 KVM Extender-Rx (KE-PK0101-RB)	1 PCS
CD-ROM (User manual)	1 PCS
AC to DC Power Adapter	1 PCS
3 TO 3 KVM Cable 1.8M	2 PCS

2.2 USB KVM Extender Kit (KE-UK0101-MB)

USB KVM Extender-Tx (KE-UK0101-TB)	1 PCS
USB KVM Extender-Rx (KE-UK0101-RB)	1 PCS
CD-ROM (User manual)	1 PCS
AC to DC Power Adapter	2 PCS
1 TO 2 KVM Cable 1.8M	2 PCS

2.3 Combo KVM Extender Kit (KE-CK0101-MB)

Combo KVM Extender-Tx (KE-CK0101-TB)	1 PCS
Combo KVM Extender-Rx (KE-CK0101-RB)	1 PCS
CD-ROM (User manual)	1 PCS
AC to DC Power Adapter	2 PCS
1 TO 2 KVM Cable 1.8M	2 PCS
3 TO 1 KVM Cable 1.8M	2 PCS

3. Cable Diagrams

3.1 VGA Cable:

VGA Cable: HDDB15 pin Male to Male



<VGA Cable>

3.2 CAT-5/5E/6 Straight Through UTP/STP Cable: 8P8C



<CAT-5/5E/6 Straight Through UTP/STP Cable>

3.3 PS/2 Cable

Mini Din 6-pin Male to Male (Keyboard plug: Purple color, Mouse plug: Green color)

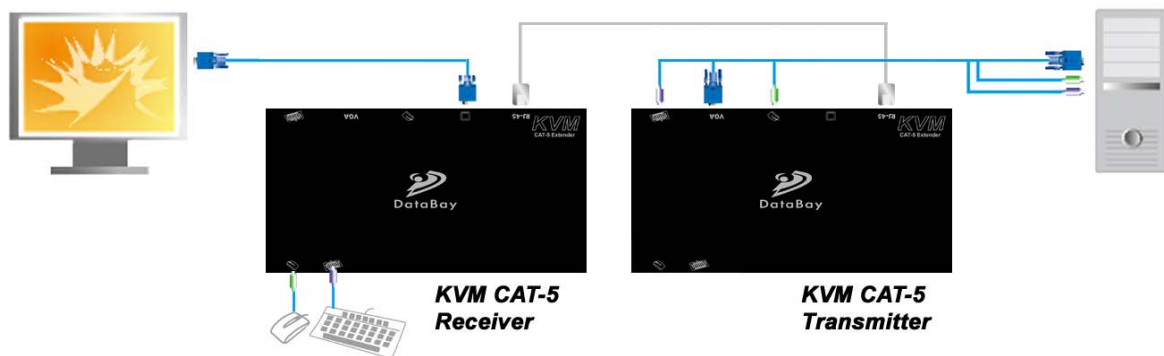


<PS/2 Cable>

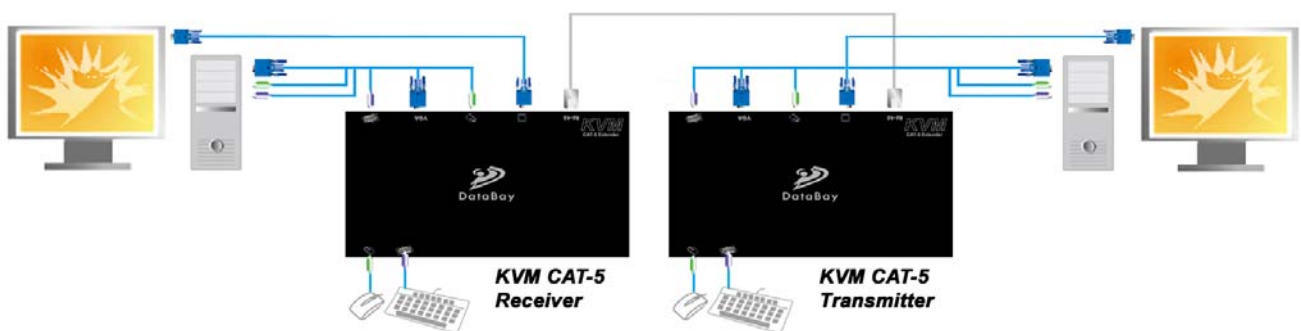
4. Hardware Installation

Before installation, please make sure all of peripherals and computer have been turned off; and following the procedures to install your conditions correctly :

