

# KVM-9009v2.0 KVM Remote Console Kit

# **User Manual**

## **V1.0**

Digital Data Communications Asia Co., Ltd. http://www.level1.com

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#### 1 Introduction

The CAT5 KVM Extender, Transmitter Module (T-Module) + CAT5 Receiver (R-Box), enables user to access the computer, server or KVM switch up to 1000 feet (300 meters) away.

The CAT5 Extender is a pair of devices for high-density applications where you want full use of keyboards, mouse, and monitor, but there is no room for a server nearby. Or for applications where you want to put all computers in a safe place, all the users only have keyboard/mouse and monitor on their desk. The CAT5 Extender is able to move your console (keyboard, Mouse, and Monitor) to a suitable control field conveniently over existing network construction. You just need install a pair of extender T-module and R-Box into local side and remote side individually. It also saves your cable layout and cable installation cost.

The CAT5 KVM receiver (R-Box) uses CAT5 cable to extend your keyboard, mouse and monitor 1000 feet (300 meters) away from the KVM switch. It has superior auto-adjust RGB gain/delay control capability.

#### 1.1 Main Features

- Locate CAT5 console up to 1000 feet (300 meters) away from the KVM switch with superior **auto-adjust** RGB signals capability
- Collocate computers and servers on one location, ideal for hazardous or unsecured environments
- Switch computers by Hot Key commands
- Configurable Programmable Hotkeys
- User name and Password protection
- Audible feedback when switching
- LED indicators for computer status or data transmission
- Work with PS/2 or USB computer
- Easy to install and use with plug-and-play functionality.

### 1.2 Package contents

- 1x CAT5 Transmitter Unit (T-Module)
- 1x CAT5 Receiver Unit (R-Box)
- 1x 3-in-1 VGA Cable(1x PS/2-USB Changer)
- 1x AC to DC Power Adapter

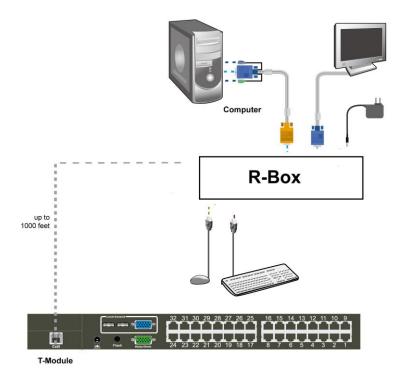
#### 1.3 Product Line

#### Models

ACC-1001	T-Module
KVM-9008	R-Box Receiver Professional (1000 feet, auto-adjust)

## 2 System Installation

The figure below depicts the system installation of CAT5 Transmitter Module (T-Module) + CAT5 Receiver (R-Box)



**System Installation** 

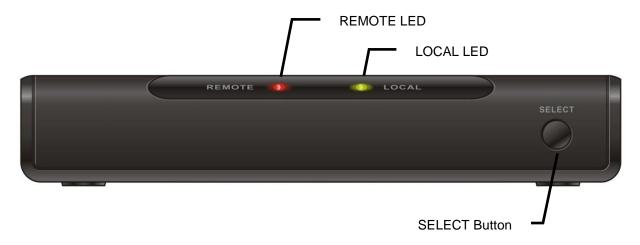
## 2.1 ACC-1001v2.0(T-Module)



It's the module for inserting to the extension slot of the Combo, CAT5 KVM.

Using CAT5 cable to connect the T-module and R-BOX.

