

## **KS-3108 / KS-3116 User Manual**

### **NOTE**

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.



### **PACKING LIST**

The complete KS-3108 / KS-3116 8 ports/16 ports PS/2 / USB switch package consists of:

- ◆ KS-3108 / KS-3116 8 ports/16 ports PS/2 / USB switch
- ◆ Power Adapter
- ◆ User Manual

Please check to make sure that all the components are present and that nothing was damaged in shipping. If you encounter a problem, contact your dealer.

Read this manual thoroughly and follow the installation and operation procedure carefully to prevent any damage to the unit, and/or any of the devices that connect to it.

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## OVERVIEW

The KS-3108 / KS-3116 8 ports/16 ports PS/2 / USB CAT5 UTP KVM (Keyboard, Video, Mouse) Switches are control units that allow access and control of up to 8 (KS-3108) or 16 (KS-3116) computers from a single PS/2 / USB keyboard, PS/2 / USB mouse, and monitor console.

There are two convenient methods to access any computer connected to the installation: (1) using the push button port selection switches located on each unit's front panel; (2) selecting from menus provided by the On Screen Display (OSD).

Setup is fast and easy: simply plug cables into their appropriate ports. There is no software to configure, and no incompatible problems. It works on multiple operating platform (PC compatible, Sun, etc.).

There is no better way to save time and money than with a KS-3108 / KS-3116 installation. Since a single console manages all of the computers, the KS-3108 / KS-3116 setup: (1) eliminates the expense of having to purchase a separate keyboard, monitor, and mouse for each computer; (2) saves all the space those extra components would take up; (3) saves on energy costs; (4) eliminates the inconvenience and wasted effort involved in constantly moving from one computer to another.

## FEATURES

- ◆ Control 8 (KS-3108) or 16 (KS-3116) computers with local or remote console.
- ◆ Both the console and the computer are compatible with PS/2 / USB mouse and keyboard.
- ◆ Computer selection via front panel switches and OSD.
- ◆ LEDs display for easy status monitoring.
- ◆ Auto Scan Mode for monitoring all computers.
- ◆ Superior video quality.
- ◆ Easy installation – no software required
- ◆ Hot pluggable – add or remove computers for maintenance without powering down the switch
- ◆ Support Windows, Solaris etc

## HARDWARE REQUIREMENTS

### CONSOLE

- ◆ A VGA, SVGA monitor capable of the highest resolution that you will be using on any computer in the installation.
- ◆ A PS/2 / USB mouse
- ◆ A PS/2 / USB keyboard

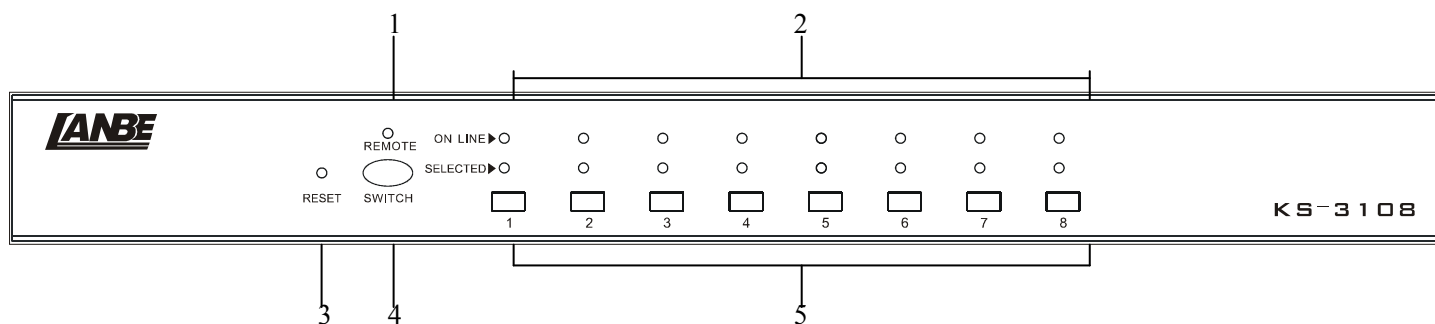
### COMPUTER

The following equipment must be installed on each computer:

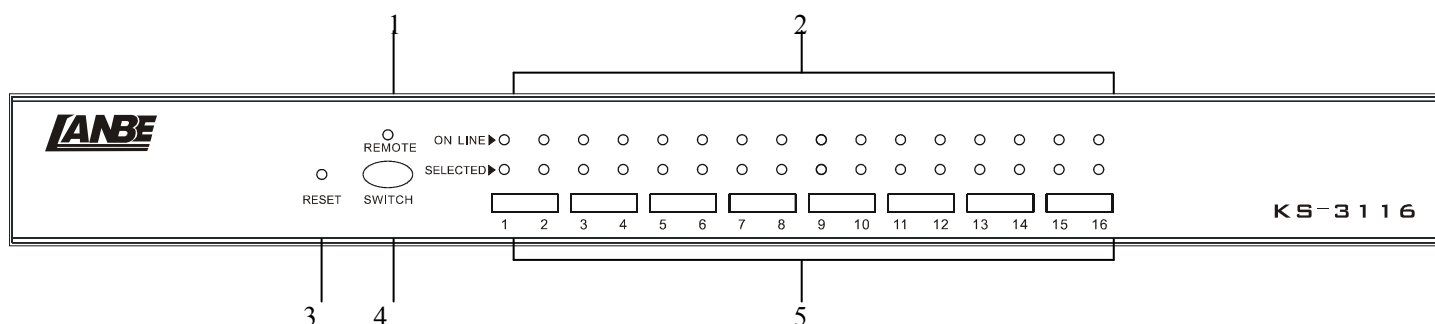
- ◆ A VGA, SVGA card
- ◆ Either USB port or PS/2 keyboard and mouse ports.

# INTRODUCTION

## KS-3108 FRONT VIEW



## KS-3116 FRONT VIEW



### 1. REMOTE LED

- ◆ The REMOTE LED indicates whether the selected computer is controlled by remote console or local console. If it is on, the computer is controlled by remote console. Otherwise, it is controlled by local console.

### 2. The port LEDs are built into the Port Selection Switches. The upper ones are the On Line LEDs; the lower ones are the Selected Port LEDs:

- ◆ The On Line LEDs light RED to indicate that the computer attached to the corresponding port is up and running.
- ◆ The Selected LEDs light GREEN to indicate that the computer that attached to the corresponding port is the one that has the KVM focus.

### 3. Reset

- ◆ When the switch has no responding, use needle or ballpoint pen to plug into the hole to reset the switch.

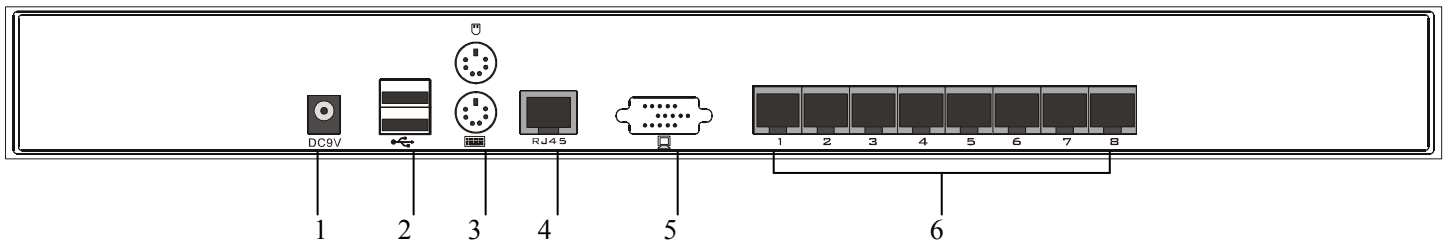
### 4. Local / Remote switch button

- ◆ Press the button to select whether local or remote console to control the computers.