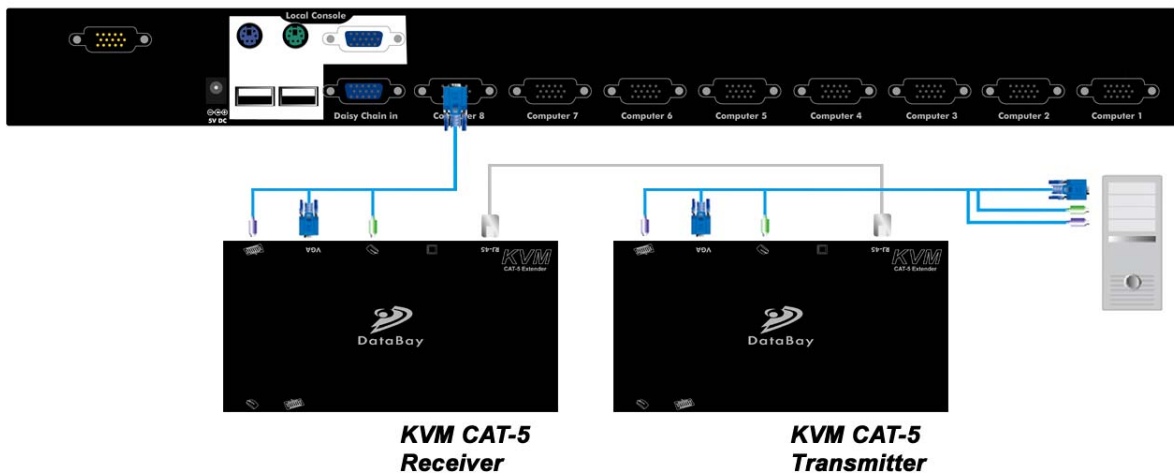
1. There is a video knob on the top of KVM Extender-RX receiver is for adjusting VGA display quality. It would adapt the characteristics of the cable, such as the length, cable type, shielded and unshielded to adjust video quality.
2. To connect PC console port or server console port by using standard 3-to-3 KVM Switch cable or 2-to-2 KVM switch cable (keyboard/VGA/Mouse plug -male to male for PS/2,USB,Combo KVM Extender) to KVM CAT-5 transmitter.
3. To connect CAT-5 cable plug to LAN Port connector of KVM CAT-5 transmitter
4. To connect CAT-5 cable plug to LAN Port connector of KVM CAT-5 receiver
5. To connect keyboard, Mouse and Monitor to KVM CAT-5 Transmitter console port
6. To connect keyboard, Mouse and Monitor to KVM CAT-5 receiver console port



