level
one

KVM-9005

KVM Cat5 Extender

Model No:

KVM-9005 -----
1) KVM-9005T: Transmitter
2) KVM-9005R: Receiver

Introduction:

KVM Cat5 Extender is designed to control the PC, Server or KVM Switch up to 500 feet away from your Keyboard, Mouse and VGA monitor. KVM-9005T transmitter is to synthesize the signals of PS/2 keyboard, PS/2 mouse, and VGA monitor for being easily transmitted to a long distance over popular Ethernet CAT5 cable. KVM-9005R receiver is to take the synthetic signal and return it back to the signal s of PS/2 keyboard, PS/2 mouse and VGA monitor respectively.

KVM-Cat5 is a good solution for those noisy server room environment where is unsuitable for people to work for a long time, besides, it facilitates effective management on dispersive computers through one dedicated central control room, demonstration room, meeting room, or at your desk. CAT5 STP cable (Shielded Twisted Pair)/ UTP cable (Unshielded Twisted Pair) or enhanced cable like CAT5E/CAT6 cable is applied to LAN network popularly. KVM-9005 uses the same existing network construction to transfer local console signal to remote side.

KVM-9005 allows you to move your console, i.e. Keyboard, Mouse and VGA monitor, to a suitable place for centralized control conveniently over LAN network. You just need to install a pair of extender, the transmitter and receiver, into local side and remote side respectively. It also saves your cable layout and installation cost.

Features:

➢ Compact desktop size
➢ Work with single PC, as well as the console port and PC port of KVM Switch
➢ Work with CAT5, CAT5e, or CAT6 Ethernet cable

➢ Distance up to 500 feet
➢ Support standard 3-in-one KVM switch cable
➢ Easy to install and friendly to set up the video signal via adjustable knobs.
➢ Compatible with DOS, MS Windows, Linux, Unix, and Netware
➢ No software required
➢ High VGA resolution up to 1280 X 1024 (CAT5 cable up to 500 feet approximately)
➢ LED indications for Power on/off and data transmission

Technical specifications

Functions	KVM-9005T Transmitter	KVM-9005R Receiver
PS/2 Keyboard port	2	2
PS/2 Mouse port	2	2
VGA monitor port	2	2
RJ-45 port	1	1
Console port connector (all female type)	PS/2 purple mini-din 6 pin for keyboard PS/2 green mini-din 6 pin for mouse VGA blue HDDB 15 pin	
PC port connector or KVM switch console port connector (all female type)	PS/2 purple mini-din 6 pin for keyboard port PS/2 green mini-din 6 pin for mouse port VGA blue HDDB 15 pin	
RJ-45 port connector	8P8C (same as Ethernet 100BaseT port)	
LED	Power, Data	PC1,PC2
Knobs (for VGA tuning)	No	1
300 feet segment DIP switch	1	No
Size	Desktop	Desktop
Power adapter	No need	DC9V, 500mA
Weight (g)	134g	150g
Dimension (mm)	111.5(L) x 75(W) x 35.5 (H) mm	117(L) x 80(W) x 39.5 (H) mm

Package contents

Model no.: KVM-9005

KVM-9005T transmitter	1 pc
KVM-9005R receiver	1 pc
KVM 3-in-one cable	1 pc
Power adapter DC9V,500mA	1 pc

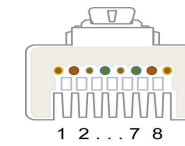## Cable Diagram

PS/2 Cable:

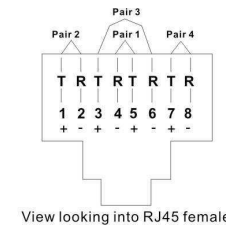Mini Din 6 pin Male to Male

VGA Cable:

HDDB15 pin Male to Male

CAT5/5E/6 Straight Through STP (Shielded Twisted Pair) or UTP (Unshielded Twisted Pair) Cable:

8P8C

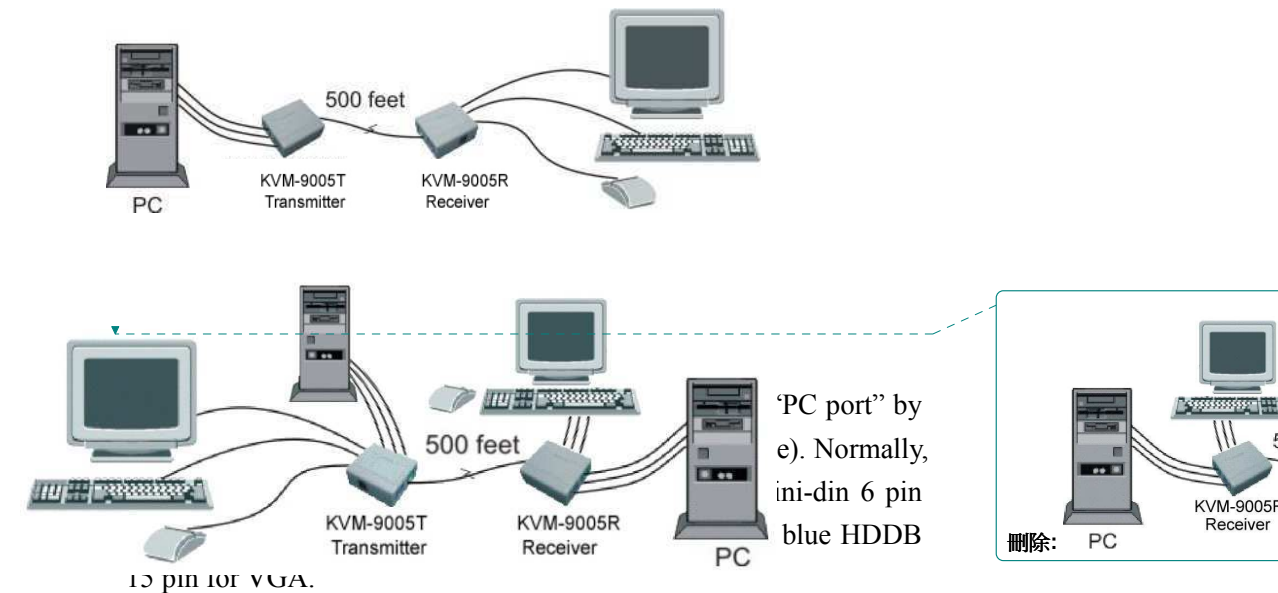| Pin	Wire Color	Pair	Function
1	White/Orange	2	T
2	Orange	2	R
3	White/Green	3	T
4	Blue	1	R
5	White/Blue	1	T
6	Green	3	R
7	White/Brown	4	T
8	Brown	4	R

View looking into RJ45 female

Installation:

Before installation, please make sure to turn off all of peripherals and computers have; and follow the procedures to install your conditions correctly:
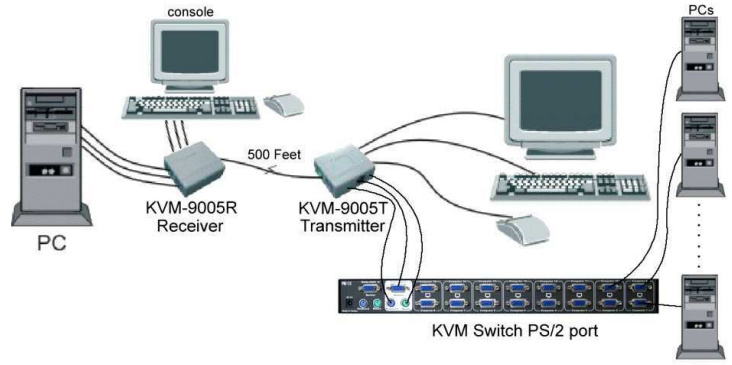
Adjust the **"KNOB"** on the top of KVM-9005R receiver for optimal VGA display quality, which is various because of cable characteristic, such as the length, category, shielded, and unshielded. Turn on "DIP SWITCH 1 and 2" on the side of KVM-9005T, if the CAT5 cable is longer than 300 feet.   The factory default value of **"DIP SWITCH 1 and 2"** is **OFF**.

1.   Extending your PC console up to 500 feet away:

'PC port" by e). Normally, ini-din 6 pin blue HDDB 15 pin for VGA.

1.2. Connect another PC console port with KVM-9005R receiver "PC port" by using standard 3-in-one KVM switch cable (male to male).

1.3. Connect CAT5 cable plug to RJ-45 connector of KVM-9005T transmitter.

1.4. Connect CAT5 cable plug to RJ-45 connector of KVM-9005R receiver.

1.5. Connect Keyboard, Mouse, and Monitor to KVM-9005T transmitter "console port."

1.6. Connect Keyboard, Mouse, and Monitor to KVM-9005R receiver "console port."

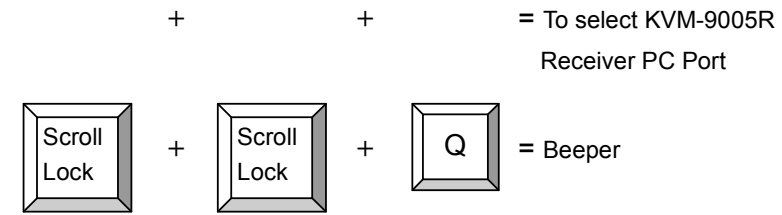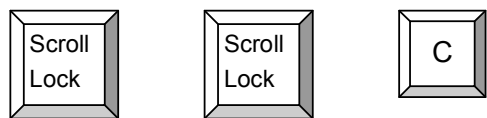## 2. Extending console port or PC port of KVM Switch up to 500 feet away

2.1. Connect a KVM switch console port with KVM-9005T transmitter "PC port" by using standard 3-in-one KVM switch cable (male to male).