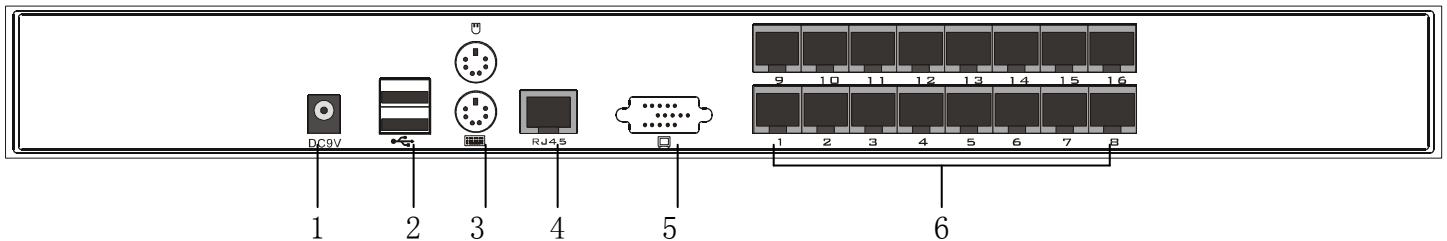
### 5. Port Selection Switches

- ◆ Press a switch button to access the computer attached to its corresponding port.

## KS-3108 REAR VIEW



## KS-3116 REAR VIEW



### 1. Power Jack

- ◆ The power adapter cable plugs into this jack.

### 2. USB Port

- ◆ The USB mouse & keyboard plug into these ports.

### 3. PS/2 Port

- ◆ The PS/2 mouse & keyboard plug into these ports.

### 4. Remote RJ45 Port

- ◆ It is used to connect the remote console.

### 5. VGA Port

- ◆ It is used to plug the monitor.

### 5. Computer Port Section

- ◆ The CAT5 UTP that links the switch to your computers plug in here.

# INSTALLATION

## BEFORE YOU BEIGIN

1. Make sure that power to all the devices you will be connecting up have been turned off.
2. To prevent damage to your installation, make sure that all devices on the installation are properly grounded.

## SINGLE STAGE INSTALLATION

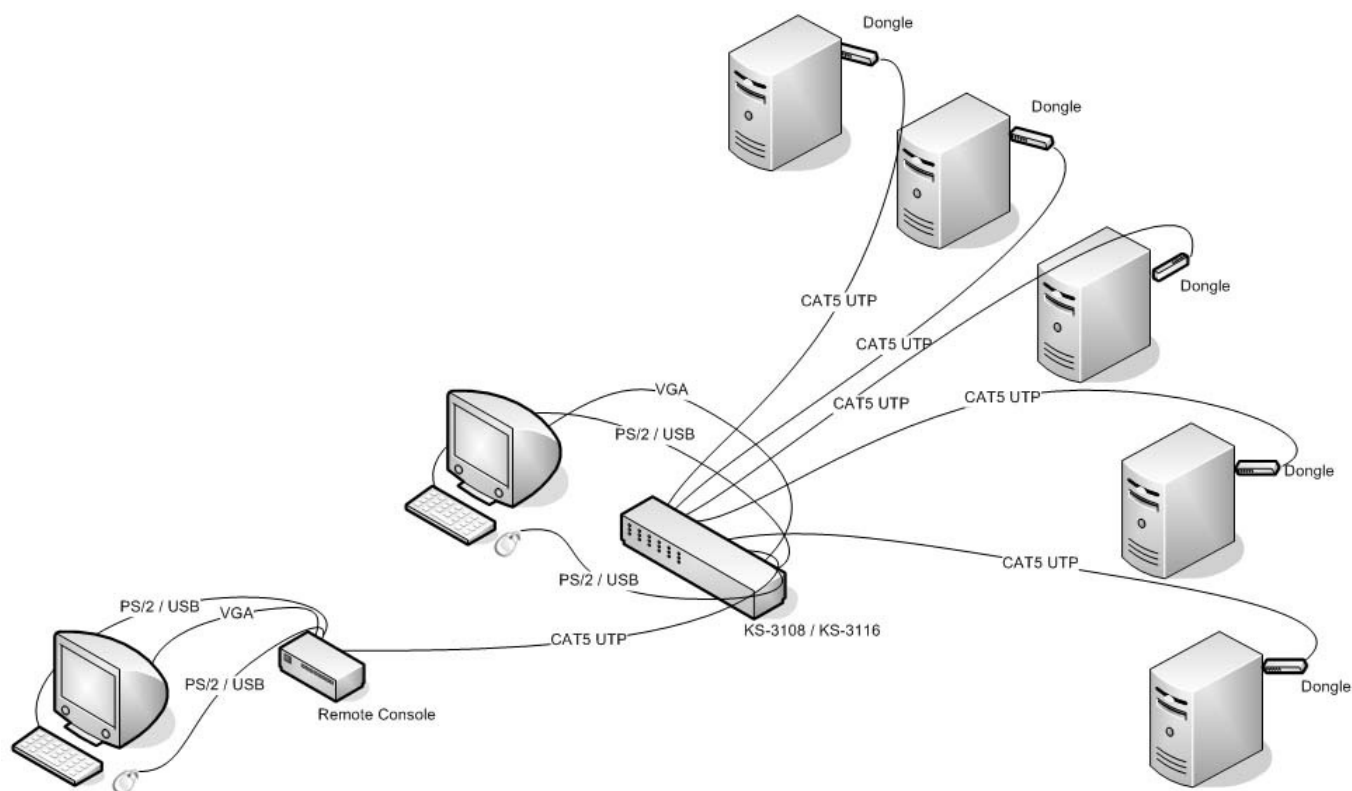
To set up your KS-3108 / KS-3116 installation, do the following:

1. Plug your PS/2 / USB keyboard, PS/2 / USB mouse and monitor into the console port section located on the unit's rear panel.
2. Plug one end of the CAT5 UTP into the available computer port on the switch.
3. Plug the other end of the CAT5 UTP into the RJ45 port on the matching dongle. Connect the dongle to the computer.
4. Repeat step 2-4 for any other computers you are connecting up
5. Plug the power adapter cable into the switch's power jack, then plug the power adapter into an AC power source.

This completes the single stage installation, and you can turn on the power to the computers.

NOTE: The KS-3108 / KS-3116 initially links to computer connected to the first Computer port.

ILLUSTRATION:



## **OPERATION**

### **HOT PLUGGING**

The KS-3108 / KS-3116 supports hot plugging. Components can be removed and added back into the installation by unplugging and replugging their cables from their respective ports without the need to shut the switch down. For hot plugging to work properly, the following procedure must be observed:

#### ◆ Hot Plugging CPU Ports

When to plug or unplug the cable from the port in powering;

1. The cable must be plugged back into the same port it was removed from.

#### ◆ Hot Plugging Console Ports:

The PS/2 / USB keyboard, mouse can be hot plugged.

### **POWERING OFF AND RESTARTING**

If it becomes necessary to power off one of the KVM unit, before starting it back up you must do the following:

1. Shut down all the computers that are attached to the unit.

Note: If the unit is operating under external power, unplug the power adapter cable.

2. Wait 10 seconds, then plug the power adapter back and power on all computers.

### **PORT SELECTION**

The KS-3108 / KS-3116 provides two methods to obtain instant access to any computer in your installation: manual and OSD.

#### Manual

Simply press the appropriate port selection switch on the KS-3108 / KS-3116's front panel. After pressing the switch, the selected LED lights to indicate that the port has been selected.

#### OSD

OSD (On Screen Display), provides a menu driven interface to handle the computer switching procedure to provide instant access to any computer on the installation. OSD operation is discussed below.

# OSD OPERATION

## OSD OVERVIEW

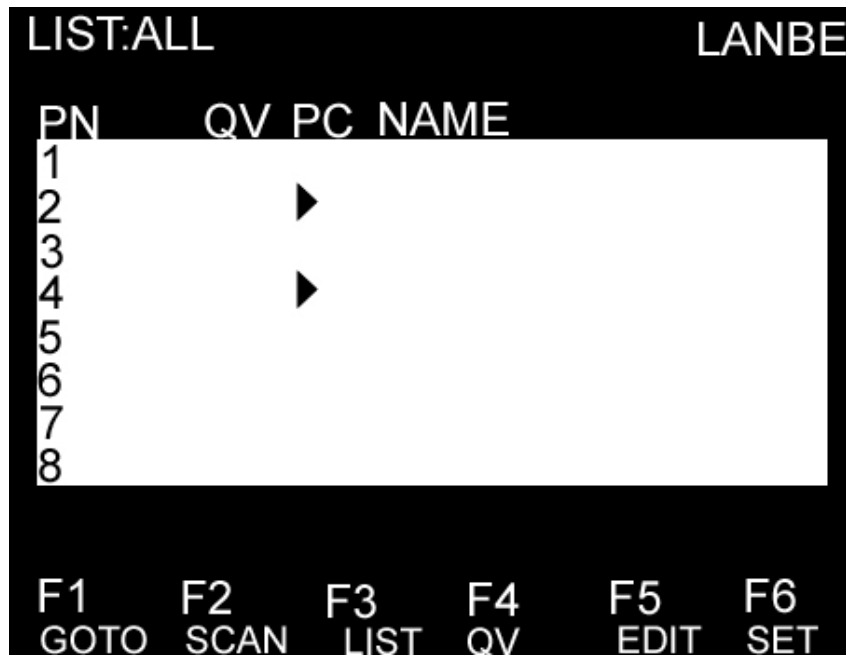
The On Screen Display (OSD) is used to handle all computer control and switching procedures. All procedures start from the OSD main menu. To pop up the main menu, tap the [Scroll Lock] twice.