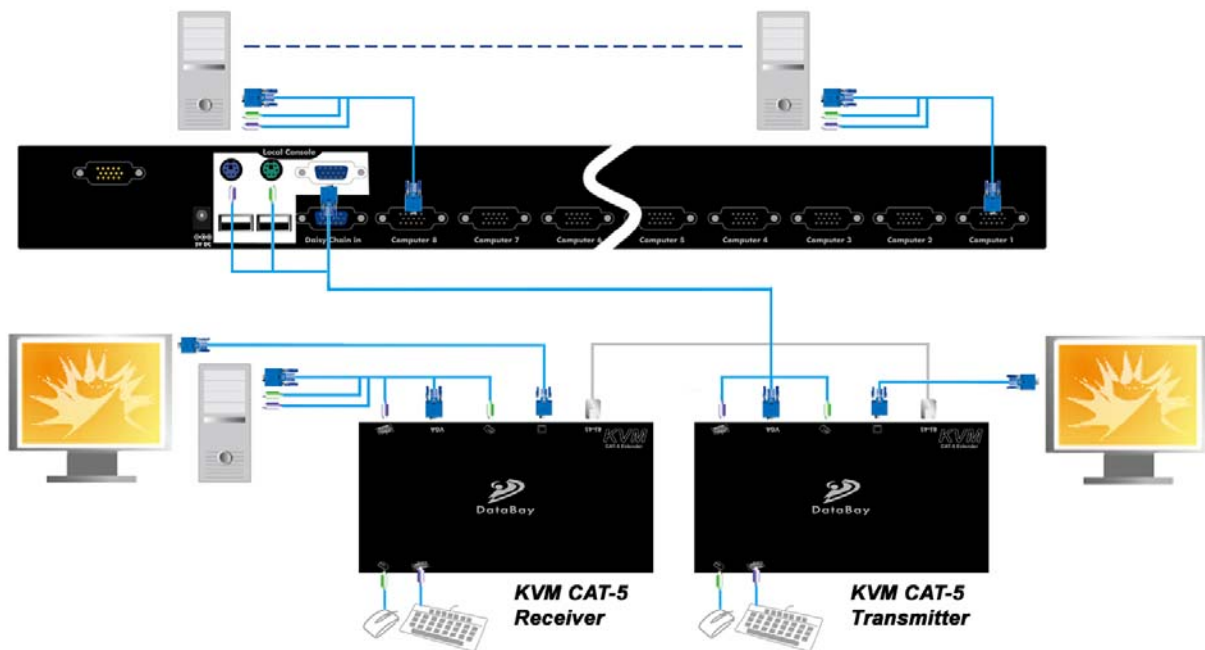
<Extending PC console up to 300 meters Application example>



<Extending PC console up to 300 meters Application example>



<Extending console port or PC port of KVM Switch up to 300 meters Application example>



<Extending console port or PC port of KVM Switch up to 300 meters Application example>

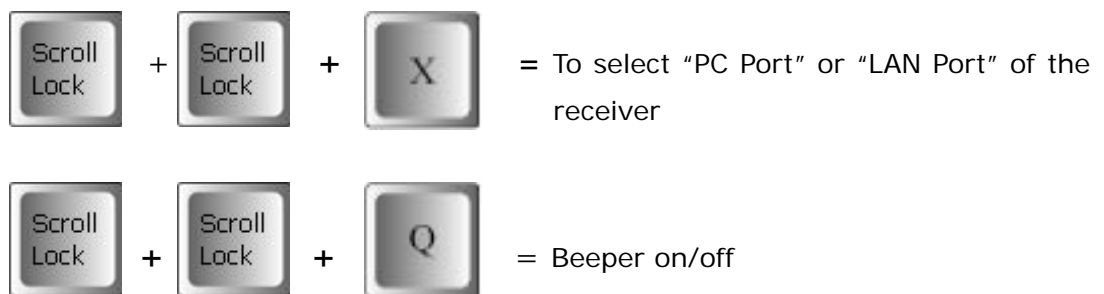
7. Power on PC and KVM CAT-5 Extender
8. To check the VGA screen display and make sure the quality is acceptable. If the video quality is not good for operation. Please use video knobs to adjust the video quality to optimization you expect.

5. Operation & Usage

5.1 Hot Key commands

You can switch the receiver KVM Extender-RX from "PC Port" to "LAN Port" and vice-versa through simple hot key sequences made by the remote console side. To send commands to the receiver, press the "SCROLL LOCK" key twice within 2 seconds. There will be a beep for confirmation.