2.2. Connect PC console port with KVM-9005R receiver "PC port" by using standard 3-in-one KVM switch cable (male to male).

2.3. Connect CAT5 cable plug to RJ-45 connector of KVM-9005T transmitter.

2.4. Connect CAT5 cable plug to RJ-45 connector of KVM-9005R receiver.

2.5. Connect Keyboard, Mouse, and Monitor to KVM-9005T transmitter "console port."

2.6. Connect Keyboard, Mouse, and Monitor to KVM-9005R receiver "console port."

3. Power on PC and KVM-9005R receiver.

4. Check the VGA screen to make sure the quality is acceptable. If the video quality is not good for operation, please use knobs to adjust the video quality to optimization.

Keyboard Hot Key Commands:

You can also conveniently command KVM-9005R receiver to switch its "PC port" and "RJ-45 port" through simple key sequences from the remote console side. To send commands to KVM-9005R receiver, press the "SCROLL LOCK" key twice within 2 seconds. There will be a beep for confirmation.

Below are the different Hot Key Commands:

| Scroll Lock | Scroll Lock | C |

| Scroll Lock | + | Scroll Lock | + | Q | = Beeper

+ + = To select KVM-9005R Receiver PC Port

➢ When KVM-9005T transmitter is connected to a KVM Switch, the Hot Key Commands of the KVM switch will be transparent to be passed to KVM Switch.

Troubleshooting:

1. Receiver power LED is not ON. Make sure power adapter is connected to KVM-9005R receiver.
2. No video signal is displayed on the monitor.
   2.1 Please check if VGA cable and CAT5 cable are properly connected to the connectors respectively.
   2.2 Make sure VGA cable is attached to computer during the boot-up process.
   2.3 Make sure power adapter is connected to receiver.
3. Video signal is foggy or un-cleared on the screen.
   3.1 Please check if the VGA cable is properly connected.
   3.2 Make sure the VGA resolution is not too high for the length of cable that is used. It is highly recommended to use "optimal CAT5 cable length" to get the best video quality and not to waste unnecessary CAT5 cable. Therefore, if the problem happened, please shorten the CAT5 cable length or reduce VGA resolution.

➢ **NOTE: High VGA resolution up to 1280X1024 (CAT5 cable length up to 500 feet approximately)**

4. There is the error message "Keyboard or Mouse not found" on the screen. Please make sure PS/2 cable and connector are well seated.
5. For USB computers like PC, MAC, or SUN Microsystems, please apply USB-to-PS/2 adapter to KVM-9005.

Certification:

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 – Certificate

This equipment is in compliance with the requirements of the following regulations: EN 55 022: CLASS B

![level one logo]

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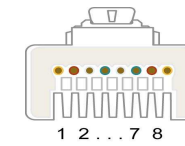## Cable Diagram

PS/2 Cable:

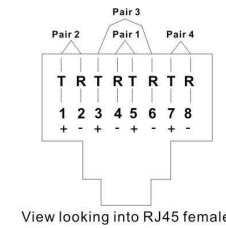Mini Din 6 pin Male to Male

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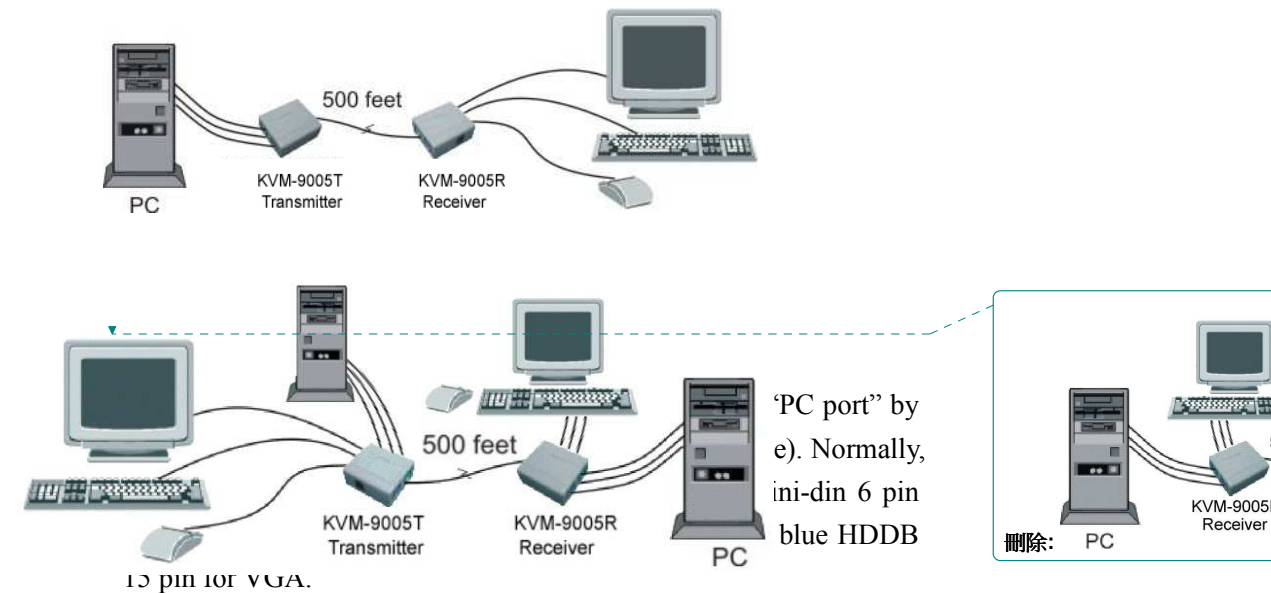| Pin	Wire Color	Pair	Function
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View looking into RJ45 female

Installation:

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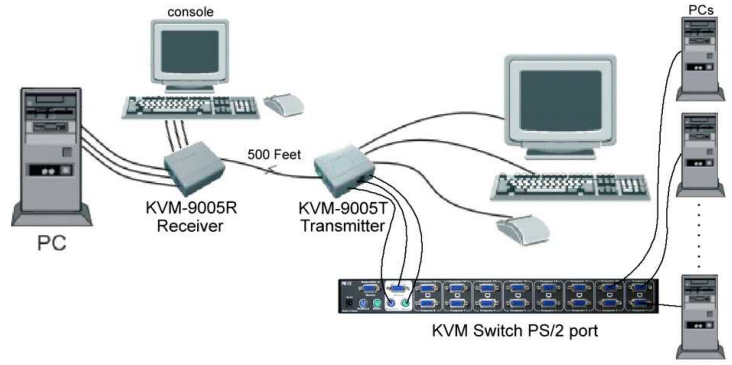
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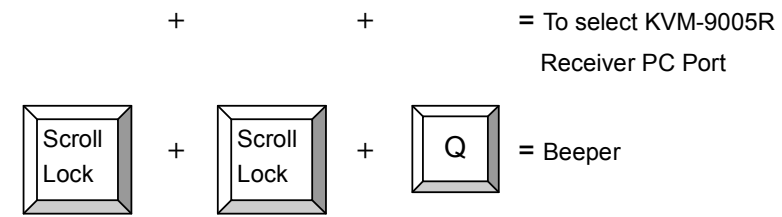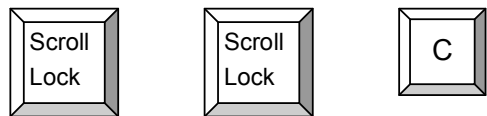**2. Extending console port or PC port of KVM Switch up to 500 feet away**

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2.2. Connect PC console port with KVM-9005R receiver "PC port" by using standard 3-in-one KVM switch cable (male to male).

2.3. Connect CAT5 cable plug to RJ-45 connector of KVM-9005T transmitter.

2.4. Connect CAT5 cable plug to RJ-45 connector of KVM-9005R receiver.

2.5. Connect Keyboard, Mouse, and Monitor to KVM-9005T transmitter "console port."

2.6. Connect Keyboard, Mouse, and Monitor to KVM-9005R receiver "console port."

3. Power on PC and KVM-9005R receiver.

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Keyboard Hot Key Commands:

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➢ When KVM-9005T transmitter is connected to a KVM Switch, the Hot Key Commands of the KVM switch will be transparent to be passed to KVM Switch.

Troubleshooting:

1. Receiver power LED is not ON. Make sure power adapter is connected to KVM-9005R receiver.

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   2.3 Make sure power adapter is connected to receiver.

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Made in Taiwan

V2.0

BMND24330A00