Note: You can optionally change the hotkey to the Ctrl key, in which case you would tap [ctrl] twice.

If OSD menu is set as “console locked”, you must input password each time the main menu appears. If no password has been set, just press [Enter] to show main menu.

Note: There are two passwords in OSD. One is user password which is initially empty. And the other is factory password which is “LANBE”.

OSD menu interface is shown as below:



Note: OSD always starts in List View, with the highlight bar at the same position it was in the last time it was closed.

## OSD NAVIGATION

To dismiss OSD, press [Esc].

To move up and down through the list one line at a time, use the Up and Down Arrow Keys. If there are more list entries than what can appear on the main screen, the screen will scroll.

To activate a port, move the highlight bar to it then press [Enter].

After selecting a port, the OSD menu automatically disappears and a blue tip window appears to indicate the port currently selected.



## OSD MAIN SCREEN HEADINGS

Heading	Explanation
PN	This column lists the port numbers for all the CPU ports on the installation. The simplest method to access a particular computer is to move the highlight bar to it, then press [Enter].
QV	If a port has been selected for Quick View scanning, an arrowhead symbol displays in this column to indicate so.
PC	The computers that are powered on and are on line have an arrowhead symbol in this column to indicate so.
NAME	If a port has been given a name, its name appears in this column.

## OSD FUNCTIONS

OSD functions are used to configure and control the OSD. For example, you can: rapidly switch to any port; scan selected ports only; limit the list you wish to view; designate a port as a Quick View Port; create or edit a port name; or make OSD setting adjustments.

### F1 GOTO:

GOTO allows you to switch directly to a port either by keying in the port's name or its port number.

To use NAME method, move highlight bar to "NAME", press [Enter], input name of a port, then press [Enter] to confirm.

To use PN method, move highlight bar to "PN", press [Enter], input port number, then press [Enter] to switch. If the port number is invalid, it will remind the user to input again.

Note: When keying name, if there is a matching name, the matched name will appear on the screen, just press [Enter] to switch to that port.

To return to main menu, press [Esc].

### F2 SCAN

The SCAN function can automatically scan from current selected port, the scan interval can be set by users. When scanning, a small window on the screen indicates the current port number. Press [Space] to stop scanning, and the KVM switches to the port last scanned.

### F3 LIST

The LIST function lets you broaden or narrow the scope of which ports the OSD displays on the main screen. Many of the OSD functions only operate on the computers that have been selected for listing on the main screen with this function. The choices and their meanings are given in the table below:

Choice	Meaning
ALL	Lists all of the ports on the installation.
QVIEW	Lists only the ports that have been selected as Quick View Ports.
POWERED ON	Lists only the ports that have their attached computers powered on.
POWERED ON + QVIEW	Lists only the ports that have their attached computers powered on and have been selected as Quick View Ports.
QVIEW + NAME	Lists only the ports that have been selected as Quick View Ports and have name.

NAME	Lists only the ports that have names.
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Move the highlight bar to the choice you want, then press [enter]. An icon appears before the choice to indicate that it is the currently selected one.

After you make your choice and press [Enter], you return to the OSD main screen with the newly formulated list displayed.

#### F4 QV

QV function can select port as Quick View. Move the highlight bar to a port, press [F4], an icon of up triangle appears. Press [F4] again, the icon disappears.

#### F5 EDIT

EDIT function creates or edits the name of a port. Press [F5], a pink edit box will appear on the screen. Input name, and then press [Enter], the port is set a name and it will also appear on the screen.