## $\mathbf{2.2} \quad KVM\text{-}9008v2.0(R\text{-}BOX)$



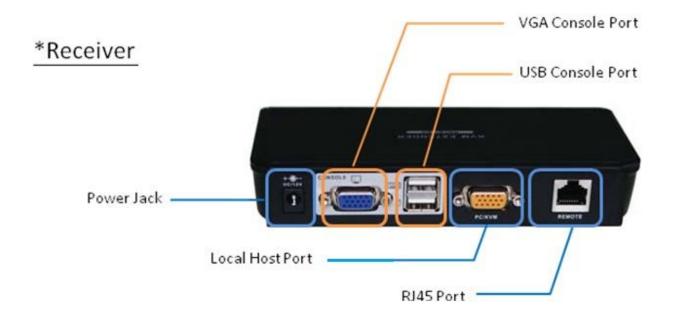
[front]

**USB Console** Port: for connecting to USB type keyboard and mouse

#### **Local/Remote LED:**

LED	Status	Description
	Off	The Local port is not selected.
Local	On	The Local port is selected and a computer connected to the Local port is power on.
	Flash	The Local port is selected, but no computer is connected to
		the Local port or the computer is power off.
	Off	The Remote port is not selected.
	On	The Remote port is selected and a computer connected to the
Remote		Remote port is power on.
	Flash	The Remote port is selected, but no computer is connected to
	Plasii	the Remote port or the computer is power off.

Local/Remote Select Button: for selecting local or remote computer



#### [back]

**Power Jack**: for connecting to the power adapter

**RJ-45 Port**: for connecting to a CAT5 cable

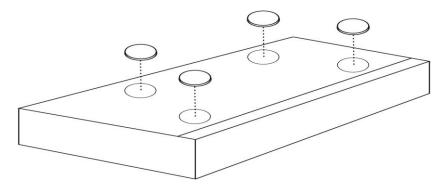
**Console Port**: for connecting to monitor

**Local Host Port**: for connecting to the local host via 3-in-1 VGA cable

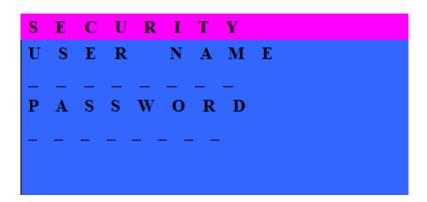
#### 3. Installation

#### 3.1 R-Box Installation

Install food pads --- turn R-Box upside down and refer to the following instructions for installation properly.



- 1. Make sure the CAT5 cable is straight through type.
- 2. Plug one end of CAT5 cable into RJ-45 connector of the T-module, and plug another end of CAT5 cable into RJ-45 port of the R-Box.
- 3. Connect keyboard, mouse and monitor to the R-Box console ports (USB Keyboard/Mouse ports, and VGA port)
- 4. Connect Local Computer to R-box with the accompanied 3-in-1 VGA cable (please see section "3-in-1 VGA Cable Installation" for details).
- 5. The recommended **Power Up sequence** is as follows: the monitor, R-Box, KVM Switch, and finally the computer.
- 6. The OSD Login screen will show up waiting for user name and password.



The Default User Name is eight zeros –"00000000".

The Default Password is eight zeros -"00000000".

7. Push the **SELECT** button to select remote or local Computer.

#### 3.2 The 3-in-1 VGA Cable Installation

#### Note:

It is recommended to power off all the computers and server before the installation. If the PS2 computer could not be turn off, please plug in the connectors in the following order: first, PS/2 mouse connector; second, PS/2 keyboard connector, third, the VGA connector to the computer.

The 3-in-1 VGA cable has a HDDB15 male connector at one end. Plug it into the LOCAL HOST port of the R-Box. The other end of input cable has three connectors: a HDDB15 male type for computer video, a purple mini din 6-pin PS/2 connector for keyboard and a green mini din 6-pin PS/2 connector for mouse. Plug these three connectors into the respective ports of computer.

(a) PS/2 computer --- Plug in PS/2 mouse connector to computer mouse port, the PS/2 keyboard connector to computer keyboard port.

Do not hot plug PS/2 port. If you must do that, please make sure PS/2 mouse first then the PS/2 keyboard, then VGA port.



3-in-1 VGA cable

(b) USB computer --- connect PS/2-USB changer to PS/2 keyboard connector, then plug the changer into available USB port. This single USB port can communicate both keyboard and mouse signals. It works as a standard HID (Human Interface Device), no extra driver needed.

Please keep the PS/2 mouse connector disconnected.