Below are the different Hot Key Commands:



5.2 LED indication and usage

5.2.1 There are two LEDs on Transmitter : Local , Remote

5.2.2 There are two LEDs on Receiver : Local , Remote

5.2.3 When KVM CAT-5 Extender is powered on, both Transmitter Local LED and Receiver Local LED lit.

5.2.4 Powered on PC is automatically detected as KVM Cat-5 receiver is turned on. Local PC is selected as priority when both local and remote PCs are powered on.

5.2.5 Remote console (Receiver side) and local console (Transmitter side) access the sample PC is the same priority. Once remote console gets access PC right, the local console just could view the VGA monitor.

6. Technical Specifications

Model Name	PS/2 KVM Extender		USB KVM Extender		Combo KVM Extender	
Model No.	KE-PK0101-MB		KE-UK0101-MB		KE-CK0101-MB	
	Tx	Rx	Tx	Rx	Tx	Rx
PS/2 keyboard port	1	1			1	1
PS/2 Mouse port	1	1			1	1
USB keyboard port			1	1	1	1
USB Mouse port			1	1	1	1
VGA port	1	1	1	1	1	1
RJ-45 port	1	1	1	1	1	1
Console port connector (all female types)	PS/2 mini din 6-pin for keyboard(Purple color) PS/2 mini din 6-pin for mouse (Green color) VGA HDDB 15-pin (Blue color)		2 USB type A ports VGA HDDB 15-pin (Blue color)		PS/2 mini din 6-pin for keyboard(Purple color) PS/2 mini din 6-pin for mouse (Green color) 2 USB type A ports VGA HDDB 15-pin (Blue color)	
PC port connector (all female types)	PS/2 mini din 6-pin for keyboard port (Purple color) PS/2 mini din 6-pin for mouse port (Green color) VGA HDDB 15-pin (Blue color)		USB Type B port VGA HDDB 15-pin (Blue color)		VGA HDDB 15-pin (Blue color)	
LAN port connector	8P8C					
LED	Local , Remote					
Video knob (for VGA signal adjustment)	No	Yes	No	Yes	No	Yes
Power adapter	No needed	DC 5V/1A	DC 5V/1A		DC 5V/1A	
Weight (g)	150g	130g	150g	130g	150g	130g
Dimension (mm)	142(L) x 73(W) x 24(H)					
Operation Temperature	0~50℃					
Storage Temperature	-20 ~ 60℃					
Humidity	0~95%, Non-Condensing					

7. Troubleshooting

1. Receiver power LED is not ON, to make sure power adapter is connected to KVM CAT-5 receiver.
2. No video signal is displayed on the monitor.
 - 2.1 Please go to check all of VGA cables & connector and CAT-5 cable & connector is loosed or disconnected.
 - 2.2 VGA cable was not attached to computer during boot up process.
 - 2.3 Power adapter is not connected to receiver.
3. Video display is shadow or un-cleared on the screen
 - 3.1 Please check VGA connector contact between this extender and monitor or this extender and computer is well seated.
 - 3.2 The VGA resolution is too high for the length of cable being used. If the problem happened at VGA resolution, to shorten the CAT-5 cable length or reduce VGA resolution (For instance: Changing 1024X768 to 800X600).
 - 3.3 It is highly recommended to use "optimal CAT-5 cable length "to get the best video quality and don't waste unnecessary CAT-5 cable.
4. There is the error message " keyboard or Mouse not found "on the screen. Please make sure PS/2 cable and connector is well seated.
5. For USB interface computers like PC, MAC or SUN Microsystems, please apply USB-TO-PS2 converter to KVM CAT-5 extender PS2 interface connector.

8. Certifications

FCC

This equipment has been tested and found to comply with Part 15 of the FCC Rules.

Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference
- (2) This device must accept any interference received, including interference that may cause undesired operation.

CE

This equipment is in compliance with the requirements of the following regulations:

EN 55022: CLASS B

RoHS

All contents of this package, including products, packing materials and documentation comply with RoHS.



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