#### F6 SET

SET function configures the OSD menu. Move the highlight bar to an option, press [Enter] to enter a setting option.

CHANNEL DISPLAY MODE: Mode of small tip window.

Choices and meanings are below:

Choice	Meaning
PN + NAME	Tip window displays port number and port name.
PN	Tip window displays port number.
NAME	Tip window displays port name.

Move the highlight bar to an option and press [Enter] to select it.

CHANNEL DISPLAY DURATION: Time the tip window last.

Options are following:

- ◆ 3 SECOND The tip window lasts for 3seconds.
- ◆ ALWAYS ON The tip window always on the screen.

Move the highlight bar to an option and press [Enter] to select it.

CHANNEL DISPLAY POSITION: Position of the tip window.

A small blue window appears on the screen. Use arrow key to move it, then press [Enter] to specify the position.

SCAN DURATION: Duration for scanning one port.

Options are 3 seconds, 5 seconds, 10 seconds, 15 seconds, 20 seconds, 30 seconds, 40 seconds, 60 seconds.

Move the highlight bar to an option and press [Enter] to select it.

OSD ACTIVATING HOTKEY: Hotkey to activate OSD.

Options are CTRL, SCROLL, SHIFT and ALT. Move the highlight bar to an option and press [Enter] to select it.

**SET PASSWORD:** Set new password.

First enter old password, then enter new password and confirm it. The new password is set. If error occurs, the screen will remind users.

**CLEAR THE NAME LIST:** Clear the names of port list.

You need to enter password to clear the names of port list.

**RESTORE DEFAULT VALUE:** Restore settings to default value.

You need to enter password to Restore settings to default value.

Note: The user password will also be cleared, and the factory password will not.

**LOCK CONSOLE:** Lock the console.

You cannot switch or scan after you lock the console (including switch by push button on the panel or OSD).

You need to enter password to set.

Note: After Locking the console, you can also unlock the console by this option. It also needs password verification.

## TROUBLE SHOOTING

Symptom	Possible Cause	Action
Keyboard and/or mouse not responding.	Keyboard and/or mouse need to be reset.	Unplug the cables from the console ports , then plug them back in.
	No connection to the computer.	Check the cable from the switch to the computer to make sure it is properly connected.
	KVM switch needs to be reset.	Press reset button on the rear panel.
OSD menu no display.	Power supply problem.	Plug power adapter to supply enough power.

## SPECIFICATIONS

Type	KS-3108	KS-3116	
Computer connections	8	16	
CPU port selection	Front panel switches/OSD menu		
Console connectors	Keyboard	1 x PS/2, 1 x USB female	
	Mouse	1 x PS/2, 1 x USB female	
	Video	1 x HDB-15 female (blue)	
	Remote Connection	1 x RJ45	
Dongle connectors	Keyboard	1 x PS/2 female (purple), 1 x USB female	
	Mouse	1 x PS/2 female (green) , 1 x USB female	
	Video	8 x HDB-15 male (blue)	16 x HDB-15 male (blue)
LEDs	On Line	8	16
	Selected	8	16
Video resolution	1600 x 900		
Power	DC5V, 400mW		
Operating temperature	-10°C~50°C		
Storage temperature	-20°C~60°C		
Housing	Metal		
Weight	0.8 Kg		
Dimensions(L x W x H )	432 x 155 x 44 mm		

## **SAFE GUIDE**

Please follow the directions below when installing, using and maintaining it in order to guarantee the device to work well.

- ◆ When installing and operating the device, please make sure proper power supply first, and then do other operations after it is initialized.
- ◆ As signal and power transfer need custom cable, please use matched cable, unmatched cable may cause system work improperly or even damage the device.
- ◆ Keep airy during operating to prevent high temperature.
- ◆ Keep the device away from working long in wet environment to prevent short circuit.
- ◆ Please do not open the device without permission of professionals.

NOTE: This equipment has been tested and found to comply with the limits for a Class A

digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide

reasonable protection against harmful interference when the equipment is operated in a

commercial environment. This equipment generates, uses, and can radiate radio frequency

energy and, if not installed and used in accordance with the instruction manual, may cause

harmful interference to radio communications. Operation of this equipment in a residential

area is likely to cause harmful interference in which case the user will be required to correct

the interference at his own expense.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:(1)this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.