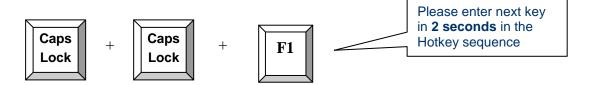


3-in-1 VGA Cable and PS/2 to USB Changer

## 4. Hot Key Control

You can conveniently command R-Box through a simple hot key sequence. To send commands to the R-Box, you must **press the hotkey** (default **Caps Lock**) **twice within 2 seconds**. You will hear a beep sound confirming entering Hotkey mode. Then you have to **enter Command in 2 seconds**. If you do not press any key during Hotkey mode over 2 seconds the Hotkey mode will be escaped and back to Normal state.

The default hotkey is **Caps Lock** but you can change hotkey as your application convenience. If you prefer to use other hotkey, please go to OSD menu and change the default hotkey to the other.



The table blow lists all supported hotkey commands.

Command	Function
F1	To show "Help" OSD window
F2	To select "Hotkey" type
<b>F3</b>	To "Revise" user name and password in OSD window
<b>F</b> 4	To <b>log out the OSD</b> , and show up the Login window waiting for username and password.
C	Toggle switch between Local and Remote ports
Q	Turn beep sound on/off
S	To activate the <b>Auto-Scan</b> function. Auto-scan Remote and Local port every 8 seconds repeatedly.
A	For auto-adjust video signal of remote port to optimum

## 5. OSD (On Screen Display) on R-Box

OSD Menu provides a menu-driven interface to control the R-Box switch.

Under this application the R-Box OSD function is limited to Hotkey OSD windows (not support F3 and F4), since the connected KVM switch has its own OSD system.

When press the hotkey twice, then press **F1**, the Help window will show up.



## **6. Technical Specifications**

Feature	T-Module (Transmitter)
RJ45 (CAT5)	Connect CAT5 cable to R-Box
Operation Temperature	0 ~ 50°C
Storage Temperature	-20 ~ 60°C
Humidity	0~80%, Non-Condensing
Weight (g)	370g
Dimension (mm)	100 x 70 x 29
Feature	CAT5-R Box (Receiver)
USB connector	2 USB connectors for keyboard and mouse Note: PS/2 keyboard and mouse user needs a PS/2 to USB converter.
VGA connector	2 HDDB15 connectors, one for VGA monitor, one for Connecting 3-in-1 VGA cables to local computer
RJ45 (CAT5)	Connect CAT5 cable to T-Box or KVM switch
LED's	2 (Blue color for Local and Remote indicators)
Port selection	Hot Key, Push Button
Hotkey	Configurable
Security	user name and password
OSD	Hot key, status.
Keyboard Emulation	PS/2 or USB
Mouse Emulation	PS/2 or USB
VGA Resolution (Local Host)	1920 x 1440
VGA Resolution (Remote Host)	1680 x 1050 (500 feet) 1280 x 1024 (1000 feet)
Housing	Metal
Power Adapter	DC 12V, 1A
Operation Temperature	0 ~ 50℃
Storage Temperature	-20 ~ 60°C
Humidity	0~80%, Non-Condensing
Weight (g)	370g
Dimension (mm)	160 x 70 x 25

## 7. Cables

#### 7.1 3-in-1 VGA Cable

HDDB15 male to one HDDB15 male plus two mini din 6-pin PS/2 connectors.



**3-in-1 VGA Cable Connectors** 

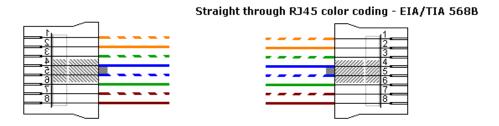
### 7.2 PS/2 keyboard to USB Changer

PS/2 (keyboard) to USB (keyboard and mouse) changer.



PS/2 keyboard to USB Changer

## 7.3 CAT5/5E/6 Straight Through UTP/STP Cable



CAT5/5E/6 Straight Through Cable Connector (8P8C)

### 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. Include interference that may cause undesired operation.

#### CE

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

#### **RoHS**

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

